PN-ABU-873

Best available copy -- faded type

PN-ABU 873
94657

BASE LINE SURVEY

for

COMMAND WATER MANAGEMENT PROJECT – WARSAK LIFT CANAL

DR. NURUL-ISLAM MIAN
(Editor)

Publication No.200 November, 1988

STUDY CONDUCTED

BY

INSTITUTE OF DEVELOPMENT STUDIES
N.W.F.P. AGRICULTURAL UNIVERSITY
PESHAWAR (PAKISTAN)

FOR

COMMAND WATER MANAGEMENT PROJECT
(WARSAK LIFT CANAL), CENTRAL
IRRIGATION CIRCLE, IRRIGATION
DEPARTMENT, N.W.F.P. PESHAWAR

ACKNOWLEDGEMENTS

Many persons and several agencies cooperated in bringing this study to a successful completion. We wish to place on record our profound gratitude for that.

We owe a special debt of gratitude to Dr. Muhammad Ibrahim Haider and Mr.James McClung, Technical Advisors to CWMP, for their advisory cooperation with this Institute throughout the period of this study. Their advice on several technical matters greatly helped refine the quality of this study.

Akhtar Ali Ismaili, Project Manager, Kaleem Afzal, Deputy Project Manager and Mr. Khanzada, Agricultural Economist of CWMP are thanked for facilitating matters pertaining to this project and very helping attitude.

Mr. S.Mehfooz Ali Shah, Director General Agriculture Extension, NWFP, very kindly allowed Engr; Abdul Ghaffar Khan to conduct and guide the engineering studies. We are highly grateful to him for this cooperation.

Professor Jehangir Khan Khattak extended generous co-operation of his Department for this study for which we are highly grateful to him.

The project staff worked diligently, efficiently, and dedicatedly. No words of praise can adequately acknowledge their fine contribution. Their work was excellent.

Lastly, but most importantly, we wish to place our highest compliments for the farmers for bearing up with us for so long. They were highly cooperative and pleasant. Nothing could succeed without that. We are highly indebted to them for this favour.

Dr. Nurul-Islam Mian
Project Director

CONTENTS

	PAGE
ACKNOWLEDGMENT.....	i
TABLE OF CONTENTS	ii
LIST OF TABLES	v
LIST OF APPENDICES.....	xii
EXECUTIVE SUMMARY	xiii
PART:I INTRODUCTION	
• BACKGROUND INFORMATION ON THE COMMAND WATER MANAGEMENT PROJECT - WARSAK LIFT CANAL	1
• OBJECTIVES	3
• UNIT OF STUDY	4
• METHODOLOGY	4
PART: II SOCIO-ECONOMIC SURVEY OF SAMPLE HOUSEHOLDS	
• GENERAL CHARACTERISTICS OF THE SAMPLE HOUSEHOLDS	13
• LAND HOLDINGS AND LAND USE	24
• WATER MANAGEMENT	33
• CROPS AND CROPPING PATTERN	47
• CROPPING INTENSITY	54
• USE OF SELECTED FARM INPUTS	56
• SOURCES OF SUPPLY OF FARM INPUTS	62

- INPUTS SUPPLY PROBLEMS 65
- CREDIT 69
- FARM MACHINES AND IMPLEMENTS 72
- LIVESTOCK 74
- FRUIT PRODUCTION 81
- CROP YIELDS 84
- UTILIZATION OF CROPS 94
- FARMING COST 98
- VALUE PRODUCTIVITY OF CROPS RAISED ON SAMPLE FARMS IN 1987-88 105
- CROP-WISE NET PROFIT/LOSS 110
- PROFIT/LOSS ON FARMING 114
- DISPOSABLE INCOME OF SAMPLE HOUSEHOLDS DURING 1987-88 118

: III ENGINEERING STUDIES

- INTRODUCTION 121
- OBJECTIVES 122
- SITE DESCRIPTION 123
- METHODOLOGY 123
- RESULTS 133
- DIAGRAMS AND GRAPHS 160

IV SOIL STUDIES

- INTRODUCTION 196
- METHODOLOGY 198
- DESCRIPTION OF SOIL SERIES 200

- IRRIGATION EFFICIENCY SITES 205
- PHYSICO-CHEMICAL PROPERTIES OF SOILS 206
- LAND CAPABILITY CLASSIFICATION 210
- SUMMARY 215

PART: V MAIN FINDINGS

- SOCIO-ECONOMIC PROFILE OF WATER USERS 240
- ENGINEERING ASPECTS 250
- SOILS 252

PART: VI CONCLUSIONS AND RECOMMENDATIONS 254

LIST OF TABLES

TABLE NO.	TITLE	PAGE
I.1	DISTRIBUTION OF SAMPLE WATER USERS	7
I.2	DISTRIBUTION OF SOIL SAMPLES FOR MOISTURE CONTENTS DETERMINATION	10
I.3	DISTRIBUTION OF SOIL SAMPLES	11
II.1	SAMPLE HOUSEHOLDS CLASSIFIED BY TENURE STATUS	14
II.2	LITERACY STATUS OF HEAD OF SAMPLE HOUSEHOLDS	14
II.3	LEVEL OF EDUCATION OF THE HEADS OF SAMPLE HOUSEHOLDS	16
II.4	HOUSEHOLD SIZE	16
II.5	HOUSEHOLD COMPOSITION BY AGE AND SEX	18
II.6	LITERACY STATUS OF THE SAMPLE POPULATION	21
II.7	DISTRIBUTION OF HOUSEHOLD HEADS AND OTHER WORKING MEMBERS OF THE SAMPLE HOUSEHOLDS BY MAJOR OCCUPATION	22
II.8	PLACE OF WORK OF PAID WORKERS	24
II.9	AVERAGE AREA OWNED BY SAMPLE FARMERS	25
II.10	AREA RENTED IN BY SAMPLE HOUSEHOLDS	26
II.11	AREA OWNED AND RENTED OUT BY SAMPLE HOUSEHOLDS	27
II.11.1	REASON FOR RENTING OUT OF ALL THE FARM LAND BY THE CONCERNED SAMPLE HOUSEHOLD	29
II.12	AVERAGE OPERATED HOLDING OF SAMPLE HOUSEHOLDS	30
II.13	LAND USE IN THE SAMPLE WATER COURSES	31
II.14	IRRIGATION TIME ALLOWED PER TURN	34
II.15	NUMBER OF WARABANDI LOST DURING APRIL-DECEMBER 1988	35
II.16	REASON FOR LOSS OF WATER TURNS	36

TABLE NO.	TITLE	PAGE
II.17	FREE WATER FOR IRRIGATION OTHER THAN ON EXCHANGE BASIS	37
II.18	CASES OF TAMPERING OF WATER	38
II.19	FREQUENCY OF DE-SILTATION OF SAMPLE WATER COURSES	39
II.20	FARMERS VIEWS ON DE-SILTATION SYSTEM	40
II.21	CANAL WATER PROBLEMS	42
II.22	CROPPING PATTERN ON SAMPLE FARMS IN KHARIF 1987	49
II.23	CROPPING PATTERN ON SAMPLE FARMS IN RABI 1987-88	51
I.24	DISTRIBUTION OF TOTAL CROPPED AREA IN 1987-88 BY CROPS GROWN	53
I.24.1	CROPPING INTENSITY IN SAMPLE WATERCOURSES	55
I.25	PERCENTAGE OF FARMERS REPORTING USE OF CHEMICAL FERTILIZERS	56
I.26	ACTUAL AND RECOMMENDED PER HECTARE FERTILIZER CONSUMPTION ON SAMPLE FARMS IN THE PROJECT AREA	58
I.27	PERCENTAGE OF FARMERS REPORTING USE OF INSECTICIDES/PESTICIDES AND WEEDICIDES	59
I.28	EXTENT OF AWARENESS AND USE OF IMPROVED VARIETIES OF WHEAT SEED	60
I.29	EXTENT OF AWARENESS AND USE OF IMPROVED MAIZE SEED	61
I.30	SOURCES OF SUPPLY OF CHEMICAL FERTILIZERS (UREA,DAP,NPK)	63
I.31	SOURCES OF SUPPLY OF INSECTICIDES/PESTICIDES AND WEEDICIDES	64
I.32	INPUTS IN THE SUPPLY OF WHICH PROBLEMS HAVE BEEN REPORTED BY FARMERS	66
I.33	SOURCES OF AGRICULTURAL INFORMATION USED BY SAMPLE FARMERS	68

TABLE NO.	TITLE	PAGE
II.34	CREDIT TAKEN BY SAMPLE HOUSEHOLDS	69
II.35	AMOUNT BORROWED BY SOURCE	71
II.36	PURPOSE OF CREDIT	71
II.37	AVERAGE NUMBER AND VALUE OF SELECTED TRADITIONAL FARM IMPLEMENTS POSSESSED BY SAMPLE FARMERS	72
II.38	PERCENTAGE OF SAMPLE HOUSEHOLDS WHO OWN ANIMALS AND POULTRY	75
II.39	LIVESTOCK AND POULTRY PER OWNER AND PER SAMPLE HOUSEHOLD	76
II.40	COMPOSITION OF THE LIVESTOCK OWNED BY SAMPLE HOUSEHOLDS	77
II.41	MILK PRODUCTION AND DISPOSAL IN 1987-88	78
II.41.1	INCOME FROM SALE OF LIVESTOCK AND LIVESTOCK PRODUCTS IN 1987 88	79
II.42	FRUIT TREES OWNED BY SAMPLE HOUSEHOLDS	81
II.43	KIND AND NUMBER OF FRUIT TREES OWNED BY SAMPLE HOUSEHOLDS	82
II.44	INCOME FROM SALE OF FRUIT IN THE SEASON PRECEDING THE BASE LINE SURVEY	83
II.45	CROP YIELDS ON SAMPLE FARMS IN DIFFERENT SECTIONS OF THE WARSAK LIFT CANAL	84
II.46	CROP YIELDS IN DIFFERENT REACHES OF ALL SAMPLE WATERCOURSES TAKEN TOGETHER	86
II.46	YIELD OF MAIZE IN SAMPLE WATERCOURSES	87
II.47	MAIZE FODDER YIELD IN SAMPLE WATER COURSES	88
II.48	VALUE PRODUCTIVITY OF SORGHUM IN SAMPLE WATERCOURSES	89

TABLE NO.	TITLE	PAGE
II.49	YIELD OF SUGARCANE IN SAMPLE WATERCOURSES	89
II.50	YIELD OF WHEAT IN SAMPLE WATERCOURSES	90
II.51	YIELD OF BARLEY IN SAMPLE WATERCOURSES	91
I.51.1	VALUE PRODUCTIVITY OF BARLEY FODDER PER HECTARE IN SAMPLE WATER COURSES	92
I.51.2	VALUE PRODUCTIVITY OF BERSEEM IN SAMPLE WATER COURSES	95
I.52	UTILIZATION OF MAIZE CROP	95
I.53	UTILIZATION OF SORGHUM, BERSEEM AND BARLEY (FODDER)	95
I.54	UTILIZATION OF WHEAT AND BARLEY CROPS	96
I.54.1	UTILIZATION OF GUR, CANE TOPS, AND BAGASSE	97
I.55	COMPOSITION OF FARMING COST PER HECTARE IN PROJECT AREA	99
I.56	COST COMPOSITION (AVERAGE OF ALL CROPS) IN HEAD, MIDDLE AND TAIL SECTIONS OF THE PROJECT AREA	100
I.57	PAID AND SELF-SUPPLIED INPUT COST PER FARM IN THE PROJECT AREA	101
I.58	ECONOMIC AND PAID COST OF FARMING: PER SAMPLE FARM AND PER HECTARE	102
.59	CROP-WISE PER HECTARE FARMING COST	103
.59.1	COST RANGE OF CROPS RAISED ON SAMPLE FARMS	104
.60	PER FARM AND PER HECTARE VALUE OF CROPS RAISED IN SAMPLE WATER COURSES IN 1987 - 1988	106
.61	PER FARM AND PER HECTARE VALUE GENERATED BY CROP PRODUCTION ON SAMPLE FARMS IN 1987 - 88	107
.62	SHARE OF BY-PRODUCTS IN VALUE PRODUCED PER HECTARE OF CROPS ON SAMPLE FARMS	109

TABLE NO.	TITLE	PAGE
II.63	CROP-WISE PROFIT/LOSS ON SAMPLE FARMS IN PROJECT AREA (1987-88)	111
II.64	CROP-WISE PROFIT/LOSS IN DIFFERENT SECTIONS OF THE CANAL (1987-88)	112
II.65	PROFIT/LOSS FROM FARMING 1987-88	115
II.66	SOURCE-WISE DISTRIBUTION OF SAMPLE HOUSEHOLDS DISPOSABLE INCOME IN 1987-88	118
II.67	INCOME PER CAPITA AND PER SAMPLE HOUSEHOLD IN 1987-88	120
III.1	WARSAK LIFT CANAL'S DOWNTIME	136
III.2	CONVEYANCE EFFICIENCY OF RD. 22000-L HEAD HEAD FLUME DISTANCE FROM MOGHA =31.4M	137
III.3	CONVEYANCE EFFICIENCY OF WATER COURSE RD. 45800-L HEAD FLUME DISTANCE FROM MOGHA =9M.	137
III.4	CONVEYANCE EFFICIENCY OF WATER COURSE RD. 53700-L HEAD FLUME DISTANCE FROM MOGHA = 32.2M	138
III.5	CONVEYANCE EFFICIENCY OF WATER COURSE RD. 70800-L HEAD FLUME DISTANCE FROM MOGHA = 20.4M	138
III.6	CONVEYANCE EFFICIENCY OF WATER COURSE RD.115806-L HEAD FLUME DISTANCE FROM MOGHA = 70M	139
III.7	WATER ALLOWANCE	139
III.8	WATER COURSE RD. 22,000-L HEAD INFILTRATION FUNCTION	140
III.9	WATER COURSE RD. 22,000-L (TAIL) INFILTRATION FUNCTION TABLE	141
III.10	WATER COURSE RD.45,800-L (TAIL) INFILTRATION FUNCTION	142

TABLE NO.	TITLE	PAGE
III.11	WATER COURSE RD.53,700-L (HEAD) INFILTRATION FUNCTION	143
III.12	WATER COURSE RD.53,700-L (TAIL) INFILTRATION FUNCTION	144
III.13	WATER COURSE RD.70,800 L (MIDDLE) INFILTRATION FUNCTION	145
III.14	WATER COURSE RD.70,800-L (TAIL) INFILTRATION FUNCTION	146
III.15	WATER COURSE RD.115,806-L (HEAD) INFILTRATION FUNCTION	147
III.16	WATER COURSE RD.115,806-L (TAIL) INFILTRATION FUNCTION	148
III.17	SOIL MOISTURE DEFICIT IN THE ROOTZONE OF FIELD SELECTED FOR GROSS IRRIGATION EVALUATION AT OUTLET RD-22000-L(HEAD)	149
III.18	SOIL MOISTURE DEFICIT IN THE ROOTZONE OF FIELD SELECTED FOR GROSS IRRIGATION EVALUATION AT OUTLET RD-22000-L(TAIL)	150
III.19	SOIL MOISTURE DEFICIT IN THE ROOTZONE OF FIELD SELECTED FOR GROSS IRRIGATION EVALUATION AT OUTLET RD-45800-L(TAIL)	151
III.20	SOIL MOISTURE DEFICIT IN THE ROOTZONE OF FIELD SELECTED FOR GROSS IRRIGATION EVALUATION AT OUTLET RD-53700-L(HEAD)	152
III.21	SOIL MOISTURE DEFICIT IN THE ROOTZONE OF FIELD SELECTED FOR GROSS IRRIGATION EVALUATION AT OUTLET RD-53700-L(TAIL)	153

TABLE NO.	TITLE	PAGE
III.22	SOIL MOISTURE DEFICIT IN THE ROOTZONE OF FIELD SELECTED FOR GROSS IRRIGATION EVALUATION AT OUTLET RD-70800-L(MIDDLE)	154
III.23	SOIL MOISTURE DEFICIT IN THE ROOTZONE OF FIELD SELECTED FOR GROSS IRRIGATION EVALUATION AT OUTLET RD-70800-L(TAIL)	155
III.24	SOIL MOISTURE DEFICIT IN THE ROOTZONE OF FIELD SELECTED FOR GROSS IRRIGATION EVALUATION AT OUTLET RD-115806-L(HEAD)	156
III.25	SOIL MOISTURE DEFICIT IN THE ROOTZONE OF FIELD SELECTED FOR GROSS IRRIGATION EVALUATION AT OUTLET RD-115806-L(TAIL)	157
III.26	FIELD LEVEL IRRIGATION PERFORMANCE PARAMETERS	158
III.27	TUBE WELLS	159
IV.1	SOIL SERIES IN AREAS OF SIX WATER COURSES	203
IV.2	CHARACTERISTICS OF SOILS UNDER COMMAND OF SIX WATER COURSES OF WARSAK LIFT CANAL (SAMPLES NUMBER WITH PERCENTAGES)	208
IV.3	DESCRIPTION OF LAND CAPABILITY UNITS AND THEIR AGRICULTURAL POTENTIAL	212
IV.4	LAND CAPABILITY CLASSIFICATION OF SOILS UNDER COMMAND OF SIX WATER COURSES OF WARSAK LIFT CANAL	214

LIST OF APPENDICES

		PAGE
APPENDIX-A	APPENDIX TABLES A.1 TO A.38 OF PART II.	260
APPENDIX-B	APPENDIX OF PART-IV	318
APPENDIX-C	STATISTICAL TABLES OF SAMPLE WATER COURSE RD.22,000*	324
APPENDIX-D	STATISTICAL TABLES OF SAMPLE WATER COURSE RD.45,800*	416
APPENDIX-E	STATISTICAL TABLES OF SAMPLE WATER COURSE RD.53,700*	514
APPENDIX-F	STATISTICAL TABLES OF SAMPLE WATER COURSE RD.70,800*.....	613
APPENDIX-G	STATISTICAL TABLES OF SAMPLE WATER COURSE RD.115,806*	720
APPENDIX-H	STATISTICAL TABLES OF SAMPLE WATER COURSE RD.132,000*	819
APPENDIX-I	SURVEY SCHEDULE	910
APPENDIX-J	LIST OF PARTICIPANTS IN THE PROJECT..	960

---

* Tables are based on:

- Schedule-I for General Characteristics
- Farm Accounting Schedule for Kharif 1987
- Farm Accounting Schedule for Rabi 1987-88

EXECUTIVE SUMMARY

This report is based on studies conducted in six selected watercourses of Warsak Lift Canal, in 1987-88, to establish base line data to be used to assess success of the Command Water Management Project on its completion. The specific objectives of these studies were to:

i. prepare socio-economic profile of water users with main focus on their land, warabandi issues, water course management, cropping pattern, yields, economics of farming and other relevant aspects of the farm sector;

ii. measure waterflow in water courses, estimate conveyance losses etc; and

iii. analyse the soils of the project area.

SOCIO-ECONOMIC ASPECTS

Almost 29 percent of the sample household heads are literate. All the respondents exhibited good understanding of the subject of this survey, importance of water saving measures etc; and appeared positively responsive to the ideas underlying the Command Water Management Project.

The land owned by the sample households averages 3.12 hectares; this is inclusive of 1.04 hectares located outside the sample watercourses. No household owns more than twenty hectares of land. Renting out of land by the sample population is widespread. This is done for managemental convenience or/and to engage themselves in more remunerative pursuits. Many land owners do off-farm jobs besides farming.

Land use intensity averages 81. Fallow land accounts for 45.68 percent of the farm area in Rabi and 68.61 percent in Kharif season. Water scarcity, not the rotation requirements, explain this high percentage of fallow land.

Cropping intensity averages 89 and the range is 43 to 152. It is positively correlated with water availability.

The major crops are wheat, maize, and fodder (sorghum/berseem) which accounted for 87 percent of the total cropped area in 1987-88. A touch of commercialization is seen in the cropping pattern in the Middle section which is close to urban settlements. In the other two sections, it is largely subsistence oriented.

In the Project Area taken as a whole, yields are much below the Peshawar district's average for the irrigated area. Taking the district's average as the index (=100) the yield indices of maize, sugarcane, and wheat in the Project Area were 57, 35, and 52 respectively in 1987-88.

Within the Project Area, the Middle Section has higher yields in case of most crops as compared with the rest of the canal. Besides the water factor, higher yields in the Middle Section are attributable to its better soils, better inputs and farming practices.

The sample farmers in the Project Area taken as whole, suffered a loss of Rs.227 per hectare in 1987-88. The profit/loss position in different part of canal was as given below:

	Profit/Loss(-) per hectare (Rs)
- Head of canal	- 211
- Middle of canal.....	17
- Tail of canal.....	- 975

Loss in the Head Section (Rs 211 per hectare) was contrary to expectation. It is attributable to water problem in one of its water courses (RD 45,800) due to slope problem and also to shallow/gravely land resulting in low yield. The Tail of canal suffered acute water shortage throughout the crop year covered by this survey; the impact emerged in the farm of low yields or outsight crop failures. Inefficient farm managemen resulting in high costs per hectare also contributed to this situation i.e; losses or/and low profit.

The estimates given above are arrived at by costing all inputs whether purchased or home supplied. The profit/loss position per hectare with and without accounting farm purchased inputs was as shown below:

Locality	Profit/Loss (-) per farm	
	If all inputs costed (Rs)	If only purchased inputs accounted for: (Rs)
- Head	- 423	5,883
- Middle	32	6,175
- Tail	-1101	1,357
- All places	- 460	4,568

Thus when viewed as a firm, the farms are, generally speaking, losing enterprises. But when taken as household enterprises, not charging for home supplied inputs, the same farms emerge as income yielding sources which explains why does farming activity goes on despite losses in economic terms.

INCOME COMPOSITION:

Paid employment is the main source of income of the sample households. This is yet another unexpected finding and is explained by close proximity of the Peshawar city/cantonment to the Project Area.

Source	% of total income
Agriculture	37.51
Paid employment (all off-farm)	49.33
. Other sources	13.16

WATER AND WATER COURSES

Warabandi had been done in three out of the six sample water courses by the elders of water users themselves long ago. The present generation wants re-fixation of water drawal rights for a more equitable distribution of water. They prefer the governmental administration of warabandi.

A large proportion of farmers lost more than five water turns each in 1988 due to unscheduled closures of the canal, water shortages etc. Those at the tail, were the worst affected ones.

The water distribution system is inequitable. Two watercourses were found drawing much more than their sanctioned quota.

The average mean conveyance efficiencies for water courses range between 72.88 % and 83.58 %.

Application efficiencies are satisfactory, and can be improved further with precision level levelling.

SOILS

Majority of soils are medium to moderately textured, non-saline, moderately alkaline (PH 7.9 to 8.4), moderately to strongly calcareous low to medium in organic matter, deficient in total nitrogen and having medium to high available phosphorous and potassium contents.

Class I soils (very good irrigated land of very high potential) with minor limitations occupy 71% area. Class II (good irrigated land of high potential) with gentle slope and laminated loamy soils, occupy 9 % area. Class III (moderate irrigated land of moderate potential) with shallow depth, rapid permeability and low fertility, occupy 6 % area. Rest of the 14 percent area is accounted for by lower order soi

BACKGROUND INFORMATION ON THE COMMAND WATER MANAGEMENT PROJECT - WARSAK LIFT CANAL

This study was conducted for the Command Water Management Project (CWMP) - Warsak Lift Canal. A brief description of the CWMP would be in point before introducing the study and presenting its findings.

The CWMP (Warsak Lift Canal) is a USAID/IDA aided project of the Irrigation Department, N.W.F.P. It envisages water course and several other improvements in the Warsak Lift Canal area. One hundred water courses will be improved. The expected results are minimisation of loss of water in the channels and its more efficient utilization on the farms which, together with marketing and infrastructural improvements would lead to a rise in farm production, income etc and thus improve the general economic well being of the farmers and others associated with the farm sector. The components (inputs) of the project, the constraints to be removed, and the outputs associated with removal of constraints are as follows.

PROJECT INPUTS

i. Water- course improvement. Lining of distributories and/or minors; re-modelling of moghas and/or gating of outlets; improvement of canal structure and lift pumps; water course renovation.

ii. Installation of private tubewells.

iii. Drainage by tubewells.

iv. Surface drainage.

v. Improvement in the on-farm irrigation ditches.

vi. Technical assistance for precision land levelling.

vii. Demonstration plots.

viii. Establishment of provincial policy committee; sub-project management office; sub-project co-ordinating committee; and water users associations.

OJECT OUTPUTS

The expected outputs of the project are:

i. Increased and reliable water supply.

ii. More equitable distribution of water.

iii. More efficient utilization of water on the farm.

iv. Less water-logging and salinity.

v. Better management of water-courses and water distribution.

vi. Improvements in farmers knowledge of better use of water and improved inputs.

PECTED IMPACTS

The improvements outlined above are expected to result in:

i. higher crop yields;
ii. increased crop area and crop intensity;
iii. shift in cropping pattern; and
iv. more optimum use of inputs.

These developments would in their turn lead to:

i. higher income and the consequent improvement in the living standard of the farmers and others associated with the agricultural sector; and

ii. a more equitable distribution of income to the general benefit of the masses.

OBJECTIVE AND METHODOLOGY OF THE BASE LINE SURVEY

The Base Line Survey (BLS) was conducted during June 1987 - August 1988, in six selected water courses of the Warsak Lift Canal.

OBJECTIVE

The main objective of the survey was to establish base line data to be used to assess the success of the Command Water Management Project after its completion. To this end the following information was collected as required as per terms of reference:

1. The main socio-economic characteristics of sample farmers.
2. Use of fixed and variable factors of production (including water), farm output and the nature and extent of farmers current problems especially those the project is thought likely to alleviate.
3. Farmers knowledge of improved farming and water management practices and their exposure to extension services.
4. Cropping intensities and cropping patterns in the sample water courses.
5. Water flows in water courses.
6. Sub-soil water quality and its depth.
7. Soil characteristics.

UNIT OF STUDY

The target people/objects of the BLS are the:

i- Water users;

ii- Farms in the watercourses;

iii- Water in the watercourse; and

iv- Soils of command area

Accordingly the study has four major components:

i- A general socio-economic survey of water users;

ii- A study of farms focussing on land, crops, farm accounts, etc.

iii Water studies.

iv- Soil analysis

METHODOLOGY

All the four studies mentioned above were conducted in the same set f sample water courses - six in number. Therefore, first the selection rocedure of the sample water courses is described. Thereafter, methodology f each of these four studies is separately given.

ELECTION OF WATER COURSES

There are 151 water courses in the Warsak Lift Canal. Out of them 00 are covered by CWMP.

Six water courses were selected for this study. The selected water courses are evenly distributed over Head, Middle and Tail sections of the Canal. They were selected purposively in the light of the following criteria and other relevant considerations to ensure their representative character:

1. The authorized discharge should not be outside the 0.5 - 2.0 cusecs range.

2. The culturable command area should not be outside 150 - 500 acres range.

3. The cropping pattern should be representative of the concerned area.

According to the above mentioned criteria the following water courses were selected.

1. Head of Canal
   i) RD. 22,000 (Reqi Lalam).....Head of Head
   ii) RD. 45,800 (Achini Bala).....Tail of Head

2. Middle of Canal
   i) RD. 53,700 (Sufaid Dehri)....Head of Middle
   ii) RD. 70,800 (Suleman Khel)....Tail of Middle

3. Tail of Canal
   i) RD.115,806 (Maryam Zai).....Head of Tail
   ii) RD.132,000 (Tela Band).....Tail of Tail

In the parenthesis are given the names of the villages served by these watercourses.

GENERAL SOCIO-ECONOMIC SURVEY

The general socio-economic survey was conducted in the six sample water courses through Schedule-1 (Appendix-B). The sample size was fixed at a maximum of ten water users (also called land owners/farmers) each

from the Head, Middle, and Tail reach of each of the six selected water courses. In case there were only ten or a smaller number of water users in a given reach of the water course, then all of them were interviewed. A list of water users in each sample water course was prepared and the sample was drawn randomly. In all, 159 water users were interviewed; they account for 45 percent of the total farmers in the six selected water courses. Distribution of sample farmers is given in Table I.1. (The lists of water users obtained from the Irrigation Department formed the basic sampling frame for this study. These were checked and revised in the field.)

The quota of 10 sample water users in each reach of the selected water course could not be met in water number RD. 22,000 and RD. 132,000 as in no part of these water courses there were ten or more farmers. Therfore, in these places all the farmers were covered by the survey.

Table I.1

DISTRIBUTION OF SAMPLE WATER USERS

Location of sample water courses	Number of water users								
	Head of Water Course		Middle of Water Course		Tail of Water Course		All places		
	Total (no.)	Sample (no.)	Total (no.)	Sample (no.)	Total (no.)	Sample (no.)	Total (no.)	Sample (no.)	8 as % of 7
1	2	3	3	4	5	6	7	8	9
1) Head of Canal	28	19	21	15	18	15	67	49	73.13
a) Head of Head RD 22,000	9	9	5	5	5	5	19	19	100.00
b) Tail of Head RD 45,800	19	10	16	10	13	10	48	30	62.50
2) Middle of Canal	89	20	59	20	58	20	206	60	29.13
a) Head of Middle RD 53,700	42	10	29	10	43	10	114	30	26.32
b) Tail of Middle RD 70,800	47	10	30	10	15	10	92	30	32.61
3) Tail of Canal	20	16	32	15	28	19	80	50	62.50
a) Head of Tail RD 1,15,806	14	10	27	10	19	10	60	30	50.00
b) Tail of Tail RD 1,32,000	6	6	5	5	9	9	20	20	100.00
Grand Total	137	55	112	50	104	54	353	159	45.04

FARM ACCOUNTING STUDY

The farm accounting study was addressed to the same set of 159 sample water users who were interviewed through Schedule-I for study of general socio-economic characteristics. This part of the study was conducted in three phases as given below:

Phase 1. For Kharif 1987

Phase 2. For collection of farm accounts data upto pre-harvest stage of Rabi 1987-88.

Phase 3. The farmers were contacted after the Rabi harvesting was over.

This phasing was done in order to have more reliable estimates of cost and return. The sample farm is taken as a firm. All inputs, whether paid for, or home supplied, are duly costed. Bases for costing of inputs and valuation of output are described at appropriate places in the report.

WATER STUDIES

Water studies were undertaken for (i) flow measurement (ii) conveyance losses, (iii) irrigation efficiency, and (iv) infiltration rate.

i) Water Flow Rate Measurement

This was done in five out of the six sample water courses. The sixth sample water course (RD.132,000) which is at the tail of the Canal did not have any water as the canal water exhausted before reaching there at the time of the survey. The daily flow rate fluctuations were noted at half hourly intervals.

ii) Conveyance Losses

For conveyance losses readings were taken simultaneously at the Head, Middle, and Tail of each of five sample water courses for at least three days. Conveyance losses in RD. 132,000 were not measured due to non availability of water.

iii) Irrigation Application Efficiency Tests

Two Irrigation Application Efficiency Tests were undertaken at the Head and Tail or Middle of each water course except RD. 132,000.

i) Water Infiltration Rate

This study was undertaken on the plots where irrigation application efficiency tests were carried out.

SOIL STUDY

The soil study has three components. These are described as follows.

i) Soil Samples Of Irrigation Application Efficiency Tests

Soil samples were collected from the fields on which Irrigation Application Efficiency Tests were made, to determine bulk density, water holding capacity, fertility, salinity and moisture contents. For moisture contents estimation, the three soil profiles of the entire root zone upto 1.5 meters or to gravel depth were dug out and depth divided into six increments i.e.; 0-15 cm, 15-30cm, 30-60cm, 60-90cm, 90-120cm and 120-150cm. Composite soil samples from three profiles of representative depths were made. Soil of RD. 45,800 is not very deep and samples upto about 60 or 80 cm could be collected. One irrigation application efficiency test was carried out in totally gravel field in which soil was very shallow (less than 15 cm).

Table-1.2

DISTRIBUTION OF SOIL SAMPLES FOR MOISTURE CONTENTS DETERMINATION

Sr. No.	Location at the Canal	Number of soil samples
0	1	2
1.	Head of Canal	11
	a) RD. 22,000	9
	Ist: Test	3
	2nd: Test	6
	b) RD. 45,800	2
	Ist: Test	2
	2nd: Test	-
2.	Middle of Canal	24
	a) RD. 53,700	12
	Ist: Test	6
	2nd: Test	6
	b) RD. 70,800	12
	Ist: Test	6
	2nd: Test	6
3.	Tail of Canal	11
	a) RD. 115,806	11
	Ist: Test	5
	2nd: Test	6
	b) RD. 132,000	- (water was
	Ist: Test	- not
	2nd: Test	- available)
	T o t a l	46

ii) Soil Samples of Project Area

The total culturable command area in the six sample water courses is 2303 acres. For the general characterization of soils for physico-chemical properties, fertility status and salinity levels, composite soil samples of 0 - 45cm depth were collected. Each water course commanded area was traversed and representative areas were earmarked. From each representative area a composite sample was made of 16-25 acres, thus each soil sample mostly covered about 16 to 25 acres depending upon the variation in soil morphological characters and external features. Each sample was labelled properly and sent to Agricultural Research Institute, Tarnab, Peshawar, for analysis.

Table - I.3

DISTRIBUTION OF SOIL SAMPLES

Sample Water Course	C.C.A.*	Soil Samples (number)
1	2	3
Head of Canal	767	22
a) RD 22,000	488	13
b) RD 45,800	279	9
Middle of Canal	978	38
a) RD 53,700	473	18
b) RD 70,800	505	20
Tail of Canal	558	30
a) RD 1,15,806	305	18
b) RD 1,32,000	253	12
Grand Total	2303	90

Culturable Command Area

iii) Description of Soils in Field

Soil profile description upto C horizon was made in each site of Irrigation Application Efficiency Tests. To identify the soil series in project area, profile study was made which includes porosity, colour, texture, structure, consistence, pH, lime and salinity/sodicity status. On the basis of these studies, land capability and soil suitability classes were assessed.

GENERAL CHARACTERISTICS OF THE SAMPLE HOUSEHOLDS

The socio-economic survey was addressed to a sample of 159 households entitled to use water from the Warsak Lift Canal. They are interchangeably called, in this study, as sample water users/sample households/sample farmers.It needs be noted that the right to use canal water is restricted to those who own land in the canal's command area. Therefore, this study's sample is comprised only of land owners' households. In this chapter some general introductory information is provided about them.

TENURE STATUS

As stated above, because of the particular nature of this study pure tenants lie outside its sampling frame. All the 159 respondents are land owners. Thirty two of them get their land cultivated entirely by tenants. Fourteen households, forming 8.81 percent of the total of 159, have rented in land from others beside cultivating their own. The remaining 113 households (71.07 % of total) cultivate only their own land; Table II

Table II.1

SAMPLE HOUSEHOLDS CLASSIFIED BY TENURE STATUS

Sr. No.	Tenure Status	Head Section		Middle Section		Tail Section		All Sections	
		No.	%	No.	%	No.	%	No.	%
1	2	3	4	5	6	7	8	9	10
1.	Absentee landlords (all land cultivated by tenants)	7	14.29	21	35.00	4	8.00	32	20.13
2.	Owner cultivators (cultivate only own land)	37	75.51	31	51.67	45	90.00	113	71.07
3.	Owner-cum-tenants	5	10.20	8	13.33	1	2.00	14	8.80
4.	Total	49	100.00	60	100.00	50	100.00	159	100.00

Table II.2

LITERACY STATUS OF HEADS OF SAMPLE HOUSEHOLDS

Sr. No.	Location	Literate		Illiterate		Total
		No.	%	No.	%	No (=100)
0	1	2	3	4	5	6
1.	Head of Canal	16	32.65	33	67.35	49
2.	Middle of Canal	29	48.33	31	51.67	60
3.	Tail of Canal	1	2.00	49	98.00	50
4.	T o t a l :-	46	28.93	113	71.07	159

The land owners depending entirely on tenanted cultivation can theoretically speaking be called 'absentee landlords'. But in actual fact they are not exactly so. They do remain in regular touch with their rented out farms; participate in cropping decision, provision of inputs, water course management etc. Thus, self management of the land is the dominant practice in the Project Area.

LITERACY STATUS OF HOUSEHOLD HEADS

Almost 29 percent of the sample households' heads are literate in the Project Area taken as a whole. In the Middle Section 48.33 percent and in the Head Section 32.65 percent household heads belong to this category. In the Tail Section the corresponding figure is a mere two percent (Table-II.2).

Nearly half of the literate household heads in the Project Area have passed Matriculation or higher examinations. In the Head Section of the Canal the corresponding figure is 19.75 percent, in the Middle Section it is as high as 62.07 percent, while both the literate farmers in the Tail section are matriculates (Table-II.3). Those who have had upto five years of schooling are, generally speaking, able to read Urdu and also Pashto with understanding. In the present case there is a good percentage of those who are able to understand even the English language. This situation implies that in the areas under study the extension services can make an extensive use of extension literature brought out in simple Urdu/Pashto.

Table-11.3

LEVEL OF EDUCATION OF THE HEADS OF SAMPLE HOUSEHOLDS

Sr. No.	Level of Education	Location: Head of Canal No.	Head of Canal %	Middle of Canal No.	Middle of Canal %	Tail of Canal No.	Tail of Canal %	Total No.	Total %
0	1	2	3	4	5	6	7	8	9
1.	Class 1-5	6	37.50	5	17.24	-	-	11	23.40
2.	Class 5-9	7	43.75	6	20.69	-	-	13	27.66
3.	Ma ic	-	-	13	44.83	2	100	15	31.91
4.	Intermediate	1	6.25	3	10.34	-	-	4	8.51
5.	Graduate	1	6.25	1	3.45	-	-	2	4.26
6.	MA/M.Sc	1	6.25	1	3.45	-	-	2	4.26
14.	T o t a l	16	100	29	100	2	100	47	100

Table-11.4

HOUSEHOLD SIZE

(Numbers)

Sr. No.	Location	Sample Households	Total Population	Average size of household
0	1	2	3	4
1.	Head of Canal	49	784	15.98
2.	Middle of Canal	60	689	11.48
3.	Tail of Canal	50	573	11.46
4.	Total	159	2045	12.86

HOUSEHOLD SIZE

The household size averages 12.86 in the Project Area taken as a whole. In the Head Section it is 15.98. The corresponding figures at Middle and Tail of the Canal are 11.48 and 11.46 respectively (Table II.4). These figures clearly speak of dominance of joint family system. The average household size in rural-Peshawar District was 7.26 in 1981 according to the Census conducted in that year. The Project Area's corresponding figure exceeds that by as much as 77 percent. Both social and economic factors account for this comparatively higher size. The Project Area is in close vicinity of Peshawar which is the biggest urban centre in the NWFP. This is holding in check both pull and push factor caused out-migration as the population concerned can find jobs in close vicinity of their abodes more easily as compared with the rural population in general and those in remote areas in particular. Joint living has some social and economic advantages, too. Besides security of life and property, it facilitates undertaking of farming enterprises without much dependence on hired labour. This element is clearly reflected in farm accounts study as undertaken in a later part of the report.

HOUSEHOLD COMPOSITION

Of the 2045 household members in the 159 households under study, 1044 or 51 percent are males. Those aged 'below 5 years' account for 30.90 percent of the total population in the Project Area. In the Head Section the corresponding figure is 34.10 percent followed by the Tail Section with 33.86 percent. It is 24.82 percent in the Middle Section; (Table-II.5).

Table-II.5

HOUSEHOLD COMPOSITION BY AGE AND SEX

Sr. No.	Canal Section	Age group	Total members (both sexes)		Male		Female	
			No.	%	No.	%	No.	%
1.	Head Section	a. Below 5	267	34.10	138	35.03	129	33.16
		b. 5 and above	516	65.90	256	64.97	260	66.84
		c. All ages	783	100.00	394	100.00	389	100.00
2.	Middle Section	a. Below 5	171	24.82	93	25.43	74	22.98
		b. 5 and above	518	75.18	270	73.57	248	77.02
		c. All ages	689	100.00	367	100.00	322	100.00
3.	Tail Section	a. Below 5	194	33.86	89	31.45	105	36.21
		b. 5 and above	379	66.14	194	68.55	185	63.79
		c. All ages	573	100.00	283	100.00	290	100.00
4.	All Section	a. Below 5	632	30.90	324	31.03	308	30.77
		b. 5 and above	1413	69.10	720	68.97	693	69.23
		c. All ages	2045	100.00	1044	100.00	1001	100.00

ITERATE POPULATION (EXCLUDING STUDENTS)

Minus those still at school, 209 members are literate forming 14.79 percent of the population under study in the Project Area taken as a whole. The corresponding figures for males and females are 26.67 percent and 2.45 percent respectively; (Table-II.6). In the different sections of the canal the literacy position is as given below (in percentage):

	Male	Female	Both
-Head	30.47	4.23	17.25
-Middle	29.63	2.42	16.60
-Tail	17.53	--	8.97

Women are conspicuous by their low literacy rate. This is also the situation in the rural areas in general in the province as also in the country as a whole.

STUDENTS

Those still at school account for 23 percent of the population aged five years and above. This is the overall situation in the Project Area. The population in the Head Section is better placed in this respect with 27.52 percent. It is followed by the Middle Section with 22.78 percent. The Tail Section has the corresponding figure of 17.41 percent respectively. Though the older population is characterised by low literacy level, it is encouraging to find that a good proportion of the younger one is at school.

Variation in percentage of population at school in different sections of the canal is attributable chiefly to differentials in schooling facilities. The villages in the Head and Middle Sections of the canal enjoy more educational facilities than those in the Tail Section. The inhabitants of these villages enjoy not only more schooling facilities within the villages as compared with those in the Tail Section but are also able to send their children to the City which is close by.

LITERATE PLUS AT SCHOOL POPULATION

Merging those who have left the schools with those who are still studying gives an impressive figure. This is 37.86 percent for the population as a whole in the Project Area. For males the corresponding figure is as high as 67.36 percent. The females however trail far behind with only 7.21 percent. Comparative picture in this respect in different sections of the Canal is summed up below from Table II.6:

	Male	Females
-Head Section	82.42	7.69
-Middle Section	65.93	10.48
-Tail Section	49.48	2.16

Table-II.6

LITERACY STATUS OF THE SAMPLE POPULATION

Br. No.	Canal Section	Sex	Total Members (Number)	Literate (excluding students) No.	Literate (excluding students) % a	At School No.	At School % a	Total Literates (and at School) No.	Total Literates (and at School) % a
0	1	2	3	4	5	6	7	8	9
1. Head		Male	256	78	30.47	133	51.95	211	82.42
		Female	260	11	4.23	9	3.46	20	7.69
		Both	516	89	17.25	142	27.52	231	44.77
2. Middle		Male	270	90	29.63	98	36.30	178	65.93
		Female	248	6	2.42	20	8.06	26	10.48
		Both	518	86	16.60	118	22.78	204	39.38
3. Tail		Male	194	34	17.53	62	31.96	96	49.48
		Female	185	0	0.00	4	2.16	4	2.16
		Both	379	34	8.97	66	17.41	100	26.39
4. All		Male	720	192	26.67	293	40.69	485	67.36
		Female	693	17	2.45	33	4.76	50	7.22
		Both	1413	209	14.79	326	23.07	535	37.86

a: % of column 3

It is interesting to note that the Tail Section lags behind the other two when literacy rate of the sample households' heads only is considered. But it doesnot present such a sharp contrast when the overall household data are compared. This is attributable largely to a good percentage of the children at schools in the Tail Section.

DEPENDENCY LOAD

The 159 sample households under study have 2045 members including 263 working members (Table II.7). The dependency load thus comes to 1: 6.77. Only four females are reported to be doing paid jobs. No mentionable participation of women in farming activity was found in any part of the Project Area.

Table-II.7

DISTRIBUTION OF HOUSEHOLD HEADS AND OTHER WORKING MEMBERS OF THE SAMPLE HOUSEHOLDS BY MAJOR SOURCE OF INCOME

Sr. No.	Major Source of Income	Location: Head of Canal		Middle of Canal		Tail of Canal		All places	
		No.	%	No.	%	No.	%	No.	%
0	1	2	3	4	5	6	7	8	9
1.	Rent of land	7	7.61	21	18.58	4	6.90	32	12.17
2.	Paid Employment:								
	a. On Farm	-	-	-	-	-	-	-	-
	b. Off Farm	43	46.74	52	46.02	8	13.79	103	39.16
3.	Self Employed:								
	a. Farming	42	45.65	39	34.51	46	79.31	127	48.29
	b. Transport	-	-	1	0.89	-	-	1	0.38
4.	Grand Total	92	100.00	113	100.00	58	100.00	263	100.00

MAJOR SOURCE OF INCOME

Of the 263 earners, as many as 103 are doing paid off-farm jobs, (Table II.7). Section-wise comparison is presented below:

		Head (%)	Middle (%)	Tail (%)
I	Paid employment (all off-farm)	46.74	46.02	13.79
II	Rentier absentee (landlords)	7.61	18.58	6.90
III	Farming	45.65	34.51	79.31
IV	Other sources	-	0.89	-

PLACE OF WORK

Of the 103 paid workers doing off-farm jobs, 71 work within the command areas of the sample water courses or other palces in Peshawar district. Another 14 work in other parts of NWFP, 11 in other provinces, and 7 in other countries. A fair degree of mobility is indicated by this distribution of work place; (Table-II.8).

Table-II.8

PLACE OF WORK OF PAID WORKERS

(Number)

Sr. No.	Place of Work	Head of Canal	Middle of Canal	Tail of Canal	All places
0	1	2	3	4	
1.	Sample W.C and other places in Peshawar District.	28	40	3	71
2.	Elsewhere in NWFP	7	6	1	14
3.	Other provinces	2	6	3	11
4.	Other countries	6	0	1	7
5.	All Places	43	52	8	103

LAND HOLDINGS AND LAND USE

Land holdings of the sample households are rather small, mostly below five hectares. Taking the 159 sample households as a whole, the area owned averages 3.12 hectares. Operated holding averages only 2.24 hectares. Land use intensity is 84 percent in the sample water courses taken as a whole. Detailed information on the subject is presented in the rest of this section.

AREA OWNED

Area owned averages 3.12 hectares - 2.08 hectares in the sample watercourses and the rest in other places. Average ownership is the smallest in Head Section - 2.79 hectares, and largest at the Tail - 3.74 hectares; (Table II.9).

Table II.9

AVERAGE AREA OWNED BY SAMPLE FARMERS

(hectares)

Sr. No.	Canal Section	Land in sample W.C*	Land outside Sample W.C*	All places
1.	Head	1.84	0.95	2.79
2.	Middle	1.82	1.02	2.84
3.	Tail	2.61	1.13	3.74
4.	All sections	2.08	1.04	3.12

= Water course
Source: Appendix Table A.1.

AREA RENTED IN

The area rented in totals 27.87 hectares giving overall average of .17 hectare for the sample households in general. Considering the fact that the sample households are small land owners, the expectation would be to find them supplementing their holdings by renting in land from other But the survey's findings are exactly opposite to it. Very little land has been rented in (Table II.10), while a large percentage of the land owned by the sample households, as will be seen in Table II.11, has been rented out. The factors underlying this apparent contradiction are explain in the following sub-section on area rented out.

Table-II.10

AREA RENTED IN BY SAMPLE HOUSEHOLDS

(Hectares)

Sr. No.	Canal section	Location of rented in land	Total rented in area	Average area rented in
1.	Head	a.	10.31	0.21
		b.	-	-
		c.	10.31	0.21
2.	Middle	a.	13.31	0.22
		b.	1.42	0.02
		c.	14.73	0.24
3.	Tail	a.	2.83	0.06
		b.	-	-
		c.	2.83	0.06
4.	All sections	a.	26.45	0.17
		b.	1.42	-.-
		c.	27.87	0.17

Source: Appendix Table A.1. -.- negligible
a. In sample water courses
b. Outside sample warter courses
c. Both Places

AREA RENTED OUT

The sample households have rented out as many as 166.88 hectares of land. This constitutes 33.69 percent of the land owned by them. This applies to the Project Area taken as a whole. In the Head Section 44.54 percent and in the Middle Section as much as 48.10 percent of land has been rented out by the sample households there. The corresponding figure is 12.59 percent for the Tail Section; Table II.11.

Table II.11

AREA OWNED AND RENTED OUT BY SAMPLE HOUSEHOLDS

(Area in hectares)

Canal Section	Area owned	Area rented out: Hectares	Area rented out: % of area owned
1	2	3	4
1. Head			
a. Watercourse RD 22,000	42.29	18.46	43.65
b. Watercourse RD 45,800	94.79	42.60	44.94
c. T O T A L	137.08	61.06	44.54
2. Middle			
a. Watercourse RD 53,700	83.66	65.05	77.75
b. Watercourse RD 70,800	87.35	17.20	19.69
c. T O T A L	171.01	82.25	48.10
3. Tail			
a. Watercourse RD 115806	79.12	10.42	13.17
b. Watercourse RD 132000	108.06	13.15	12.17
c. T O T A L	187.18	23.57	12.59
4. All sections	495.27	166.88	33.69*

Source:- Appendix Table A.1.

* According to the Pakistan census of Agriculture (1980) 29 percent of the privately owned land was cultivated by tenants in the NWFP.

The area rented out is six times more than that rented in by the sample households. The latter being small land owners, it would be a reasonable expectation to find the opposite holding true. Therefore, an explanation for this unexpected pattern seems in point.

The extent of renting out is exceptionally large in the Head and Middle sections of the Project Area. These localities are in close vicinity of Peshawar City. Besides, considerable off-farm job opportunities are found there locally. This situation is conducive to the practice of heavy dependence on tenanted cultivation and taking up of off-farm jobs on full or part-time basis. This combination fetches the concerned people more money than devoting all their time to farming. Hence, the high percentage of renting out of land.

Fragmented holdings, too, lead to a resort to tenanted cultivations as the owners find it difficult to manage their scattered land. This phenomenon is found in the Project Area. Another contributory factor is the prestige factor. Some land owners, normally the big ones, prefer tenanted cultivation over self-cultivation. A large proportion of rented out land under analysis belongs to this class of land owners. Renting out is a good proposition also when the holding is too small. Thus, a number of factors contribute to heavy resort to renting out. In the ultimate analysis, the explanation is furnished by economic factors. It need also be taken into account that this study's sample is drawn from land owners only. There are no pure tenants in the sample. This fact by itself answers the apparent contradiction noted above.

Renting out of land has been resorted to a smaller extent in the Tail Section than elsewhere in the Project Area. This is mainly explained by the presence of water constraint which reduces rent worthiness of the land. Moreover, easy alternatives to farming are not available there as abundantly as in other parts of the Canal.

It may be recalled at this point that as many as 32 sample households (see Table II.1) have rented out all their land. This factor, too, has been instrumental in pushing up the figures of rented out land as a proportion of the total area owned. These 32 household heads were interviewe again to ascertain the reason for resort to renting out of their entire holdings. The resulting information in given in Table II. 11.1.

Table II.11.1

REASONS FOR RENTING OUT OF ALL THE FARM LAND
BY THE CONCERNED SAMPLE HOUSEHOLD

	Reasons for resort to renting out of all the farm land	Number	Percentage
1.	Owners doing whole-time paid jobs; so unable to attend to land	20	62.50
2.	The holding is too big for the owner to manage personally.	3	9.38
3.	Owner engaged in whole-time business.	6	18.75
4.	Owners too old to manage the land personally	3	9.38
	T O T A L	32	100.00

OPERATED HOLDING

Operated holding of the sample farmers in the Project Area taken as a whole averages 2.24 hectares of which 1.55 hectares are within the sample watercourse commanded area and the rest outside. The smallest size of operated holding has been recorded in the Head Section where it is 1.76 hectares due to a large proportion of land having been rented out. In the Middle Section, its size is 1.72 hectare, and in the Tail Section it is nearly twice that much i.e, 3.32 hectares; Table II.12.

Table-II.12

AVERAGE OPERATED HOLDING OF SAMPLE HOUSEHOLDS

(Hectare)

Sr. No.	Canal Section	In sample W.C.	Outside sample W.C	Total
1.	Head	1.35	0.41	1.76
2.	Middle	1.12	0.60	1.72
3.	Tail	2.25	1.07	3.32
4.	All Sections	1.55	0.69	2.24

Table II.13

LAND USE IN THE SAMPLE WATER COURSES

Sr. No.	Land use	Head of Canal						Middle of Canal						Tail of Canal						All places	
		RD 22000		RD 45800		TOTAL		RD 53700		RD 70800		TOTAL		RD 115806		RD 132000		TOTAL			
		Hct.	%	Hct.	%	Hct.	%	Hct.	%	Hct.	%	Hct.	%	Hct.	%	Hct.	%	Hct.	%	Hct.	%
1.	Crops	34.91	93.77	52.91	93.99	87.82	93.91	58.97	100.00	42.54	41.86	101.51	63.21	48.77	90.45	61.52	79.80	110.29	84.18	299.62	77.7
2.	Orchards	-	-	0.50	0.89	0.50	0.53	-	-	4.94	4.86	4.94	3.09	2.72	5.04	4.04	5.24	6.76	5.16	12.23	3.1
3.	Not available for cultivation	2.32	6.23	2.88	5.12	5.20	5.56			54.15	53.28	54.15	33.71	2.43	4.51	11.53	14.96	13.96	10.66	73.31	19.0
4.	Total Area	37.23	100.00	56.29	100.00	93.52	100.00	58.97	100.00	101.63	100.00	160.60	100.00	53.92	100.00	77.09	100.00	131.01	100.00	385.16	100.0
5.	Land use intensity (1+2/4x100)	93.77		94.88		94.44		100.00		46.72		66.29		95.49		85.04		89.44		80.97	

Hct= Hactares.

Note:- Land use statistics given in this table cover the area operated by the sample households plus the area of absentee landlords being cultivated by their tenants. Therefore, the area figures may not be equal to those given in Table II.12.

AND USE INTENSITY

Of the total land (385.16 hectares) operated by and for the sample ɔuseholds in the Warsak Lift Canal Command Area almost 81 percent is tilised for agricultural purposes; Table II.13. The lowest land use ntensity (46.72%) has been recorded in sample water course RD 70800 ıich is at the Tail of the Middle Section. Average for the Middle Section ɔmes to only 70.58 percent although the other sample watercourse (RD 3,700) has land use intensity of 100. The high figure of 100% land use ntesnity is creditable to relative abundance of water use in RD 53,700; : receives water from two sourres. The low of 46.72 is explained hy ɜlative water scarcity (in RD 70,800) due to which a lot of land is ·ing barren and undeveloped.

WATER MANAGEMENT

In this chapter some selected aspects of canal irrigation relating to the sample farms are studied. The main focus is on water management system, adequacy or otherwise of water supply, and relevant problems.

WARABANDI SYSTEM

The sample farmers are allowed to draw canal water turn by turn. This is known as '<u>Warabandi System</u>'. In two sample water courses RD 70,800 and RD 115,806 <u>Warabandi</u> has from the very beginning been done by the land owners themselves. In sample watercourse No. RD 22,000, <u>Warabandi</u> was initially done by the Irrigation Department. The Warabandi schedule has, however, been amended by the land owners in order to accommodate the water demand of these who have reclaimed land for its cultivation. In practical terms this watercourse is to be considered as one under the management of water users themselves. In the rest of the sample watercourses -RD 45,800, RD 53,700 and RD 1,32000, <u>Warabandi</u> schedules have been fixed by the Irrigation Department, and is observed by the water users. Water users in the privately managed watercourses (<u>for Warabandi</u>) are generally speaking in favour of fixation of <u>Warabandi</u> by the government. This subject is discussed in some detail later on in this section.

MBER OF TURNS

In the three sample water courses where the water users have their m Warabandi arrangements, water is drawn once in 10 - 13 days. In the other ree watercourses where the Irrigation Department has fixed the Warabandi hedule, it is drawn once a week. The farmers drawing water once in 10- l days are given more time than that given to those who draw it once a ek. The 10 - 13 day turns had been fixed long ago by the elders of the esent generation of water users. The latter have, however, expressed eference for weekly turns.

IRRIGATION TIME PER TURN

Time allowed per turn depends on the area allowed to be irrigated, ich in its turn is determined by reference to area owned by land owners the watercourse. Larger the area, larger is the number of hours of water pply per turn. The relevant information for the sample farm is given in ble II.14.

Table II.14

IRRIGATION TIME ALLOWED PER TURN

Hours Allowed	Percentage of water user in: Head Section	Middle Section	Tail Section	All Sections
1	2	3	4	5
Upto One	20.41	18.33	12.00	16.98
1 - 2	18.37	26.67	20.00	22.01
2 - 4	28.57	35.00	30.00	31.45
4 - 6	10.20	13.33	10.00	11.32
6 - 8	4.08	-	16.00	6.29
More then 8	18.37	6.67	12.00	11.95

Source: Appendix Table A.34

LOSS OF WATER TURNS

Almost 60 percent of the sample farmers lost more than five water turns during 1988. In the Tail Section all farmers belong to this category as will be seen in Table II.15.

Table-II.15

NUMBER OF WATER TURNS LOST DURING APRIL - DECEMBER 1988

Sr. No.	Number of turns lost	Location: Head of Canal No.	Head of Canal %	Middle of Canal No.	Middle of Canal %	Tail of Canal# No.	Tail of Canal# %	Total respondents; all places No.	Total respondents; all places %
0	1	2	3	4	5	6	7	8	9
1.	None	-	-	-	-	-	-	-	-
2.	One	-	-	-	-	-	-	-	-
3.	Two	1	2.04	-	-	-	-	1	0.63
4.	Three	4	8.16	2	3.33	-	-	6	3.77
5.	Four	13	26.53	2	3.33	-	-	15	9.43
6.	Five	21	42.86	21	35.00	-	-	42	26.42
7.	More than 5	10	20.41	35	58.33	50	100	95	59.75
8.	All cases	49	100.00	60	100.00	50	100	159	100.00

Source: Appendix Table A.35

Note: The canal closed every year in Janurary. In 1988 it was closed also during February and March for repair.

\# Water course RD 132,000 received no water. The figures pertain to RD 115806 where all water users lost more than five turns.

In 20 cases, the turns were lost because the main canal had no water en the concerned farmer's turn came. In 139 cases, this happened due to sufficiency of water in the canal due to which water supply in the fected water courses exhausted before reaching the concerned farmers elds; Table II.16.

Table-II.16

REASON FOR LOSS OF WATER TURN

.	Reason	Turn lost							
		Head of Canal		Middle of Canal		Tail of Canal		All Places	
		No.	%	No.	%	No.	%	No.	%
0	1	2	3	4	5	6	7	8	9
	Because there was no water in the main canal.	-	-	-	-	20	40.00	20	12.58
	Because there was in-sufficient water in the main canal.	49	100	60	100	30	60.00	139	87.42
	All Cases	49	100	60	100	50	100.00	159	100.00

It may be clarified that in Head as well as the Middle of the canal ter turns were lost due to sporadic closures of the canal resulting om close down of pumps due to faults or electricity break down. The spondents could, however, not report their exact number which is, erefore, included in row 2 of the table.

EXCHANGE OF WATER

Mutual exchange of water among the sample farmers is extremely rare. Only three out of the total of 159 of them reported that they exchanged water with others. Two of them are in the Middle Section and one in the Tail Section of the Canal. They borrowed and also lent water during Kharif (1987) once and twice respectively.

FREE WATER TAKEN AND GIVEN

Water is taken from and given to others free of cost (other than on exchange basis) by the sample farmers out of their allocated quota. But the cases are ony a few. Only two farmers-both from the Middle Section, have reported having taken free water from others while four have reported having given it to fellow farmers. As a matter of fact this case, too, should be counted as one of exchange of water. Because, it is inconceivable that one who provides free water to his neighbour will be charged when he approaches the neighbour to get some in case of need; Table-II.17.

Table-II.17

FREE WATER FOR IRRIGATION OTHER THAN ON EXCHANGE BASIS

Sr. No.	Location	Is free water ever								Total Farmers
		Taken				Given				
		Yes		No		Yes		No		
		No.	%	No.	%	No.	%	No.	%	No(=100)
1	2	3	4	5	6	7	8	9	10	11
1.	Head of canal	-	-	49	100.00	-	-	49	100	49
2.	Middle of canal	2	3.33	58	6.67	4	6.67	56	93.33	60
3.	Tail of canal	-	-	50	100.00	-	-	50	100	50
4.	All places	2	1.26	157	98.74	4	2.52	155	97.48	159

TAMPERING OF WATER

Tampering of sample farmers share of water has been reported in all sections of the Canal. In the Head Section, 18.37 percent respondents have reported this problem. In the Middle Section as many as 36.67 percent face it. The Tail Section is better placed, as only in 6.00 percent cases this problem is reported. The overall incidence is 21.38 percent; Table 11.18.

Table 11.18

CASES OF TAMPERING OF WATER

Sr. No.	Canal Section	Is sample farmers share of water tampered with? Yes		No		Total Farmers
		No.	%	No.	%	No. (=100)
0	1	2	3	4	5	6
1.	Head	9	18.37	40	81.63	49
2.	Middle	22	36.67	38	63.33	60
3.	Tail	3	6.00	47	94.00	50
4.	All Sections	34	21.38	125	78.62	159

DE-SILTING OF WATER COURSES

The farmers themselves do de-silting of water courses. Those not personally participating in this work are required to pay for the labourers engaged in their place. Timing of de-silting is mutually decided by the water users.

Normally a water course is de-silted at least once a year on collectiv basis i.e; all water users or men on their behalf participate in this work. But different sections of a water course may be de-silted several times to keep the flow smooth. Taking the Project Area as a whole, 30.82 percent water users have reported that the water courses are de-silted once a year. Another 33.33 percent have given water course cleaning frequency at two a year. As many as five de-siltations are also reported; the reporting farmers are 12.58 percent of the total; Table-II.19.

Table-II.19

FREQUENCY OF DE-SILTATION OF SAMPLE WATER COURSES

(Percentages)

Sr. No.	Number of De-siltations in a year	Sample Water Course: Head Section 1 RD 22000	2 RD 45800	Middle Section 3 RD 50700	4 RD 70800	Tail Section 5 RD 115806	6 RD 132000	Average of all water courses
1	2	3	4	5	6	7	8	9
1.	One	10.53	13.33	33.33	13.33	50.00	50.00	30.82
2.	Two	42.11	30.00	26.67	6.67	46.67	50.00	33.33
3.	Three	-	-	3.33	-	3.33	-	1.26
4.	Four	15.79	-	-	-	-	-	1.89
5.	Five or more	21.04	53.33	-	-	-	-	12.58
6.	No response	10.53	3.33	33.33	30.00	-	-	19.50
7.	When needed	-	-	3.33	-	-	-	0.63

FARMERS VIEWS ON DE-SILTATION SYSTEM

Most of the sample farmers-59.12%, are satisfied with the existing system of de-siltation of water courses. This is the situation in the Project Area taken as a whole. In the Head Section, it is quite opposite as will be seen in Table-II.20.

Table-II.20

FARMERS VIEWS ON DE-SILTATION SYSTEM

Sr. No.	Location	Total Farmers (No)	Are the farmers satisfied with the existing system? Yes No.	Yes %	No No.	No %
1.	Head of Canal	49	17	34.69	32	65.31
2.	Middle of Canal	60	28	46.67	32	53.33
3.	Tail of Canal	50	49	98.00	1	2.00
4.	All places	159	94	59.12	65	40.88

In the Head Section 65.33% respondents are not satisfied and in the Tail Section as many as 98% respondents are satisfied with the de-siltation system. The two extreme situation need a comment for clarification.

In the Head Section, especialy in head reach of sample watercourse RD 45,800, the water users are not cooperative in the matter of de-siltation. Of the non-cooperation among the water users there are several reasons, socia as well as economic, which can be the subject for an in dependent study.

In the Tail Section, the level of satisfaction is high because the water users are quite cooperative. All contribute to the collective task of de-siltation without resistance. Of this cooperative spirit, too, there are socio-economic explanations besides technical which need be studied. This section even otherwise doesnot suffer much from siltation problem because by the time the water reaches there a lot of fittration has taken place already.

PROBLEMS (CANAL WATER) FACED BY SAMPLE FARMERS

The sample farmers were asked whether they faced the following problems:

i. A general shortage of water

ii. Defective slope of the channel

iii. Siltation of the channel

The response is, to varying extent, in the affirmative in all the five cases. Relevant data are given in Table II.21 and discussed as follows.

Table-II.21

CANAL WATER PROBLEMS

Sr. No.	Problmes	Location on water course	Is this problems faced ? Yes No.	Yes %	No No.	No %	Total Farmers No(=100)
0	1	1	2	3	4	5	6
1.	A general shortage of water	Head	44	89.80	5	10.20	49
		Middle	52	86.67	8	13.33	60
		Tail	50	100.00	-	-	50
		All points	146	91.82	13	8.18	159
2.	Defective slope of the channel	Head	12	24.49	37	75.51	49
		Middle	1	1.67	59	98.33	60
		Tail	2	4.00	48	96.00	50
		All points	15	9.43	144	90.57	159
3.	Siltation of the channel	Head	8	16.33	41	83.67	49
		Middle	10	16.67	50	83.33	60
		Tail	15	30.00	35	70.00	50
		All points	33	20.75	126	79.25	159

WATER SHORTAGE

This is reported by 146 out of the total of 159 sample farmers in the Project Area. In the Head Section almost 90% and at the Tail of the Canal all the sample farmers face this problem.

DEFECTIVE SLOPE OF THE CHANNEL

This problem has been reported complained by only 15 respondents out of the total of 159. As many as 12 of them belong to sample watercourse RD 45,800. The latter has the followings problems. Its water inlet is not fully submerged in the canal water. If it were lowered then some land in the upper reaches of the watercourse wouldnot get water as lowering of the inlet would necessitate deepening of the channel (because of which , as stated above, the farms in upper reaches wouldnot get water). Therefore, the inlet has been fixed at the existing higher point where, however, the pipe is not fully submerged in canal water due to which water pressure is low. If the pipe were fixed at still higher a point then the problem of channel's slope in relation to the canal would be solved but there would be no water in the channel. So this is quite a tricky situation.

SILTATION

Most of the sample farmers have not reported facing this problem. In the Head Section only 16.33 percent respondents have said that they face it, and about the same percentage (16.67) face it in the Middle Section. It is more acute in the Tail Section where the corresponding figure is 30 percent.

SOME OTHER WATER MANAGEMENT ISSUES

In what follows, some Warabandi and related issues are discussed. From the ensuing analysis and discussion it will emerge, that besides the problem of a general shortage of water, the water users wish to see solved, as quickly as possible, the issues concerning equitability of Warabandi, interval between two water turns, the water rates etc.

PRIVATE WARABANDI

Majority of the water users in the sample water courses practicing private Warabandi, wish to abandon this system and have the Warabandi re-done by the Irrigation department. The sample watercourses of this type are RD 70,000 and RD 115,806; (in practical terms RD 22,000, too, is a case of this type but is not included in the discussion because the initial Warabandi in this watercourse had been done by the Irrigation Department and later on the water users amended that). In these water courses, Warabandi had been done many decades ago by the elders of the present generation of waterusers. Water was in the first instance allocated to tribes. The latter distributed it among their respective members. The inter and intra-tribal distribution was supposed to be in proportion to land owned by the tribes/households concerned. But in practice this criterion was not followed fully. The stronger tribes allegedly got more water than their due and the same holds true for individual households within a tribe. The most common criticism of private Warabandi system is,

however, that water was allocated to landowners by reference to the total land owned in the village, and not that in the command area of the water course. This method resulted in over-allocation of water to some at the expense of others. The beneficiaries are generally the big land owners and the sufferers are the small ones. Thus some land owners have get more water than needed by them. There are reports of sale of surplus water by some water users. In one case, a big land owners was reported to have offered his surplus water right to one of the sample farmers for a lumpsum payment of Rs 10,000.00 in a sample watercourse practicing private Warabandi. The offer was, however, not accepted because the sample farmer concerned feared that he would lose the water if governmental Warabandi (which he thought might be introduced) came to be introduced in the area.

The extent of over-allocation of water quota is not known. It should be a worth while proposition to inquire into this question. The affected water users see the solution of this problem in abandonment of private Warabandi in favour of that fixed by the government. This would automatically involve a survey of the holdings in the concerned watercourses, assessment of water quota etc; and thus anomalies and injustices would be set right.

WATER TURN INTERVAL

As stated earlier in this section, the water users in sample water courses number RD 22,000, RD 70,000, and RD 115,806 draw water after 10-13 days. If water supply were available assuredly throughout the season then even this interval (10 - 13 days) would be alright. But the canal

goes dry or water supply falls below the normal level quite a number of times. In such a situation the 10 -13 day water turn farms are exposed to greater risks of longer no/short-water periods than those with 7-day turn. It sometimes actually happens that the farms donot get water when their turn comes after 10 - 13 days and have to go dry again when the next turn comes after 10 - 13 days while in-between the canal may be in flow.

In two of the three sample watercourses under reference (viz; RD 22,000 and RD 115806) the 7-day turn was in practice previously. In RD 22,000 it was changed to 13-day turn, without increasing the irrigation time, in order to provide water for the newly reclaimed land (all of which belongs to rich people)in the command area. In this water course, the reclamation work was in progress also at the time of the survey. When some more land is brought under plough, the water shortage problem will accentuate further. The farmers want return to the 7 - day Warabandi. Or alternatively, as they demand, a new water course be made for feeding the reclaimed lands.

In RD 115,806, the 7-day Warabandi was converted into 13-day Warabandi but the water supply was accordingly doubled. The farmers are, however, unhappy with the 13 - day turn as due to water shortage they donot get their full water quota although time has been doubled, and they are also exposed to risk of dry periods as already elaborated above.

The problems reported above need be studied in depth and appropriate remedies should be adopted. In the private Warabandi water courses, the overwhelming majority of landowners seems to prefer governmental Warabandi. In the other watercourses, the government should study the possibility and

appropriateness of a re-check of Warabandi schedules to ensure that all lands entitled to draw water do get the same in due proportion i.e; the equitability of distribution should be ensured. Increasing claims on water due to land reclamation should be studied and appropriate measures be taken to ensure that the water rights of others are not encroached upon. These and other water management issues deserve a serious study followed by concrete action.

ABIANA (WATER RATES)

There are reports of Abiana being charged even though canal water is not made available for a whole season. For example, in RD 132,000 Abiana was charged for the year 1987 although in that year this watercourse didnot get any water. The affected water users were, therefore, naturally annoyed over this. This subject need be studied in detail to determine this problem's nature, extent, and remedies.

CROPS AND CROPPING PATTERN

Wheat, Maize, and Fodder crops account for bulk of the cropped area in the six sample watercourses taken as a whole. This pattern is departed from notably in the Tail Section where fodder crop's representation is relatively smaller. Another notable departure in the Tail Section from the overall pattern is that of a good proportion of land being allocated to Sugarcane and Spinach. This being the general picture, the cropping pattern is studied in the rest of this section, in some detail.

KHARIF SEASON

The crops grown on sample farms in kharif 1987 are Maize, Sorghum, Sugarcane, and Pigeon Pea. The latter was gown only in sample water course RD 70,800 (Table II.22).

Maize accounted for bulk (55.92%) of the total cropped area in Kharif season in the Project Area taken as a whole, and also that in the Head and Tail sections (66.53 % and 68.22 % respectively). In the Middle Section, Sorghum claimed more area than any other crop; this being 45.80% followed closely by Maize with 44.90 percent.

Maize accounted for bulk of the total cropped area also in all but one of the six sample water courses taken individually. Only in sample watercourse RD 53,700, which is in Middle Section, its area was exceeded by that of Sorghum.

Sorghum occupied the second position in the Project Area taken as a whole and also in the Head and Middle sections of the Canal. In the Tail Section, Sugarcane was the number two crop.

Table II.22

CROPPING PATTERN ON SAMPLE FARMS IN KHARIF 1987

(Area in Hectares)

Canal Section	Maize		Sarghum		Sugarcane		Pigeon pea		All crops
	Area	%	Area	%	Area	%	Area	%	Area (=100)
1	2	3	4	5	6	7	8	9	10
I. Head									
i. RD 22000	16.18	89.39	1.92	10.60	-	-	-	-	18.10
ii. RD 45800	8.55	44.83	5.56	29.15	4.96	26.00	-	-	19.07
iii. Total	24.73	66.53	7.48	20.13	4.96	13.34	-	-	37.17
2. Middle									
i. RD 53700	15.24	41.69	18.17	49.17	3.14	8.59	-	-	36.55
ii. RD 70800	6.73	54.36	4.24	31.92	0.35	2.82	1.06	8.56	12.38
iii. Total	21.97	44.90	22.41	45.80	3.49	7.13	1.06	2.17	48.93
3. Tail									
i. RD 115806	4.19	56.46	0.55	7.41	2.68	36.12	-	-	7.42
ii. RD 132000	3.84	88.27	0.51	11.72	-	-	-	-	4.35
iii. Total	8.03	68.22	1.06	9.01	2.68	22.77	-	-	11.77
4. All sections	54.37	55.92	30.95	31.63	11.13	11.37	1.06	1.08	97.89

Source: Appendix Table A.2.

Despite water scarcity in the Tail Section, the sugarcane crop claimed there 22.77 percent of the total area under Kharif crops. This crop was grown in sample water course RD 115,806. The solitary farmer cultivating it there supplemented canal irrigation with irrigation from his own tubewell. He devoted only 2.68 hectares to sugarcane for which his tubewell provided enough water to supplement that available from the watercourse.

Sorghum, a fodder crop, is shown in Table II.22 claiming 31.63 percent of the total Kharif crops. The actual representation of fodder cropswas, however, more than that because a large proportion of maize crop, too, was used as fodder. In the Tail Section most of the maize crop was used as fodder because water shortage prevented it reaching full maturity. Apportionment of maize crop partly for obtaining maize grain and partly for use as fodder is a common practice and also profitable. As will be seen in Appendix Table A.38, and the rest for grain production in the project Area taken as a whole. Section- wise corresponding figure are given below (from Appentix Table A.39).

Section	Maze area used as fodder (%)
- Head	25.96
- Middle	31.36
- Tail	60.40

RABI SEASON

In the Rabi season (1987-88) wheat accounted for 72.89 percent of the cropped area in all sections of the Canal taken together. In no secton it was less than 65 percent. As will be seen in Table II.22, this crop accounted for a major portion of the Rabi area also in all the six sample water courses taken individually.

Table II.23

CROPPING PATTERN ON SAMPLE FARMS IN PEBI 1987-88

(Area in Hectares)

Section	Wheat		Barley		Berseem		Pea		Spinach		All crops Canal
	Area	%	Area	%	Area	%	Area	%	Area	%	Area (=100)
1	2	3	4	5	6	7	8	9	10	11	12
1. Head											
i. RD 22000	31.31	89.68	1.47	4.21	2.13	6.10	-	-	-	-	34.91
ii. RD 45800	20.33	74.82	1.53	5.63	5.31	19.54	-	-	-	-	27.17
iii. Total	51.64	83.18	3.00	4.83	7.44	11.99	-	-	-	-	62.08
2. Middle											
i. RD 53700	24.29	67.52	0.76	2.11	10.92	30.35	-	-	-	-	35.97
ii. RD 70800	18.15	67.93	1.01	3.77	3.84	14.36	3.73	13.94	-	-	26.74
iii. Total	42.45	67.69	1.77	2.82	14.76	23.54	3.73	5.95	-	-	62.71
3. Tail											
i. RD 115806	17.60	83.29	2.57	12.16	0.96	4.54	-	-	-	-	21.13
ii. RD 132000	11.93	50.40	7.08	29.91	-	-	-	-	4.66	19.68	23.67
iii. Total	29.53	65.92	9.65	21.54	0.96	2.14	-	-	4.66	10.40	44.80
4. All Sections	123.62	72.89	14.42	8.50	23.16	13.66	3.73	2.20	4.66	2.75	169.59

Source: Appendix Table A.2.

Cropping pattern in the Middle Section was characterised by a heavier epresentation of fodder crops as compared with other sections, as was he case also in the Kharif season. This is chiefly attributable to the lemand factor. The middle section is closer to the Peshawar City, than are others. And within this locality itself, there is good absorption of fodder.

Spinach was cultivated only in sample water course RD 132000 which is at tail of the canal. It is cultivated exclusively for producing seed which fetches a good price as will be seen later in this study.

Overall Pattern (Kharif+Rabi)

In the total cropped area (1987-88), Wheat's share was 46.22 percent followed by Maize with 20.46 percent. This was the situation in the Project Area as a whole. Departure from this general average was recorded in the Middle section where fodder crops were more prominent than Maize; Wheat was the most important one also in this section; Table II.24.

Table-II.24

DISTRIBUTION OF TOTAL CROPPED AREA
IN 1987-88 BY CROPS GROWN

(Percentages)

Area / Crop	Head Section	Middle Section	Tail Section	All Sections
I. Kharif crops	37.45	43.03	20.81	36.59
1. Maize	24.92	19.68	14.19	20.46
2. Sorghum	7.54	20.07	1.87	11.57
3. Sugarcane	5.00	3.13	4.74	4.16
4. Pigeon Peas	-	0.95	-	0.40
II. Rabi crops	62.55	56.17	79.19	63.41
1. Wheat	52.01	38.02	52.20	46.22
2. Barley	3.02	1.59	17.05	5.40
3. Berseem	7.50	13.22	1.70	8.66
4. Peas	-	3.34	-	1.39
5. Spinach	-	-	8.24	1.74
TOTAL =	100.00	100.00	100.00	100.00

Source: Appendix Table A.2

CROPPING INTENSITY

Cropping intensity on sample farms in the Project Area taken in general averages at 89. The Head Section tops in this respect with the corresponding figure of 118, followed by the Middle Section with 108. The Tail Section has cropping intensity of only 50. Water course - wise corresponding figures are given below in Table II.24.1.

The overall pattern is consistent with comparative placing of the watercourses under study in the matter of water availability. In two of the sample watercourses, the cropping intensity is well over 100; in W.C.22000 it is 152 and in W.C. 53700 the corresponding figure is 128. The first of these (W.C.22000) is at the Head of the Head Section and was commissioned in June 1987. The second one (W.C 53,700) is at the Head of the Middle Section. It draws more water than its sanctioned quota. Moreover, this Section has the benefit of receiving water from Bara river besides Warsak Lift Canal.

In the sample water course at the Tail of the Tail Section (W.C.132000), cropping intensity was only 43 in 1987-88. This watercourse suffered from non-availability of water for long periods during 1987-88 and even otherwise it doesnot get its sanctioned quota.

The cruciality of water in determining the level of cropping intensity is clearly reflected in the data given above. Improvement in water supply and management can be expected to lead to likewise impact on cropping intensity and also yeilds, other things being equal.

Table-II.24.1

CROPPING INTENSITY IN DIFFERENT REACHES OF SAMPLE WATER COURSES

Sr. No.	Water Courses	Cropping Intensities in different reaches of the water courses shown in col.1							
		Head Reach		Middle Reach		Tail Reach		All Places	
		Area (Hectare)	Cropping intensity	Area (Hectare)	Cropping intensity	Area (Hectare)	Cropping intensity	Area (Hectare	Cropping intensity
0	1	2	3	4	5	6	7	8	9
1.	HEAD OF CANAL								
	i.RD 22,000								
	a.	14.42	134	6.12	196	14.37	151	34.91	152
	b.	19.33		11.99		21.69		53.01	
	ii.RD 45,800								
	a.	20.64	88	26.45	92	6.32	139	53.41	96
	b.	18.11		24.33		8.76		51.20	
	iii.Total								
	a.	35.06	107	32.57	112	20.69	147	88.32	118
	b	37.44		36.32		30.45		104.21	
2.	MIDDLE OF CANAL								
	i.RD 53,700								
	a.	14.06	115	14.60	154	27.31	136	58.97	128
	b.	16.10		22.42		37.14		75.66	
	ii.RD 70,800								
	a.	18.07	98	11.15	82	18.26	69	47.48	83
	b.	17.78		9.15		12.54		39.47	
	iii.Total								
	a.	32.13	105	25.75	123	45.57	109	106.45	108
	b	33.88		31.57		49.68		115.13	
3.	TAIL OF CANAL								
	i.RD 115,806								
	a.	9.31	62	16.79	65	25.39	53	51.49	59
	b.	5.80		10.92		13.55		30.27	
	ii.RD 132,000								
	a.	21.85	41	14.37	60	29.34	36	65.56	43
	b.	8.90		8.60		10.52		28.02	
	iii.Total								
	a.	31.16	47	31.16	63	54.73	44	117.05	50
	b	14.70		19.52		24.07		58.29	
4.	ALL SECTIONS								
	a.	98.35	87	89.48	98	120.99	86	311.82	89
	b	86.02		87.41		104.20		277.63	

a) Cultivated Area b) Total Cropped Area

Source:- Relevent appendix tables on cultivated and cropped area.

USE OF SELECTED FARM INPUTS

In this section information is presented on the number of sample farmers who use chemical fertilisers, insecticides/pesticides, weedicides, and improved seed (wheat, sugarcane and maize).This will give an idea as to the farmers awareness of selected inputs and extent of the latter's acceptance.

CHEMICAL FERTILISERS

Use of chemical fertilisers is widespread in terms of percentage of farmers using the same. Urea is the most popular one. It is used by as many as 90.19 percent of the sample farmers in the Project Area taken as a whole. The corresponding figure is 57.86 percent for DAP, while it is 13.84 percent for NPK

(Table II.25).

Table II.25

PERCENTAGE OF FARMERS REPORTING USE OF CHEMICAL FERTILISERS

Sr. No.	Kind of fertiliser	Farmers using this in: Head Section	Middle Section	Tail Section	All places
0	1	2	3	4	5
1.	Urea	89.80	93.33	90.00	90.19
2.	DAP	57.14	51.67	66.00	57.86
3.	NPK	20.41	15.00	6.00	13.84
4.	NP	-	10.00	6.00	5.66
5.	Amm.Sulphate	2.04	3.33	6.00	3.77
6.	Amm.Nitrate	4.08	5.00	6.00	5.03

Source:- Appendix Table A.3.

Crop-wise fertiliser consumption data in terms of plant nutrients are given for the six sample water courses in Appendix Table A.4. In the latter it will be seen that the level of consumption is not necessarily higher in the higher reaches of the Canal. The relevant statistics for the important crops are reproduced below; (a= Head of Canal; b=Middle of Canal; c= Tail of Canal).

	Plant nutrients (KG/Hectare)	
Nitrogenous	Phosph.	Potassium
Maize		
a. 37.26	3.19	0.53
b. 52.40	5.98	-
c. 51.02	11.45	-
Sorghum		
a. 34.76	5.28	0.87
b. 62.78	11.04	-
c. 38.49	15.19	-
Wheat		
a. 51.29	0.22	-
b. 56.13	9.34	-
c. 43.73	9.74	-
Barley		
a. 47.97	-	-
b. 47.69	-	-
c. 16.09	4.77	-
Berseam		
a. 64.92	-	-
b. 30.84	-	-
c. 89.84	12.50	-

The water factor definitely affects the level of fertilizer application. Taking this factor as given, other factors too play important role e.g; farmers knowledge, fertilizer prices, availability etc; in determining the application level.

In the different reaches of the canal, and the canal as a whole, the ›vel of fertiliser application is below the recommended level. This ›plies to all crops, in general, as will be seen in Table II.26.

Table II.26

ACTUAL AND RECOMMENDED PER HECTARE
FERTILISER CONSUMPTION ON SAMPLE FARMS IN THE PROJECT AREA

(K.G)

Sr. No.	Crop	Nitrogenous a	Nitrogenous b	Phosphorous a	Phosphorous b
1.	Maize	45.36	75.00	5.09	37.50
2.	Sorghum	55.18	114.00	3.31	58.00
3.	Sugarcane	82.67	115.00	11.33	70.00
4.	Wheat	51.34	136.00	5.05	67.00
5.	Barley	26.60	105.00	2.91	50.00
6.	Berseem	44.23	22.00	1.51	120.00
7.	Pea	40.95	27.00	6.16	67.00
8.	Spinach	22.21	73.00	-	114.00

Source: Appendix Table A.4.

a. Used b. Recommended level

ANT PROTECTION

Only five percent sample farmers reported using insecticides/pesticides ɨ weedicides (Table II.27). The survey was not designed to ascertain ›ther or not the use of plant protection measures was consistent with › farmers need. Field observations, however, suggest that it was less ›n that needed. Those who used insecticides/pesticides also used weedicides.

Table II.27

PERCENTAGE OF FARMERS REPORTING USE OF INSECTICIDES/PESTICIDES AND WEEDICIDES

Sr. No.	Location of farm	Insecticides & pesticides	Weedicides
1	2	3	4
1.	Head Section	2.04	2.04
2.	Middle Section	8.33	8.33
3.	Tail Section	4.00	4.00
4.	All places	5.03	5.03

Source:- Appendix A.3

IMPROVED SEED

The sample farmers were given the names of seed varieties and asked whether they knew about these and, if yes, whether they used these or not. The crops covered are: wheat, maize and sugarcane. The findings are presented below crop - wise.

WHEAT

Awareness of improved variaties of wheat seed (Pak-81, L-73, Sarhad 82, Khyber 79, Pirsabaq-85, Maxipak, Khushal and Chenab) is not as widespread as was visualised at the start of the survey. The most well known of these varieties are Pak - 81 and Maxipak, known to 39.62 percent and 37.74 percent respondents respectively in the Project Area taken as a whole. No other variety is known to more than 3.77 respondents.

Table II.28

EXTENT OF AWARENESS AND USE OF IMPROVED VARIETIES OF WHEAT SEED

Variety	Percentage of farmers who: Know about this: Head Section	Middle Section	Tail Sec.	All Places	Use this: Head Section	Middle Section	Tail Sec.	All Places
. Pak-81	51.02	25.00	46.00	39.62	48.98	21.67	40.00	35.85
. L - 73	2.04	6.67	-	3.14	-	5.00	-	1.89
. Sarhad 82	6.12	3.37	2.00	3.77	6.12	1.67	-	2.52
. Khyber 79	2.04	-	-	0.63	2.04	-	-	0.63
. Pirsabaq 85	4.08	5.00	-	3.14	4.08	1.67	-	1.89
. Maxipak	22.45	48.33	40.00	37.74	22.45	48.33	38.00	37.11
. Khushal	4.08	1.67	-	1.89	4.08	1.67	-	1.89
. Chanab	2.04	3.33	-	1.89	2.04	3.33	-	1.89

ource:- Appendix Table A.5

Most of the farmers who know about availability of improved wheat eed also use it. Thus while 39.62 percent farmers are aware of Pak 81, 5.85% use it. Almost all those who know about Maxipak,use it, too.

UGARCANE

No sample farmer reported knowledge of IM-61, and only two said that hey knew about CP-48 which they, however, didnot use. In so far as NCO-310 s concerned only 26.42 percent sample farmers showed their awareness of his variety. While those actually using it form 24.53 percent of the otal of 159 sample farmers understudy; (Appendix Table A.5).

MAIZE

'Sarhad White' is known to 54.09 percent farmers. And 52.83 percent farmers use it for cultivation. None knows about 'Changez' and 'Zia' varieties, while only 4.49 percent know about 'Shaheen' which all of them use (Table II.29).

Table-II.29

EXTENT OF AWARENESS AND USE OF IMPROVED MAIZE SEED

Variety	Percentage of farmers who:							
	Know about this				Use this			
	Head Section	Middle Section	Tail Section	All places	Head Section	Middle Section	Tail Section	All places
1. Sarhad White	59.18	53.33	50.00	54.09	59.18	53.33	46.00	52.83
2. Changez	-	-	-	-	-	-	-	-
3. Zia	-	-	-	-	-	-	-	-
4. Shaheen	6.12	-	8.00	4.40	6.12	-	8.00	4.40
5. Hameshah	10.20	15.00	4.00	10.60	10.20	15.00	4.00	10.06

Source:- Appendix Table A.5

SOURCES OF SUPPLY OF FARM INPUTS

Most of the fertilizers, insecticides/ pesticides and weedicides are purchased outside the villages where the sample farmers live. Most of seeds of all kinds are home supplied. Supply problems are reported in respect of fertilizers, improved seed, insecticides, and farm machinery in that order.

CHEMICAL FERTILIZERS

Peshawar City is the main source of supply of chemical fertilizers. Well over 80 percent supplies of all kinds of fertilizers come from there to the sample farms (Appendix Table A.3). These percentages are for the Project Area as a whole. In its different sections the situation is not much different as will be seen in Table II.30 in which relevant data are given about Urea, DAP, and NPK- the three most pupular types of chemical fertilizers.

A large percentage of farmers uses chemical fertilizers. It is estimated that 612 bags of these were used in 1987-88 on the 159 sample farms under study giving the average of 4 bags per farm and 2 bags per hectare. This would add to a substantial quantity at village level, yet the village traders donot carry sufficient stock of fertilizers. It should be interesting to inquire into this phenomenon and find ways and means for supply of this input at the farmers doors.

Table II.30

SOURCES OF SUPPLY OF CHEMICAL FERTILIZERS (UREA,DAP,NPK)

(Percentage)

Type of chemical fertilizer	Canal Section	Users who buy this in: Own Village	Outside Village*	Both Places
1	2	3	4	5
1. U r e a	Head	20.45	79.55	-
	Middle	10.71	87.50	1.79
	Tail	17.78	82.22	-
	All places	15.86	83.45	0.69
2. D A P	Head	14.29	85.71	-
	Middle	16.13	83.87	-
	Tail	9.09	90.91	-
	All places	13.04	86.96	-
3. N P K	Head	20.00	80.00	-
	Middle	11.11	88.89	-
	Tail	33.33	66.67	-
	All places	18.18	81.82	-

Source:- Appendix Table-A.3.

*Peshawar city

INSECTICIDES, PESTICIDES, AND WEEDICIDES

As much as 87.50 percent supply of these inputs comes from outside the sample farmers' villages. This is for the Project Area as a whole. In the Head and Middle sections all supplies come from outside the villages. Only in the Tail Section 50.00 percent users make their purchases within their villages (Table II.31).

Table II.31

SOURCES OF SUPPLY OF INSECTICIDES/PESTICIDES, AND WEDICIDES

(percentages)

Name of input	Canal Section	Users who by this in: Own village	Outside
1. Insecticides/ pesticides	-Head	-	100.00
	-Middle	-	100.00
	-Tail	50.00	50.00
	-All places	12.50	87.50
2. Weedicides	-Head	-	100.00
	-Middle	-	100.00
	-Tail	50.00	50.00
	-All places	12.50	87.50

Source:- Appendix Table-A.3.

INPUT SUPPLY PROBLEMS

The sample farmers have reported problems in the supply of fertilizers, improved seed, insecticides, and farm machinery (tractors and threshers). As many as 81 sample farmers complained of tractor supply problem, and almost the same number (82) had problem in respect of threshers; see Appendix Tables A.36 and A.37 respectively. Those complaining of problems in the supply of fertilisers account for 35.22 percent of the total of 159 sample farmers (Table II.32). The corresponding figure for those reporting problems in respect of improved seed is 23.27 percent. Only eight sample farmers have mentioned insecticides in the list of problems.

In so far as fertilizers are concerned, the main problem is that their supply points are concentrated in Peshawar. The farmers have to spend considerable time and also money to fetch those from there. Fertilizer prices are also considered high and the farmers are unhappy over their rising trend. Short availability of this input has not been reported anywhere. It is available, but at high cost and at long distance from the farmers villages.

In the case of improved seed, short supply is the main problem. The farmers complain that use of improved seeds is propagated widely, but when they go out to buy these, none or too little is available. The problem of high prices is besides.

Insecticides are mentioned as a problem by only eight sample farmers. But it is much more widespread than what is indicated by this figure. Most of the farmers donot use these as these are not available easily or at reasonable prices. They are not well aware of how to use these. The consensus among them is that the Agriculture Department should spray their crops whenever necessary.

In the case of farm machinery, both short availability at the time of need and high rents are complained of. Tractors and threshers are the only kind of machines in demand. These are expensive. Therefore, most of those who use these, use the rented ones. At the peak of demand (at ploughing and threshing time) considerable difficulty is faced in securing tractors/threshers on time.

Table 11.32

INPUTS IN THE SUPPLY OF WHICH PROBLEMS HAVE BEEN REPORTED BY FARMERS

Sr. No.	Location	Farmers reporting problems in supply of: Fertilizer No.	Fertilizer %*	Improved seed No.	Improved seed %*	Insecticides No.	Insecticides %*
0	1	2	3	4	5	6	7
1.	Head of Canal	30	61.22	13	26.53	7	14.29
2.	Middle of Canal	20	33.33	16	26.67	1	1.67
3.	Tail of Canal	6	12.00	8	16.00	-	-
4.	All places	56	35.22	37	23.27	8	5.03

* (% of total sample)

Source For relevant data on tractors and threshers see Appendix Tables A.36 & A.37.

SOURCE OF AGRICULTURAL INFORMATION

The sample farmers were given eight specific sources of agricultural information and asked whether they obtained any from these, and if so, whether they used the information so obtained. The sources indicated to them are:

i. Agriculture Department

ii. Demonstration plots laid by insecticides/pesticides firms

iii. Radio

iv. Television

v. Newspapers

vi. Landlords

vii. Other farmers

viii. Input suppliers

Only Radio, TV, Newspapers, and other farmers are reported to have been used by the sample farmers. Agriculture Department is conspicuous but only by its absence as such a source as will, be seen in Table II.33).

Agricultual information that is provided to the farmers through the media is infact to be credited to the Agriculture Department. The sample farmers, however, didnot come into personal contact with extension workers although the extention offices are located close by.

Table II.33

SOURCES OF AGRICULTURAL INFORMATION USED BY SAMPLE FARMERS

Sr. No.	Source	Canal Section	Total Farmers	Farmers using this source of Agricultural information		Farmers using the information secured	
				No.	% of Col. No.4	No.	% of Col. 5
1	2	3	4	5	6	7	8
1.	Radio	Head	49	14	28.57	10	71.43
		Middle	60	8	13.33	5	62.50
		Tail	50	19	38.00	8	42.10
		All places	159	41	25.79	23	56.00
2.	Television	Head	49	5	10.20	1	20.00
		Middle	60	3	5.00	3	100.00
		Tail	50	7	14.00	4	57.14
		All places	159	15	9.43	8	53.33
3.	Newspaper	Head	49	-	-	-	-
		Middle	60	-		-	-
		Tail	50	1	2.00	1	100.00
		All Places	159	1	0.63	1	100.00
4.	Other farmers	Head	49	7	14.29	7	100.00
		Middle	60	17	28.33	13	76.47
		Tail	50	24	48.00	14	58.33
		All Places	159	48	30.19	34	70.83

C R E D I T

Of the 159 sample households under study, only five or 3.14 percent were in debt when interviewed. Their debt totalled Rs. 481,000.00 giving average of Rs. 96,200.00 per borrower and Rs. 3025.00 per sample household serveyed.

Table II.34

CREDIT TAKEN BY SAMPLE HOUSEHOLDS

Sr. No.	Canal Section	Respondents who have ever been indebt		Respondents in debt on interviewed date		Amount of debt (Rs) Total	Average per		Total house-hold (Nn=100)
		No.	%	No.	%		a	b	
0	1	2	3	4	5	6	7	8	9
1.	Head	2	4.08	2	4.08	306000	153000	6245	49
2.	Middle	2	3.33	3	3.33	75000	37500	1250	60
3.	Tail	1	2.00	1	2.00	100000	100000	2000	50
4.	All sections	5	3.14	5	3.14	481000	96200	3025	159

(a) = Borrower (b) = Sample household

All this money has been borrowed from banks. It is, however, believed that the sample farmers borrow also from non-institutional sources-mainly friends and relatives. But these borrowings are on a petty scale, for short periods, and are, therefore, not reported.

The number of borrowers is small. But the amount is large when considered per borrower. The borrowers are big landowners by the project area's overall standard.

It should be interesting to inquire into the causes of the above noted low frequency of indebtedness. Informal discussions with the sample farmers bring forth two possible explanations. First, most of the sample farmers have very small holdings. So they donot need much of money for operating these. Secondly, and more importantly, even if a small farmer is in pressing need of credit, this is more conveniently met by non-institutional sources than the institutional one. Institutional credit involves a lot of time and difficult procedures besides alleged bribing. The small farmers are either unable to satisfy all these requirements or find these botherations not worth the benefit the meagre credit provides to them. The bigger ones are able to satisfy not only the credit requirements, but are also better placed than the smaller ones in the matter of influence, which facilitates all procedures for them.

Low productivity of the land due to water shortage must also be counted as a weighty factor explaining the situation under comment. Credit has to be repaid sooner or later. Land scarce and water starved farmers would not risk taking it because of the apprehension that they may not get a harvest good enough to pay it back.

From the foregoing it is, however, not to be concluded that the small farmers under reference wouldnot avail institutional credit if it were made available cheap and conveniently. If credit supply position were improved in terms of amount, procedure etc, there would be no dearth of demand for it. Infact the smallness of holdings is in itself an argument in favour of making the things easier in credit extension to help the farmers make a better use of their lands and diversify their sources of income.

SOURCES OF CREDIT

Bulk of the credit - 78.17 %, was taken from the Agricultural Development Bank of Pakistan. Commercial banks accounted for the balance of 21.83 percent.

Table- II.35

AMOUNT BORROWED BY SOURCE

Sr. No.	Canal Section	Amount by sources: A D B P Rs	A D B P %	Commercial Banks Rs.	Commercial Banks %	Total Rs.(=100)
0	1	2	3	4	5	6
1.	Head	306,000	100.00	-	-	306,000
2.	Middle	70,000	93.33	5,000	6.67	75,000
3.	Tail	-	-	100,000	100.00	100,000
4.	All Sections	376,000	78.17	105,000	21.83	481,000

PURPOSE OF CREDIT

Only Rs. 5000.00 were spent on purchase of farm inputs. Rest of the amount - Rs. 476,000 (98.96 %), was spent for purchase of farm machinery, Table II.36.

Table-II.36

PURPOSE OF CREDIT

Sr. No.	Canal Section	Purpose of Credit: Farm inputs Rs.	Farm inputs %	Farm Machinery Rs.	Farm Machinery %	Total Credit Rs.(100)
1.	Head	-	-	306,000	100.00	306,000
2.	Middle	5000	6.67	70,000	93.33	75,000
3.	Tail	-	-	100,000	100,00	100,000
4.	All sections	5000	1.04	476,000	93.96	481,000

FARM MACHINES AND IMPLEMENTS

The sample farmers possess all the non-mechanical tools and implements used for farming. No deficiencies were reported. The position in respect of traditional implements is shown in Table II.37.

Table-II.37

AVERAGE NUMBER AND VALUE OF SELECTED TRADITIONAL FARM IMPLEMENTS POSSESSED BY SAMPLE FARMERS

Name of implement	Head Section		Middle Section		Tail Section		All Sections	
	No.	Value (Rs)	No.	Value (Rs)	No.	Value (Rs)	No.	Value (Rs)
1	2	3	4	5	6	7	8	10
1. Desi Plough	0.37	49	0.37	68	0.86	98	0.52	72
2. Mala	0.29	17	0.27	19	0.54	29	0.36	22
3. Ghakhawar	0.31	21	0.27	20	0.52	42	0.36	27
4. Belcha	2.00	69	2.00	82	2.00	72	2.00	75
5. Chari	0.02	-.-	0.03	-.-	0.08	2	0.04	1
6. Punjghakhi	0.43	16	0.32	17	0.46	24	0.40	19
7. Ramba	1.00	11	2.00	22	2.00	25	2.00	19
8. Loor	4.00	46	3.00	47	4.00	66	3.00	53

(-.-) Less than one Rupee)

TRACTORS

Use of tractors is widespread. As many as 152 sample farmers out of the total of 159 use these. Seven of them have their own tractors, while the remaining 145 use the rented ones. Of the rented tractors, the sample farmers' villages are the chief source of supply accounting for 90 out of 145 cases. Rest of the 55 farmers rented in tractors from other places (all rural); see Appendix Table A.36.

TROLLEY

There are two tractor trollies; one in RD-45,800 and one in RD-53,700. The cost is Rs. 26,000.00 and Rs 32,000.00 respectively.

THRESHERS

All but one of the sample farmers use threshers. Only four of them own these. Rest of them use the rented in ones. Of the latter, almost 54 percent are secured from within their own villages and the rest from outside; see Appendix Table A.37.

TUBEWELLS/WATER PUMPING MACHINES

There are two water pumping machines and one tubewell on the sample farms. The machines costing Rs. 15,000 are in sample watercourse RD-53,700. The tubewell is in RD 115,806; its cost is Rs. 45,000.

BULLOCK CART

Only one sample farmer out of the total of 159 has a bullock cart. It cost him Rs. 1600.

CATTLE SHED

There are 97 cattle sheds, owned by an equal number of sample farmers in the Project Area. This gives the average of 0.61 cattle sheds per sample farmer; the cost is Rs. 2074 (per sample farmer).

LIVESTOCK

All the sample households own animals of one kind or other. Commercial scale livestock keeping is practiced on a very limited scale. The average number of animals owned is 4.63 and that of poultry 9.68 per sample household in general in the Project Area. Though not conducted at commercial scale at present, livestock and poultry keeping can be reckoned as an important potential source of income in the Project Area in future. The data resulting from the Base Line Survey lends this hope.

LIVESTOCK OWNERS BY KIND OF LIVESTOCK OWNED

Poultry keeping is widespread. Almost 85 percent of the 159 sample households surveyed in the Project Area own poultry. A good 47.80 percent sample households own buffaloe, and 40.25 percent have cows

Table II.38.

Table-II.38

PERCENTAGE OF SAMPLE HOUSEHOLDS WHO OWN ANIMALS AND POULTRY

Kind of livestock	Head Section	Middle Section	Tail Section	All sections
1	2	3	4	5
1. Buffalo	44.90	58.33	38.00	47.80
2. Cow	57.14	16.67	52.00	40.25
3. Goat	22.45	21.67	24.00	23.27
4. Sheep	12.21	18.33	8.00	13.21
5. Bullocks	16.33	8.33	16.00	13.21
6. He-Buffalo	6.12	6.67	4.00	5.66
7. Horse/Mule	2.04	-	-	0.63
8. Donkey	20.41	28.33	70.00	38.99
9. Poultry	87.79	90.00	74.00	84.91

Source:- Appendix Table A.7.

The small percentage (13.21) of households owning bullocks is quite striking. The explanation lies in small holdings and increasing use of tractor ploughing.

AVERAGE NUMBER OF LIVESTOCK AND POULTRY

For the animals the overall average is 4.63 per sample household; (Table II.39) The range is 3.53 (Middle Section) to 5.80 (Tail Section.

Table-II.39

LIVESTOCK AND POULTRY
PER OWNER AND PER SAMPLE HOUSEHOLD

(Number)

Kind of Livestock	Per Owner: Head	Per Owner: Middle	Per Owner: Tail	Per Owner: All Sections	Per Sample Household*: Head	Per Sample Household*: Middle	Per Sample Household*: Tail	Per Sample Household*: All Sections
0	1	2	3	4	5	6	7	8
1. Buffalo	2.41	2.51	2.42	2.46	1.08	1.47	0.92	1.18
2. Cow	3.46	1.70	1.88	2.55	1.99	0.28	0.98	1.02
3. Goat	3.82	3.38	6.77	4.70	0.86	0.73	1.76	1.09
4. Sheep	2.00	2.82	9.75	3.90	0.24	0.52	0.78	0.52
5. Bull	1.97	2.00	2.25	2.05	0.31	0.17	0.36	0.27
6. He-Buffalo	1.67	1.25	1.50	1.44	0.10	0.08	0.06	0.08
7. Horse/Mule	1.00	0	0	1.00	0.02	0	0	0.01
8. Donkey	1.00	1.00	1.34	1.19	0.20	0.28	0.94	0.46
9. Total Animal	17.33	14.66	25.91	19.29	4.80	3.53	5.80	4.63
10. Poultry	18.86	10.55	7.40	11.40	14.18	9.50	5.48	9.48

* Overall average of owner and non-owner households

Source:- Appendix Tables A.7 & A.8.

LIVESTOCK COMPOSITION

Milch animals viz; buffaloe, cows, goats, and sheep account for as much as 82 percent of the total animals owned by the sample households taken as a whole. Among the rest, donkeys are most prominent with 10 percent (Table II.40).

Table-II.40

COMPOSITION OF THE LIVESTOCK
OWNED BY SAMPLE HOUSEHOLDS

(Percentages)

Kind of livestock	Head section	Middle section	Tail section	All Sections
1. Buffalo	22.55	41.51	15.86	25.37
2. Cow	41.28	8.02	16.90	22.12
3. Goat	17.87	20.75	30.34	23.61
4. Sheep	5.12	14.62	13.45	11.13
5. Bull	6.38	4.72	6.21	5.83
6. He-Buffalo	2.13	2.36	1.03	1.76
7. Horse/Mule	0.43	0	0	0.14
8. Donkey	4.26	8.02	16.21	10.04
9. All Kinds	100.00	100.00	100.00	100.00

Source:- Appendix Table A.8.

It will be noted in Table II.40 that the percentage of buffalo + cow is the highest (63.83) in the Head Section. It declines to 49.53 % at the Tail. There appears to be an obvious positive association between fodder supply and the number of these two kinds of animals on the sample farms, other things being equal. Where water is in good supply, the fodder availability is good, too. And that makes keeping these animals easier. In this respect the Head Section is relatively better placed than the other two. However, this is not the entire explanation for the situation

under comment. There could be some other contributory factors too. These need to be inquired into as the resulting information would prove useful for formulation of livestock development plan in the areas concerned.

MILK PRODUCTION AND SALE

It is estimated that in 1987-88 the sample households, in the Project Area as a whole, produced a total of 179,702 litres of milk out of which 17,340 litres, accounting for 9.65% of the total, were sold. This fetched them Rs.100,913 gross giving the average of Rs.635 per household. Milk available for home consumption was .22 liters per capita per day. (Table II.41).

Table-II.41

MILK PRODUCTION AND DISPOSAL
IN 1987-88

Sr. No.	Canal Section	Milk: Produced (Litre)	Milk: Sold (% age col. 2)	Milk: Available for home consumption a	Milk: Available for home consumption b	Sale proceeds(Rs): Total	Sale proceeds(Rs): Per household (overall average)
0	1	2	3	4	5	6	7
1.	Head	51534	24.27	2.18	0.14	71,909	1467
2.	Middle	93465	4.40	4.08	0.34	24,704	412
3.	Tail	34703	2.07	1.86	0.16	4,300	86
4.	All	179702	9.65	2.80	0.22	100,913	635

Source:- Appendix Table A.9.

a: per litrrs household per day
b: litres per capita per day

A touch of commerciality is visible from statistics pertaining the Head Section. Where 24.27 percent of the milk produced by the sample households was sold fetching Rs.1467 per sample household in 1987-88. In this section all milk sales were reported from watercourse RD-45,800 which is quite close to the urban areas comprising University Town, Hayatabad and other settlements.

INCOME FROM LIVESTOCK AND LIVESTOCK PRODUCTS

The 159 sample households under study secured Rs.105,363 from sale of livestock and livestock products in the year 1987-88. This gives average of Rs.663 per household.

Table II.41.1

INCOME FROM SALE OF LIVESTOCK AND LIVESTOCK PRODUCTS IN 1987-88

(Rupees)

PRODUCTS	Sale Proceeds							
	Head Section		Middle Section		Tail Section		All sections	
	Total	per farm	Total	per farm	Total	per farm	Total	per farm
1	2	3	4	5	6	7	8	9
1. Milk	71,909	1467	24,704	412	4,300	86	100,913	635
2. Hides & skins	1,290	26	-	-	160	3	1,450	9
3. Eggs	-	-	-	-	2,400	48	2,400	15
4. Poultry	-	-	-	-	600	12	600	4
Total	73,199	1494	24.704	412	7460	149	105,363	663

Of the livestock products totalling Rs. 105,363 in the Project Area, the Head Section accounted for Rs. 73,199 or 69 percent. This survey dnesnot go into further details of the livestock sector in the Project Area. It would, however, be a worth while proposition to study this sector in greater depth to explore the possibilities of its development as that can help minimise the economic hardships caused by water scarcity.

FRUIT PRODUCTION

Fruit plantation on sample households' lands is done on a very limited scale. Almost 78 percent of fruit trees are owned by the Tail Section sample households and the rest by those in the Middle Section.

There are in all 1079 fruit trees on sample households' land. Out of these, only 450 trees or 42 percent of the total are planted in the sample water courses. The remaining 58 percent are in other areas.

Table 11.42

FRUIT TREES OWNED BY SAMPLE HOUSEHOLDS

Sr. No.	Canal Section	Location of fruit trees	Total trees No.	Total trees %	Trees per sample household (No.)
01	1	2	3	4	5
1. Middle		a.	-		
		b.	238	100.00	3.97
		c.	238	100.00	3.97
2. Tail		a.	450	53.51	9.00
		b.	391	46.49	7.82
		c.	841	100.00	16.82
3. All Sections		a.	450	41.71	2.83
		b.	629	58.29	3.96
		c.	1079	100.00	6.79

(No fruit in Head Section)

a. In sample water courses
b. Outside the sample water courses
c. Total

Only Apricot, Plums, Lemon, and Loquat are grown on the farms under study. Apricot is the most widely grown fruit, followed by plums, lemon, and Loquat. Apricot and Plums are grown in the Middle as well as the Tail section. Lemon and Loquat are found only in the Middle Section.

Table II.43

KIND AND NUMBER OF FRUIT TREES OWNED BY SAMPLE HOUSEHLDS

(Number of trees)

Kind of Fruit	Middle Section Total	Middle Section Per H.H	Tail section Total	Tail section Per H.H	All section Total	All section Per H.H
0	1	2	3	4	5	6
1. In the sample water courses						
i. Apricot	-	-	70	1.40	70	0.44
ii. Plum	-		380	7.60	380	2.39
iii. Lemon	-	-				
iv. Loquat	-	-				-
v. All fruit	-	-	450	9.00	450	2.83
2. Outside sample water courses						
i. Apricot	62	1.03	391	7.82	453	2.85
ii. Plum	18	0.30	-	-	18	0.11
iii. Lemon	104	1.73	-	-	104	0.65
iv. Loquat	54	0.90	-	-	54	0.34
v. All Fruit	238	3.97	391	7.82	629	3.96
3. All Places						
i. Apricot	62	1.03	461	9.22	523	3.29
ii. Plum	18	0.30	380	7.60	398	2.50
iii. Lemon	104	1.73	-	-	104	0.65
iv. Loquat	54	0.90	-	-	54	0.34
v. All Fruit	238	3.97	841	16.82	1079	6.79

Per H.H: Per sample Household
Note: None grown in Head Section

During the season preceding the Base Line Survey, the fruit growers had earned a total of Rs. 20,650 from sale of fruit grown both in and out the sample watercourses. This provided Rs. 130 per sample household.

Table 11.44

INCOME FROM SALE OF FRUIT IN THE SEASON PRECEDING THE BASE LINE SURVEY

(Rupees)

Canal Section	Total sale proceeds			Sale proceed per sample household		
	a	b	c	a	b	c
1. Head	-	-	-	-	-	
2. Middle	-	1650	1650		8	8
3. Tail	4000	15000	19000	80	300	380
4. All Sections	4000	16650	20650	25	105	130

a: In the sample watercourse
b: Outside the sample watercourses
c: Total

It is interesting to note that the horticultural sector, though on the whole of a negligible size, is relatively more developed in the Tail Section. The sample watercourses number RD-115806 and RD 132000 are situate near the orchard belt of Tarnab, Urmar Bala, and Urmar Payan. Ten years ago when the water of Warsak Lift Canal was sufficient, the farmers laid out regular orchards which are now in bearing stage. In the village of Talaband (RD-132000) the respondents irrigate the fruit orchards by installing small electric power machines on open wells.

CROP YIELDS

Crop yields in the Middle Section of the Canal, represented by sample water courses RD 53,700 and RD 70,800, are generally speaking higher than those in the Head and Tail sections. The Head Section's ranking is second in this respect, while the Tail Section is at the rear. This picture emerges when the averages of all reaches of the sample water courses in different sections are considered, as will be seen in Table II.45.

Table II.45

CROP YIELDS ON SAMPLE FARMS IN DIFFERENT SECTIONS OF THE WARSAK LIFT CANAL

(Per hectare)

Sr. No.	Crops	Unit	Head Section	Middle Section	Tail Section	All Sections
0	1	2	3	4	5	6
1.	Maize grain	Maunds	12.06	16.00	1.57	12.77
2.	Maize Fodder	Bundles	529.00	671.00	99.00	465.00
3.	Sorghum	Rupees	1731.00	4706.00	146.00	3831.00
4.	Sugarcane	Maunds	323.00	454.00	246.00	390.20
5.	Pigeon Peas	Bundles	-	264.00	-	264.00
6.	Wheat	Maunds	29.84	29.80	13.39	26.03
7.	Barley grain	Maunds	13.00	14.36	11.83	11.32
8.	Barley Fodder	Rupees	3769.00	4063.00	1855.00	3012.00
9.	Berseem	Rupees	5688.00	6771.00	1901.00	6196.00
10.	Peas	Maunds	-	33.56	-	33.56
11.	Spinach (seed)	Maunds	-	9.66	-	9.66

Note: Yields are expressed in terms of rupees in the case of crops sold while still in field.

This pattern of comparative yields is somewhat different from the expected one. The expectation was to find higher yields in the Head Section as it is supposed to be better placed in respect of water supply than the lower parts of the Canal. The water situation in the Head Section was, however not what was expected. In one of its sample watercourses (RD 45,800) there is the problem of defective slope of the channel because of which fields donot get proper supplies of water. While on the other hand the command area of a sample water course (RD 53700) in the Middle Section receives water also from Bara river besides drawing more water than sanctioned for it from the Warsak Lift Canal. Thus, the water situatic was generally speaking better in the Middle Section as compared with the Head and Tail section. This factor, among other things, helped it have better yields than elsewhere in the Project Area.

As interesting picture emerges when yields in different reaches of the sample watercourses are compared. In Table II.45.1 the averages of upper reaches, middle reaches, and tail reaches of all the sample water courses taken together are given for a comparative study.

Table II.45.1

CROP YIELDS IN DIFFERENT REACHES
OF ALL SAMPLE WATERCOURSES TAKEN TOGETHER

(Mds/hectare)

Sr. No.	Crop	Yield			
		Upper reaches	Middle reaches	Tail reaches	All reaches
0	1	2	3	4	5
1.	Maize	13.00	9.92	15.21	12.77
2.	Spinach	5.76	9.84	15.43	9.66
3.	Sugarcane	537.94	431.39	308.80	390.32
4.	Pigeon Pea	-	303.00	186.00	264.00
5.	Wheat	22.90	27.71	27.55	26.03
6.	Barley	14.61	.	9.79	11.32
7.	Pea	29.75	41.25	39.60	33.56

In the case of Maize, Spinach, Wheat and Pea, the Tail reaches of the watercourses, taken as a whole, had higher yields as compared to the upper ones. This is rxplained by the following factors.

Within a given watercourse the water users in different reaches usually get water in accordance with their quota which is in proportion to their land. So while a watercourse taken as a whole may get a larger or smaller supply than another, within that given watercourse the different reaches normally get water quota proportionate to the land there. Thus, water supply differentials are not as sharp between different reaches of watercourses as betwen the watercourses in different parts of the canal. Within the different reaches of a watercourse yield differentials are thus explained largelly by differential in the level and quality of inputs and efficiency of farming practices. Field observations suggest that the yield differentials are mainly explained by this factor in the

case under study. Water, it must be emphasised, is a basic factor, but not the only one in this context.

SAMPLE WATERCOURSES WISE YIELD OF CROPS

MAIZE

Yield of maize was the highest- 17.64 maunds/hectare, in sample water course RD 70,800 followed by sample water course RD 53,700. Both these water courses are in the middle of the canal (Table II.46).

Table II.46

YIELD OF MAIZE IN SAMPLE WATERCOURSES

Sr. No.	Locality	Yield: Head reach	Middle reach	Tail reach	All reaches
0	1	2	3	4	5
1.	Head Section				
	i- RD 22,000	12.20	11.36	17.76	14.14
	ii- RD 45,800	6.09	3.86	14.53	7.47
	iii- Average	11.40	6.16	16.08	12.06
2.	Middle Section				
	i- RD 53,700	18.55	12.99	13.77	14.48
	ii- RD 70,800	18.75	18.28	15.41	17.64
	iii- Average	18.64	16.81	14.33	16.02
3.	Tail Section				
	i- RD 115,806	6.67	-	-	6.67
	ii- RD 132,000	2.46	0.70	-	1.32
	iii- Average	2.94	0.70	-	1.57
4.	All Watercourses	13.00	9.92	15.21	12.77
5.	Peshawar District*				22.43
6.	N.W.F.P*	(For year 1984-85)			24.14

* The Source is Agricultural Statistics of Pakistan, 1986.
All other data are based on base line survey

MAIZE FODDER

Maize in green form is used also as fodder. The farmers have a practice to grow maize sometimes exclusively for fodder, and sometimes they cut a part of the crop and let the rest of it reach full maturity to graining stage. The estimates of fodder yield apply to the first kind of land i.e; the land used for fodder production only.

Table-II.47

MAIZE FODDER YIELD

(Bundles of fodder per Hectare)

Sr. No.	Canal Section	Yield
1.	Head	529
2.	Middle	671
3.	Tail	99
4.	All	465

SORGHUM

In the case of Sorghum the most prevalent practice is to sell the standing crop. Some farmers themselves harvest and sell it. They, too, have reported the value, received by them, not the weight of the crop so sold. However, the value received per hectare in different sections of the canal serves as a measure of the crops' yield in to terms of physical weight, too.

Table-II.48

GROSS VALUE OF SORGHUM PER HECTARE

S.No.	Canal section	Rupees
1.	Head	1731
2.	Middle	4706
3.	Tail	146
4.	All	3831

SUGARCANE

Sugarcane yield averages at 390 maunds per hectare in the Projec Area. The highest figure was recorded in sample watercourse RD 53,70 where it was 629 maunds/hectare (Table II.49).

Table II.49

YIELD OF SUGARCANE IN SAMPLE WATERCOURSES

Mds/Hectare

Sr. No.	Locality	Yields: Head reach	Middle reach	Tail reach	All reaches
0	1	2	3	4	5
1.	Head Section				
	i. RD 22,000	-	-	-	-
	ii. RD 45,800	449.72	290.44	-	322.96
	iii. Aaverage	449.72	290.44	-	322.96
2.	Middle Section				
	i. RD 53,700	815.43	701.11	308.88	629.39
	ii. RD 70,800	310.64	-	-	310.64
	iii. Average	661.78	701.11	308.88	597.05
3.	Tail Section				
	i. RD 115,806	270.00	703.00	-	621.70
	ii. RD 132,000	-	-	-	-
	iii. Average	270.00	703.00	-	621.70
4.	All Watercourses/ all sections	537.94	431.39	308.88	390.32
5.	Peshawar District*				1115.00
6.	N.W.F.P.*				1056.00

* For source, see Table II.46.

All the sugarcane produced on the sample farms was converted into 'Gur'. For making one maund of 'Gur' approximately ten maunds of sugarcane are required if the crop is in normal health. The yields given above are approximated by reference to the quantity of Gur made by the sample farmers. Some under-estimation, therefore, cannot be ruled out; but it is not believed to be large.

PIGEON PEA

This was grown only in the Middle Sectionof the canal. The yield was 264 bundles per hectare.

W H E A T

Yield per hectare of wheat averaged at 26.03 maunds in the Project Area taken as a whole. Taken sample watercourse wise, it was the highest in RD 53,700. The latter produced 39 mds/hectare (Table II.50).

Table II.50

YIELD OF WHEAT IN SAMPLE WATERCOURSES

Mds/Hectare

Sr. No.	Locality	Yields: Head reach	Middle reach	Tail reach	All reaches
0	1	2	3	4	5
1.	Head Section				
	i. RD 22,000	18.48	39.44	32.91	29.32
	ii. RD 45,800	27.67	33.38	32.79	30.63
	iii. Average	22.66	36.47	32.87	29.83
2.	Middle Section				
	i. RD 53,700	33.90	41.99	40.35	39.11
	ii. RD 70,800	21.17	17.29	12.04	17.34
	iii. Average	26.81	32.60	30.51	29.79
3.	Tail Section				
	i. RD 115,806	16.99	21.76	16.77	18.86
	ii. RD 132,000	10.42	4.71	8.65	6.83
	iii. Average	15.06	13.65	13.76	14.00
4.	All Watercourses/ all sections	22.90	27.71	27.55	26.03
5.	Peshawar District*				50.27
6.	N.W.F.P.*				31.05

* For source, see Table II.46.

BARLEY GRAIN

Yield variations in different sections of the Canal are not ver large in the case of barley. The overall average is 11.32 mds/hectare The Middle Section leads with 14.36 maunds/hectare followed by the Hea Section with 13.00 maunds/hectare. The Tail Section is at the bottom alo in this case.

Table 11.51

YIELD OF BARLEY IN SAMPLE WATERCOURSES

Mds/Hectare

Sr. No.	Locality	Yields: Head reach	Middle reach	Tail reach	All reaches
0	1	2	3	4	5
1.	Head Section				
	i. RD 22,000	13.00	-	-	13.00
	ii. RD 45,800	-	-	-	-
	iii. Average	13.00	-	-	13.00
2.	Middle Section				
	i. RD 53,700	-	-	-	-
	ii. RD 70,800	14.75	-	13.75	14.36
	iii. Average	14.75	-	13.75	14.36
3.	Tail Section				
	i. RD 115,806	23.75	-	-	23.75
	ii. RD 132,000	16.35	-	9.47	11.16
	iii. Average	17.56	-	9.47	11.83
4.	All Watercourses	14.61	-	9.79	11.32

BARLEY FODDER

Yield in this case, as also in that of Shaftal and Berseem, is giver in terms of Rs/hectare. This, nevertheless, helps compare productivity ir different areas, as given below in Table-11.51(i).

Table-II.51.1

GROSS VALUE OF BARLEY FODDER PER HECTARE

Canal Section		Rupees
1.	Head	3769
2.	Middle	4063
3.	Tail	1055
4.	All	3012

BERSEEM

Berseem - a fodder crop, fetched Rs 6169 per hectare in the Project Area taken as a whole. The Middle Section of the canal has the corresponding figure of Rs. 6771 which is higher than that of the other two sections.

Table-II.51.2

GROSS VALUE OF BERSEEM

Canal Section		Rupees
1.	Head	5688
2.	Middle	6771
3.	Tail	1901
4.	All	6196

P E A S

This crop was grown only in the Middle section. the yield was 33.56 maunds/hectare. For NWFP and Peshawar districts the corresponding figure are 15 and 13.61 respectively for the year 1984-85 (according to data given in Agricultural statistics of Pakistan, 1986).

SPINACH

This crop was grown only in the Tail Section. It yielded 9.66 maunds of seed per hectare. The whole of the crop was used for producing seed.

CONCLUDING NOTE

Crop yields are highest in the Middle Section followed by the Head Section. The Tail Section trails in all crops. In the Middle Section the soil is deep and fertile. It draws more water from the canal than is sanctioned for it. During rainy season, water from Bara river also joins one of the two water courses (RD 53700) in this section, thus giving it advantage over the other two in respect of supply of irrigation water. Moreover, the Middle Section is quite close to the City. This must be facilitating availability of farming inputs, access to better marketing facilities for farm products with consequent positive impact on incentive to use the land more productively. All these factors have helped the Middl Section come up with comparatively better productivity figures. By the provincial and the district's standards, however, the yields are low even in this section.

UTILIZATION OF CROPS

In this section, information is presented on the utilization of the crops raised by the sample farmers on their farms located in as well as outside the sample water courses. The principal concern of this part of the study is to find out the proportion of the output self-consumed, sold, and put to other uses by the sample households. This would give an idea as to saleable surplus of various crops and would also be helpful in computing farmers income from sale of crops.

A feature common to all the three sections of the Canal is that saleable surpluses were relatively smaller in the case of cereal crops as compared with others. This is quite expected a feature. The element of commerciality is found mainly in the cultivation of fodder crops and sugarcane. Crop by crop account of mode of utilization is presented in the rest of this section.

M A I Z E

Of the main product 49.68%, and that of the by-product 57 % was allocated to home use. The corresponding figures for sale are29.98% and 23.11% respectively. This was the situation is the Project Area taken as a whole. In the Tail Section the proportions used for home consumption were much higher as will be seen in Table II.52. The Tail Section farms produced very little of maize in 1987. There was, therefore, practically no saleable surplus of maize grain while only 7.32% of maize by-product (fodder) was sold.

Table-11.52

UTILIZATION OF MAIZE CROP

(%ages)

Sr. No.	Canal Section	Home used MP	Home used BP	Sold MP	Sold BP	Other uses MP	Other uses BP
0	1	2	3	4	5	6	7
1.	Head	45.71	41.73	31.95	30.91	22.34	27.36
2.	Middle	47.28	34.86	30.90	57.34	20.82	7.80
3.	Tail	99.37	92.68	-	7.32	.63	-
4.	All	49.69	57.00	29.98	23.11	20.33	19.89

Source:- Appendix Table A.12.

MP= Main product
BP= By - product

FODDER CROPS

Sorghum and Berseem are grown exclusively for use as fodder. The same farmers allocated some land under barley, too, for use as fodder. The end of utilization of these crops is given in table-11.53.

Table-11.53

UTILIZATION OF SORGHUM, BERSEEM AND BARLEY FODDER

(%ages)

Sr. No.	Crop/Utilization	Head Section	Middle Section	Tail Section	All Sections
0	1	2	3	4	5
1.	Sorghum				
	a. Home used	41.37	0.60	100.00	13.38
	b. Sold	34.80	63.94	-	59.92
	c. Other uses	23.83	27.38	-	26.70
2.	Berseem				
	a. Home used	52.97	48.10	100.00	51.60
	b. Sold	25.26	33.12	-	29.50
	c. Other uses	21.77	18.78	-	18.90
3.	Barley Fodder				
	a. Home used	43.11	74.36	49.48	51.58
	b. Sold	13.79	-	50.52	24.46
	c. Other uses	43.10	25.64	-	23.96

Source:- Appendix Table A.12.

WHEAT AND BARLEY

Barley was mostly allocated to home use. Of the wheat crop, the mode of utilization was comparatively more diverse as will be seen in Table II.54.

Table-II.54

UTILIZATION OF WHEAT AND BARLEY CROPS

(%ages)

Sr. No.	Crop/ Utilization	Head Section		Middle Section		Tail Section		All Sections	
		MP	BP	MP	BP	MP	BP	MP	MP
01	1	2	3	4	5	6	7	8	9
1.	Wheat								
	a. Home used	61.28	79.67	17.88	58.80	45.25	69.92	53.94	70.41
	b. S o l d	5.56	12.17	9.42	11.48	37.01	23.95	11.79	13.75
	c. Other uses	33.16	8.16	42.71	29.72	17.74	6.13	34.27	15.84
2.	Barley								
	a. Home used	23.08	100.00	31.03	100.00	77.16	100.0	69.20	100.00
	b. S o l d	76.92	-	37.94	-	10.15	-	15.83	-
	c. Other uses	-	-	31.03	-	12.69	-	14.97	-

Source:- Appendix Table A.12.

SUGARCANE

Whole of the sugarcane crop was procesed into 'Gur' of which the major portion was sold. Cane tops and bagasse were mostly used for home consumption (as fodder); Table II.54.1.

Table-11.54.1

UTILIZATION OF GUR, CANE TOPS, AND BAGASSE

Sr. No.	Product	Head Section	Middle Section	Tail Section	All Sections
0	1	2	3	4	5
1.	Gur				
	a. Home used	29.39	30.68	50.00	32.26
	b. Sold	44.09	69.32	48.65	54.84
	c. Other*	26.52	-	1.35	12.90
2.	cane tops				
	a. Home used	77.50	100.00	100.00	89.65
	b. Sold	-	-	-	-
	c. Other*	22.50	-	-	10.35
3.	Bagasse				
	a. Home used	77.36	100.00	100.00	90.62
	b. Sold	-	-	-	-
	c. Other*	22.64	-		9.38

Source:- Appendix Table A.12. * landlords'share, payment in kind to labourers, charety etc.

PIGEON PEAS

Almost the entire output of pigeon pea was used by the sample farms themselves.

PEAS

Of this crop 95 percent was sold. The remaining five percent was put to other uses.

SPINACH

The whole of this crop was sold.

FARMING COST

Estimates of farming cost presented in this chapter are based on farm accounting survey covering Kharif 1987 and Rabi 1987-88 seasons. The following estimates are presented in that order:

i. Cost composition (for all crops taken together).

ii. Cost Break-up by purchased and self-supplied inputs

iii. Crop-wise cost per hectare

These estimates are for the crops raised in sample watercourses. They will be used in a later chapter for computation of profitability from farming.

COST COMPOSITION: PROJECT AREA (AVERAGE OF ALL CROPS)

Of cost composition, two estimates are computed. One includes the rent of land. The other is without it. As will be seen in the Table II.[illegible] inclusion or exclusion of rent makes a substantial difference to cost composition.

Table-II.55

COMPOSITION OF FARMING COST PER HECTARE
IN PROJECT AREA

Sr. No.	Item	With rent Rs.	%	Without rent Rs.	%
0.	1	2	3	4	5
1.	Rent of land	1530	34.96	-	
2.	Manual labour	1034	23.83	1043	36.65
3.	Animal labour	448	10.24	448	15.74
4.	Tractor/Thrasher	501	11.45	501	17.60
5.	S e e d	343	7.84	343	12.05
6.	Farm yard manure	89	2.03	89	3.13
7.	Ch-fertilisers	299	6.83	299	10.51
8.	Abiana (water rates)	26	0.59	26	0.91
9.	Dues of artisons	54	1.23	54	1.90
10.	Other	43	1.00	43	1.51
11.	T o t a l	4376	100.00	2846	100.00

Source:- Appendix Table A.13.

COST COMPOSITION IN DIFFERENT SECTIONS OF
THE CANAL (AVERAGE OF ALL CROPS)

The pattern is more or less uniform in the three sections of the canal covered by the survey. If rent is charged, then it constitutes the single biggest item of cost in all the three sections. Manual labour is the second major item, followed by machine labour (tractor/thresher). Comparative data for the three sections are given below in Table-II.56.

Table-II.56

COST COMPOSITION (AVERAGE OF ALL CROPS) IN HEAD, TAIL AND MIDDLE SECTIONS OF THE PROJECT AREA

(Percentages)

Sr. No.	Item	With rent			Without rent		
		Head Section	Middle Section	Tail Section	Head Section	Middle Section	Tail Section
0	1	3	4	5	6	7	8
1.	Rent of land	36.73	37.35	24.22	-		-
2.	Manual labour	24.98	23.07	23.21	39.50	36.84	30.63
3.	Animal labour	11.08	8.44	13.19	17.59	13.45	17.40
4.	Machine labour (Tractor/Thresher)	11.46	10.87	13.09	18.12	17.35	17.16
5.	S e e d	5.59	9.19	9.29	8.84	14.66	12.26
6.	Farmyard Manure	0.94	2.19	4.16	1.48	3.50	5.49
7.	Ch-Fertilisers	6.18	7.19	7.42	9.78	11.47	9.80
8.	Water rate (Abiana)	0.88	-	2.06	1.08	-	2.72
9.	Dues of Artisan	1.20	1.01	1.92	1.90	1.62	2.53
10.	Other	1.11	0.69	1.53	1.78	1.11	2.01
11.	TOTAL =	100.00	100.00	100.00	100.00	100.00	100.00

Source:- Appendix Table A.13.

COST BREAK UP BY PURCHASED AND SELF SUPPLIED INPUTS IN PROJECT AREA FOR ALL CROPS AS A WHOLE

In the preceding tables, cost estimates are based on economic costing principle. That is, all items are costed at actual or imputed cost. In Table II.57 that follows, cost data are segregated to find the share of purchased and self-supplied inputs in the total cost of all crops taken as a whole in the Project Area.

Table-II.57

PAID AND SELF-SUPPLIED INPUT COST PER FARM
IN THE PROJECT AREA

Item	Self supplied Rs.	Self supplied % of Col.6	Paid Rs.	Paid % of Col.6	Total Rs=(100)
1	2	3	4	5	6
1. Rent of land	2316	90.01	257	9.99	2573
2. Manual labour	1544	88.03	210	11.97	1754
3. Animal labour	642	85.26	111	14.74	753
4. Machine labour Tractor/Thresher	-	-	843	100.00	843
5. Seed	98	17.01	478	83.99	576
6. Farmyard manure	138	92.00	12	8.00	150
7. Ch.fertilisers	-	-	504	100.00	504
8. Water rates	-	-	44	100.00	44
9. Dues of artisons	-	-	91	100.00	91
10.Fuel cost	55	94.83	3	5.17	58
11.Rent of cane crusher	3	18.75	13	81.25	16
12.Total =	4796	65.14	2566	34.85	7362

Source:- Appendix Table A.13

Paid costs accounted for only about 35 percent of the economic co of farming. In absolute terms, economic cost was Rs. 7362 per farm out which the sample farmers paid only Rs. 2566. Inputs valuing Rs 4796 were self-supplied. The sample farmers had to pay in full for tractor/thresh rent, chemical fertilisers, water rates, and dues of artisans. They pai for bulk of the seed used by them and also rent of cane crushers.

No input was entirely self-supplied. However, bulk of the land ren (90 %), manual labour (88 %), animal labour (85%), farm yard manure (92 %) and fuel for Ghani (95 %) was not paid for.

COST PER FARM AND PER HECTARE IN DIFFERENT SECTIONS OF THE CANAL

How much it costs to operate a farm / a hectare of land in different sections of the Warsak Lift Canal? This information is provided in Table-II.58.

Table-II.58

ECONOMIC AND PAID COST OF FARMING: PER SAMPLE FARM AND PER HECTARE

(Rupees)

Sr. No.	Canal Section	Cost per farm: Economic (a)	Cost per farm: Paid (b)	Cost per hectare: Economic (a)	Cost per hectare: Paid (b)
0	1	2	3	4	5
1.	Head	9138	3397	4511	1678
2.	Middle	8836	3353	4748	1802
3.	Tail	3848	1359	3401	1201
4.	All	7362	2566	4376	1525

a) If the farm were treated as a firm and all inputs costed whether actually paid for or not.

b) Economic cost minus cost of self-supplied inputs.

If the sample farms were taken as firms paying for all items then a farm in the Project Area taken as a whole would on the average require Rs.7362 to finance its production in 1987-88. But the farmers actually paid only for inputs valuing Rs. 2566 which is about 35 percent of of the economic cost (Rs. 7362).

Availability of 65 percent of inputs from domestic sources is th major explanation for survival of farming activity in the Project Are despite its negative/ low profitability at places by the economic criter The major such inputs involved are land and labour. The farmers ar pulling on by under charging for these factors in the factor market.

CROP-WISE FARMING COST PER HECTARE

Crop-wise farming cost estimates per hectare are given in Table-II.5 In the case of sugarcane the estimates include the cost of processing of sugarcane into Gur.

Table-II.59

CROP-WISE PER HECTARE FARMING COST

(Rupees)

Sr. No.	Crop	Economic cost= purchased plus self supplied inputs				Paid costs only			
		Head Section	Middle Section	Tail Section	All Section	Head Section	Middle Section	Tail Section	All Secti
0	1	2	3	4	5	6	6	7	8
1.	Maize	3498	4277	3484	3809	817	1089	996	95
2.	Sorghum	3344	5216	3348	4700	874	1368	1076	123
3.	Sugarcane	11878	13953	9712	12007	3644	4793	2603	3754
4.	Pigeon Pea	-	2291	-	2291	-	657	-	65
5.	Wheat	4218	4795	3080	4144	1321	1591	1256	1398
6.	Barley	4576	3720	2489	3033	975	711	819	83
7.	Berseem	6233	4454	4307	5019	3030	975	1815	1670
8.	P e a	-	7210	-	7210	-	3146	-	3146
9.	Spinach	-	-	2957	2957	-	-	897	897

Source:- Band on Appendix Tables A.14 to A.19.

Cost range is wide in all cases. This is true both of economic and paid costs. Based on Table II.59, indices of cost range are worked out below in Table II.59.1.

Table-II.59.1

COST RANGE OF CROPS RAISED ON SAMPLE FARMERS

(Indices)

S.No	Crop	Lowest	Mean	Highest
0	1	2	3	4
1.	Maize	91 (TS)	100	112 (MS)
2.	Sorghum	71 (HS)	100	111 (MS)
3.	Sugarcane	81 (HS)	100	115 (MS)
4.	Wheat	74 (TS)	100	116 (MS)
5.	Barley	82 (TS)	100	151 (MS)
6.	Berseem	86 (TS)	100	124 (MS)

HS = Head Section
MS = Middle section
TS = Tail Section

In the Middle Section per hectare cost was generally speaking higher than in other parts of the Canal. In the lower range, the Tail Section figures most prominently.

VALUE PRODUCTIVITY OF CROPS RAISED ON SAMPLE FARMS IN 1987-88

In this section, estimates are presented of the value productivity o the crops raised on on the sample farmers land situated in the sample watercourses. The following information is presented:

- Crop-wise value productivity.
- Aggregative value of crops.
- The contribution of main and by products to total value of different crops under study.

Value productivity in the present context means the market value of crops under study. It doesnot mean the value received from their sale.

CROP-WISE VALUE PRODUCTIVITY

In the Project Area taken as a whole, sugarcane produced highest value per hectare-Rs 12,697, followed by Berseem and Spinach with Rs 5,926 and Rs 5,794 respectively. At the bottom was Pigeon Pea with Rs 2,641 per hectare (Table 11.60).

Table-II.60

PER FARM AND PER HECTARE VALUE OF CROPS RAISED IN SAMPLE WATER COURSES IN 1987 - 1988

(Rs.)

Sr. No.	Crop	Head Section a	Head Section b	Middle Section a	Middle Section b	Tail Section a	Tail Section b	All places a	All places b
0	1	2	3	4	5	6	7	8	9
1.	Maize	780	1545	607	1870	37	232	511	1486
2.	Sorghum	264	1731	1706	4567	3	146	726	3730
3.	Sugarcane	1280	12650	1049	11031	313	5839	889	12697
4.	Pigeon Pea	-	-	47	2641	-	-	18	2641
5.	Wheat	5349	5076	3408	4818	1420	2404	3381	4349
6.	Barley	172	2810	96	3268	359	1860	202	2231
7.	Berseem	864	5688	1552	6308	37	1901	863	5926
8.	Pea	-	-	322	5181	-	-	121	5181
9.	Spinach	-	-	-	-	540	5794	170	5794

Source:-Based on Appendix Table A.20

a = Per farm
b = Per Hectare

It may be stated here that the entire sugarcane crop was converted into Gur in the Head and Tail Sections. In the Middle Section this crop was grown over 3.49 hectares out of which crop covering 2.98 hectare was converted into Gur and rest of it was sold in the field. Inter-Section variations in value per hectare of sugarcane are attributable to this factor, and equally importantly to difference in quality of cane, and prices obtained for Gur.

AGGREGATIVE SITUATION (VALUE PRODUCTIVITY):
ALL CROPS CONSIDERED AS A WHOLE

A composite hectare of the crops grown on the 159 sample farms und study would fetch Rs 4091 if all the output were sold at the 1987- ruling prices (whole sale). The corresponding average would be Rs 4300 the Head Section, Rs 4765 for the Middle Section, and Rs 2392 for t Tail Section as will be seen in Table II.61.

Table-II.61

PER FARM AND PER HECTARE VALUE GENERATED BY CROP PRODUCTION ON SAMPLE FARMS IN 1987 - 88

(Rupees)

Sr. No.	Canal Section	Per Farm	Per Hectare
0	1	2	3
1.	Head		
	i. Watercourse RD-22000	11195	4013
	ii. Watercourse RD-45800	7135	4629
	iii. Average	8710	4300
2.	Middle		
	i. Watercourse RD-53700	13810	5713
	ii. Watercourse RD-70800	3925	3009
	iii. Average	8867	4765
3.	Tail		
	i. Watercourse RD-115800	2654	2789
	ii. Watercourse RD-132000	2785	1988
	iii. Average	2706	2392
4.	All sections	6878	4089

Source:- Appendix Table A.20.

In terms of money generated per hectare, the Middle Section sample watercourse No. RD 53700 is the most productive. There, the average was Rs 5713/ hectares. Comparatve placing of this sample watercourse in respect of value productivity is more or less in line with that in respect of yield per hectare. It is, however, noteworthy that the Tail Section was far behind the other two in respect of yield but not so much in that of value productivity per hectare. This is creditable chiefly to cultivation of high value crops (sugarcane and spinach seed) on a realtively larger proportion of land there than in the other sections of the Canal.

VALUE OF MAIN AND BY PRODUCTS

By products accounted for a good 25 percent of the aggregate value of crops on sample farms (Table II.62). It may be stated here that by-products are secured from Maize, Sugarcane, Wheat and Barley. Rest of the crops found in sample farms' cropping pattern donot have these. Therefore, where the crops with by-products have a larger representation, as compared with other places, in the cropping pattern the share of by-products in gross value productivity would be larger likewise, other things being the same.

Table-11.62

SHARE OF BY PRODUCTS IN VALUE PRODUCED
PER HECTARE OF CROPS ON SAMPLE FARMS

(Percentage)

Sr. No	Crops	Head Section	Middle Section	Tail Section	All Sections
0	1	2	3	4	5
1.	Maize	32.42	39.59	70.00	36.92
2.	Sugarcane	6.60	6.45	8.40	6.73
3.	Pigeon Pea	-	-	-	-
4.	Wheat	41.22	38.15	40.95	40.02
5.	Barley	96.11	12.53	48.40	54.01
6.	All crops	31.04	18.63	29.90	24.86

Sources:- Appendix Table A.20

A major part of the maize crop in the Tail Section, and that Barley in the Tail as well as the Head sections, was used as fodd Hence, the share of by-products in these sections'gross value producti per hectare more than is that recorded in the Middle Section.

CROPS-WISE NET PROFIT/LOSS

Detailed profit and loss accounts of the crops raised on sample farms in 1987-88, are given in Appendix Tables A.21 to A.29-one table for each crop. Based on these accounts, the aggregative profit/loss position is presented and described in the next chapter. But the aggregative figures i.e.; average of all crops, donot tell on which individual crop enterprise the farmers have made how much profit/loss. Therefore, before approaching the aggregative picture it would be useful to review profitability position of the crops under study individually. For computing the profit/loss accounts, the sample farm is taken as a firm. All inputs, whether purchased or home supplied, are costed at the current market rates.

PROJECT AREA AS A WHOLE

In the Project Area taken in general, Maize, Barley, and Peas sufferred losses. Maize was the heaviest loser with a loss of Rs.2323 per hectare. Among the crops showing profit, Spinach topped with Rs. 2837 per hectare.

Table-II.63

CROPS-WISE PROFIT/LOSS ON SAMPLE FARMS IN PROJECT AREA (1987-88)

Sr. No.	Crop	Profit/Loss(-) (Rs/hectare)	Benefit/Cost ratio#
0	1	2	3
1.	Maize	- 2323	0.39
2.	Sorghum	148	1.04
3.	Sugarcane	681	1.06
4.	Pigeon Pea	351	1.15
5.	Wheat	205	1.05
6.	Barley	- 804	0.74
7.	Berseem	907	1.18
8.	Pea	- 2028	0.72
9.	Spinach	2837	1.96
10.	All crops (Average)	- 277	0.94

Benefit/cost ratio = Total value of crop divided by total farm cost

Viewed strictly by economic criterion, farming proved to be a los enterprise in the Project Area in 1987-88. The average of a longer per as suggested by sample farmers' report, would not be much better tl that. Therefore, one can legitimately ask: how are the farmers able make both hands meet? This question is taken up in the next chapter. answer in brief is that the farmers contribute much of the land labour from their own sources and also self provide some other inpu When they do their own accounting they donot charge or under-charge these inputs which gives the (false) impression that they are enjoy surplus from farming. Despite losses, in the economic sense, they h some cary home income, and thus they carry on their farming activity.

COMPARATIVE POSITION IN DIFFERENT SECTIONS OF THE CANAL

The situation was comparatively better in the Middle Section where the sample farmers had an overall surplus; it was negligible, though. Losses were the heaviest in the Tail Section (Table II.64).

Table-II.64

CROP-WISE PROFIT/LOSS IN DIFFERENT SECTIONS OF THE CANAL (1987-88)

(Rupees/hectare)

Sr. No.	Crop	Profit/Loss(-) Head Section	Middle Section	Tail Section
0	1	2	3	4
1.	Maize	- 1953	- 2399	- 3252
2.	Sorghum	- 1613	893	- 3202
3.	Sugarcane	722	4077	3911
4.	Pigeon Pea	-	351	-
5.	Wheat	858	23	- 677
6.	Barley	- 1566	- 451	- 632
7.	Berseem	- 544	- 1854	- 2406
8.	Pea	-	- 2028	-
9.	Spinach	-	-	2837
10.	All Crops (average)	- 211	17	- 975

In the Head Section, the sample farmers incurred losses on four out of the six crops grown by them. Their average loss per hectare was Rs. 21 In the Middle section Rs.17/hectare was the net profit, while the Tail Section suffered heavy losses averaging Rs. 975/hectare.

The Tail Section farmers were asked, why did they at all cultivate all these crops despite water scarcity? The explanation is that at the time of sowing some water was available. Moreover there was expectation of rain in early period of crops. These two factors led to ploughing and sowing in 1987-88. This is infact the normal pattern. The fields are cultivated in the hope of rain and timely supply of canal water. In 1987-88 the sample watercourse RD 132,000 (at the tail of the Tail Section) went dry after sowing had been done and the other sample watercourse in that section (RD 115,806) also got short supplies. The yields were, theref very low in this section, particularly in the tail end watercourse.

PROFIT/LOSS ON FARMING IN SAMPLE WATERCOURSES

In the previous section, crops-wise account of profit/loss was presented. In this section, estimates of profit/loss are presented for all crops taken together by:

i- accounting for all inputs - purchased as well as the home supplied ones; and

ii- not accounting for home supplied inputs.

PROFIT/LOSS BY COSTING ALL INPUTS

By this method, the farms in the Project Area ended up in the red to the extent of Rs. 466 on the average. Per hectare loss averaged at Rs. 277 in 1987-88. Only the Middle Section farms had a surplus to show; Rs.17 per hectare, and Rs. 32 per farm. Losses were heaviest at the Tail of the Canal; Rs. 973 per hectare and Rs.1101 per farm, as will be seen in (Table II.65) on the next page.

Only two sample watercourses, out of the total of six, enjoyed profit. These are watercourse number RD. 22,000 (at head of Head Section) and number RD. 45,800 (at head of Middle Section).

Table-II.65

PROFIT/LOSS FROM FARMING 1987-88

(Rupees

Sr. No.	Canal Section	Net profit/Loss			
		If all inputs costed		If only purchased inpu considered	
		Per hectare	Per Farm	Per hectare	Per Farm
0.	1	2	3	4	5
1.	Head				
	a. Watercourse RD.22,000	165	459	2870	8007
	b. Watercourse RD.45,800	- 642	- 990	2944	4538
	c. Average	- 211	- 420	2905	5803
2.	Middle				
	a. Watercourse RD.53,700	585	1407	4264	10,388
	b. Watercourse RD.70,800	- 1030	-1344	1565	2,041
	c. Average	17	32,	3318	6,175
2.	Tail				
	a. Watercourse RD.115,806	- 125	-1198	1345	1280
	b. Watercourse RD.70,800	- 682	- 956	1050	1471
	c. Average	- 973	-1101	1199	1357
4.	All Sections	- 277	- 466	2715	4568

Source: Appendix Table A.20.1

PROFIT/LOSS WITHOUT ACCOUNTING
FOR HOME SUPPLIED INPUTS

It was seen in Table II.57 that home supplied inputs accounted for 65.14 percent of total cost in the Project Area. If these inputs were not taken into cost account then the sample farmers in the Project Area would have surplus revenue (from crops) averaging Rs 2715 per hectare or Rs 4568 per farm in 1987-88 (Table II.65). There would be surplus of revenue over expenditure in all the six sample water courses. The Middle Section farmers would have Rs 3318 per hectare yielding Rs 6157 per farm. The corresponding figures would be Rs 2905 per hectare and Rs. 5883 per farm for Head Section farmers, and Rs 1119 per hectare and Rs. 1357 per farm respectively for the Tail Section farmers. In arriving at these figures it is assumed that all the land belonged to the sample farmers themselves.

It would be methodologically speaking wrong to review profitability position without accounting for home supplied inputs. This way of looking at profitability position is however useful in that it explains why do the farmers continue to practice agriculture although by commercial/economic criteria it is not very profitable.

Not all of this surplus computed by not accounting for home supplied inputs would may be available for consumption. With the exception of rent of owned land and cost of family labour, all other inputs should be costed (whether purchased or home supplied) to arrive at net disposable income. That is, net disposable or take home income would be equal to net profit/loss plus minus rent of owned land and imputed wages of family labour angaged in farming. The estimates of take home income so computed are preserted in a later chapter.

CONCLUDING NOTE

The heavy role of home supplied resources in agriculture in th Project Area is clearly reflected in comparative data on economic profi and the profit without accounting for home supplied inputs. If the latte cease to become available, or decline in size, as would in all probabili happen with social and economic transformation e.g; decline of joint family system, increase in migration etc; then farming activity in the area would be difficult to sustain for long if other things remain the same. Thus, existence of disposable surplus income should not make the planners complacent about the need to plan for uplift of agricultural conditions in the area. For development policy formulation the economic calculations should be used. And these calculations say that much more than mere water supply improvement is needed in the Project Area to improve profitability of farming there.

DISPOSABLE INCOME OF SAMPLE HOUSEHOLDS DURING 1987-88

This section is devoted to the study of composition and level of disposable income of the sample households during 1987-88. The estimates are of income from sources in the sample water courses as well as outside

INCOME COMPOSITION

The agricultural sector accounted for only 37.51 percent of the disposable income of the sample households in 1987-88 in the Project Area taken as a whole. In the Head Section its contribution was 22.66 percent. The corresponding figures for the Middle and Tail sections are 43.84 percent and 60.67 percent respectively.

TABLE II.66

COMPOSITION OF SAMPLE HOUSEHOLDS
DISPOSABLE INCOME IN 1987-88

(Percentages)

Source of income	Head Section	Middle Section	Tail Section	All Sections
1. Agriculture	22.66	43.84	60.67	37.51
2. Industry	60.87	3.70	-	2.00
3. Trade	12.92	3.20	-	6.76
4. Rent of Property	-	5.06	-	2.23
5. Paid employment (Off-farm)	60.27	44.20	33.71	49.33
6. Other sources	3.28	-	5.62	2.17

Source: Appendix Table A.30.

Considering that the sample for this study is comprised of wa users all of whom are land owners, the income composition data as gi in Table II.66 would appear to be unexpected. But the question marks setteled as soon as the data on size of farm, crop yields,and profit f farming are kept in the background. The sample households, as seen ear in this report, operate much below subsistence holdings characterised low yeilds. Their disposable income from agriculture is small; be equal in most cases to the imputed value of rent and family labour. viewed strictly as a firm, the average farm in Head and Tail Sections into red while the Middle Section showed just negligible profit fr crops. This situation would rightly invite the remark that how are t sample households able to survive? Table II.66 answers this questio Income from the non-agricultural sector helps the sample househol survive and stay on in agriculture despite the latter's low or negati profitability. The farm sector is unable to absorb much of addition manpower. Therefore, the drift has to be to the non-farm sector. Moreove being in close vicinity to Peshawar men from the sample households fi it easier to get absorbed in the non-agricultural sector than thos settled in remote areas.

The income composition pattern under study has important implica tions for planners. Crop cultivation is not the most important source of income of the target population. In terms of income per capita as well a per household this sector does not show very impressive figures. Therefo to get the target population interested in programmes for improvement o water courses and the farming sector in general, improvement somethin more than the routine approaches would be needed.

INCOME PER FARM AND PER CAPITA

In 1987-88, income per capita and per household is estimated at Rs.1934 and Rs.27,750 respectively for the sample population. This applies to the Project Area as a whole. Section-wise position is shown in Table II.67.

Table II.67

INCOME PER CAPITA AND PER SAMPLE HOUSEHOLD

IN 1987-88

(Rupees)

Canal Section	Income	
	Per capita	Per Household
1. Head	2,337	37,348
2. Middle	2,823	32,424
3. Tail	1,118	12,815
4. All Sections	2,159	27,750

Deviation of average income in different sections of the Canal from that of the overall average is worth noting. The Tail Section's income was only 46 % of the overall average. The income statistics given above clearly speak of rampant poverty in the Project Area and also of the magnitude of efforts required to banish it.

BASE LINE SURVEY FOR COMMAND WATER MANAGEMENT

Institute of Development Studies

PROJECT - YARSAK LIFT CANAL

PART: III
ENGINEERING STUDIES

ABDUL GHAFFAR
ABDUL HAKEEM KHAN

NWFP Agri. University, Peshawar

120 ~

INTRODUCTION

The 60 Km long Warsak Lift Canal, commanding an area of 54600 acr in Nowshera/Peshawar Tehsils and Khyber Agency, was commissioned in 1' for the designed capacity of 200 cusecs. Five number centrifugal pum including one stand-by with 75% designed efficiencies were installed lift the water to the height of 200 feet. Gradually the efficiencies pumps decreased to 55% by 1986 due to wearing by silt abrasion as the a actual discharge at canal head was found 146 cusecs during diagnost analysis study.

The low pumping efficiencies coupled with water losses throu conveyance and application to fields rendered the irrigation syst inequitable. Frequent electrical disruptions and mechanical failur worsened the system's reliability. Moreover tampering of upstream outle by water users deprived the tail farmers from irrigation water.

During the fiscal year 1984-85, Warsak Lift Canal was included : the Command Water Management programme in order to improve its reliabili and equity besides emphasizing timely availability of non-water input and credit facilities in integrated form at the doorsteps of farmer throughout the project area so that the farming community could benefi from coordination of all line agencies by organized participation fo achieving optimum crop production from their lands.

In order to justify continuation of the existing Command Water Management sub-project (WARSAK LIFT CANAL) and its replication on other canals in NWFP, proper evaluation of the current project was felt necessary. The comparison between pre and post-project Base Line Surveys will enable accurate assessment for success/failure of the existing pilot project. That is why the pre-improvement Base Line Survey of Warsak Lift Canal was entrusted to the Institute of Development Studies, NWFP, Agricultural University Peshawar in July, 1987.

OBJECTIVES

Principal objective of the Base Line Survey of Warsak Lift Canal is to establish pre-improvement bench marks consisting of system's variables, in detail, with possible understanding and analysis. The accomplished Base Line Data could be utilized for estimation of the project's benefits/constraints during evaluation process after its completion.

The purpose of Engineering studies with regard to the Base Line Survey of Warsak Lift Canal is to find out:

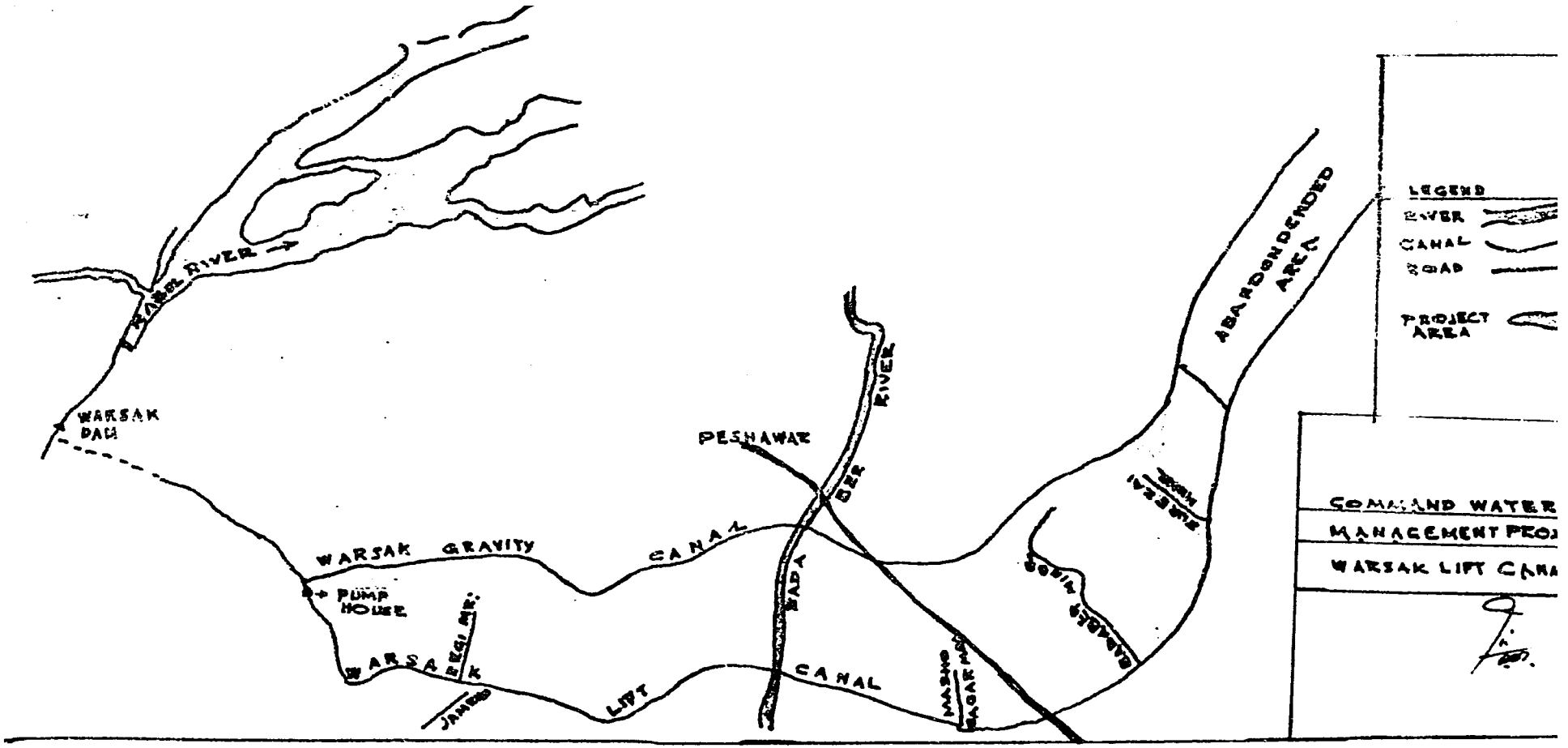
1. Assessment of canal operation for Kharif 87 and Rabbi 87-88.
2. Main system performance at off-take of minors and sample water courses for 18-10-87 through 31-12-87.
3. Conveyance losses/Efficiencies of sample water courses.
4. Uniformities of Warabundi schedules on sample watercourses.
5. Soil infiltration rates of selected fields on sample watercourses.
6. Levelness of selected fields on sample watercourses.
7. Irrigation performance parameters for selected fields on sample watercourses.
8. Specifications of open/tubewells in the command areas of sample watercourses.

SITE DESCRIPTION

Activities of the Engineering studies under the Base Line Surve were concentrated in the command areas of the Six sample watercourses off-taking directly from left bank of Warsak Lift Canal distributary at RD-22000, RD-45800, RD-53700, RD-70800, RD-115806 and RD-132000 respecti from upstream to downstream. All of these command areas lie on the lef side of the Warsak Lift Canal and comprise the villages of Regi Lalma Achini Bala, Sufed Dheri, Saleman Khel, Mariam Zai and Telaband. The 60K long Warsak Lift Canal and its four minors - Regi, Mashugagar, Badaber Surizai, alongwith their gross commanded areas are shown in the map o page-124.

METHODOLOGY

The Engineering Studies were physically started in October 87, with specific reference to the six sample watercourses which were earlie identified by the Institute of Development Studies, NWFP, Agricultural University Peshawar, in consultation with the expatriate technical assist team of the Command Water Management project. The canal and minors flow rates recorded by the Irrigation Department were incorporated in the studies as authenticated data.


KABUL RIVER
WARSAK DAM
WARSAK GRAVITY CANAL
PUMP HOUSE
WARSAK REGL. MR.
JAMRUD
LIFT CANAL
PESHAWAR
BADA RIVER
MASHO MAGAR MAR
ABANDONED AREA
LEGEND
RIVER
CANAL
ROAD
PROJECT AREA
COMMAND WATER
MANAGEMENT PROJ
WARSAK LIFT CANA

124

124

The watercourses flow rates were measured by means of cut-throat flumes and fields levelness were estimated with the dumpy level. The infiltration rates of fields were observed with the help of infiltrometer The soil characteristics of fields, the quality of canal/wells water and the soil moisture deficits in the root zones were determined in coordination with the laboratory staff of the Agricultural Research Institute Tar under the supervision of Dr. Abdur Rashid, soil scientist, Agricultural University, Peshawar.

OBSERVATIONS

The flow rates in watercourses were observed from 18-X-87 to 31-12-87 at half hourly intervals between 8-0 am to 4 30pm and the conveyance losses were measured by inflow-outflow method. The conveyance efficiencies of each sample watercourse were observed for at least three days. Two representative fields were selected in the head/middle, middle/tail or head/ tail reaches of each sample watercourse for irrigation evaluation in accordance with the actual water distribution schedules. The field elevations and irrigation advance/recession times were observed on 4x4 meter grids and then reduced to unit width by averaging. The inflows at fields turn outs were constantly monitored and observed from the time of turn over through the time of cut-off in order to find out the accurate actual volume of water applied.

The infiltration depths were simultaneously observed with three replications along length of the field for three hours, i.e. at the end of 1,5,10,20,30,45,60,90,120, and 180 minutes. However, the flow rates measurements as well as irrigation evaluations in case of the tail sample watercourse at RD-132000 were ignored because of no canal water in that reach throughout the study period.

DISCUSSION

After the completion of the planned observations in the field according to the general procedure as explained under the headings of 'methodology' and 'observations'; the available data were analysed by using the guide lines as per following related technical publications.

1- ON FARM WATER Management Manual Vol. IV Ministry of Food, Agriculture and Cooperatives; Govt. of Pakistan, Islamabad. 1986.

2. Diagnostic Analysis of Irrigation Systems Vol. II, Colorado State University, 1983.

Following are the details of data analysis with regard to canal, watercourse and field level efficiencies of the irrigation system of Warsak Lift Canal.

MAIN SYSTEM

The canal down-times from 1-7-87 through 30-6-88, apart from seasonal canal closure during January, are summarised in table-III.1 wl reflects the flow disruption durations with reasons. There were 19 disı tions averaging 107.47 hrs. The main system performance at off-take minors is shown on average bar charts in figures III.1, III.2, III.3 a III.4 which enlighten equity along the main distributary. Similarly t average daily discharges of the five sample watercourses are given in t line graphs in figures III.5, III.4. III.5, III.6, III.7, III.8 and III which enlighten equity along the canal. The details of down-times a fluctuations in the flowrates evidently suggest about the reliability the system.

WATERCOURSES

The conveyance efficiencies of watercourses were assumed 100% at th mogha and minimum at the end point keeping in view both of the reasoı that conveyance losses decrease in the tail reach on account of smalle wetted perimeter due to less discharge and that at the same time the increase in the tail reach on account of being left dry when the water i turned over to the fields in the head or middle reach. However, th conveyance losses along different reaches of the watercourses were measuı and averaged. The conveyance losses were calculated by the formula

$$\%QL = \frac{Qi - Qo}{Qi} \times 100$$

where Qi = inflow in $M^3 S^{-1}$
Qo = outflow in $M^3 S^{-1}$ and QL% = Percent conveyance loss.

The conveyance efficiency is got by subtracting percent conveyance losses form hundred. The mean conveyance efficiency is obtained by adding those of the mogha and end point together and then dividing it by 2.

The conveyance losses from test reach lengths of watercourses were observed on the basis of 300 meter unit length and then the total conveyance losses for the entire water course length were found as % of the inflow. Therefore, the end point efficiency of watercourse was calculated by subtracting the total % losses from 100. In order to get the mean efficiencies of water courses 50 was added to the respective half end point efficiencies. However, conveyance losses from mogha to the head flume were ignored because of the fact that the head flume discharge was assumed as the mogha discharge and that the head flumes were installed as near to the mogha as possible, upstream the Ist Nakka on each sample water course.

The mean efficiencies could be directly calculated by the formula

$$Em = 100 - \frac{50\ (Qi - Qo)L}{QiD}$$

where Em = mean conveyance efficiency of water course

L = Total length of the main watercourse in Meters

D = Length of the test reach in meters

Qi, Qo = inflow, outflow rates in $M^3\ S^{-1}$.

The conveyance efficiencies of sample water courses are given in Tables III.2, III.3, III.4, III.5 and III.6, which show that the longer the watercourse the smaller is its efficiency.

DISTRIBUTION UNIFORMITY

In an ideal water distribution system the conveyance losses along water courses need to be taken into account while finalizing the water distribution schedules on time-area basis in order to eliminate in-equity along the water courses associated with the conveyance losses so that the tail water users may not suffer injustice. The official water distributio schedules on time-area basis for the sample water courses were not finali; However, the water users observed un-official WARABANDI schedule subjecte to set back contributed by the following factors.

1. Un-reliability of the irrigation system
2. Inequity along the canal as well as along the watercourses.
3. Possible irrigation of adjacent areas out of culturable commanded area.
4. Educational, financial, political/social status of the individual water users.

The authorised water allowance on the Warsak Lift Canal is .004 cusecs per acre where as the actual water allowances for the sample watercourses are given in table-III.7. Apparently this area of the system's management seems the most neglected one which might be improved by organizi the water users' organizations.

Field Level Irrigation performance parameters:- The irrigation evaluation on 9 selected fields commanded by the sample watercourses were conducted. The advance/recession times reduced to unit width along with field levelness/-slope are shown on graph papers in figures III.10, III.11, III.12, III.13, III.14, III.15, III.16, III.17 and III.18 which also show the opportunity times at four meter interval along length of the fields.

Similarly, the infiltration depths data are plotted on the log-log paper and the empirical infiltration functions estimated, then by sliding them upward or downward with constant slopes the adjusted infiltration functions derived on the same log-log papers. These functions are based on the equation $\bar{Z} = Kt^{a}$

where $\bar{Z}$ = infiltrated depth, K= multiplicative co-efficient,
t = opportunity time, a=exponential co-efficient.

These infiltration functions were derived from the data plotted on the log-log papers in figures III.19, III.20, III.21, III.22, III.23, III.24, III.25, III.26 and III.27. The mathematical calculations for derivation of the adjusted infiltration functions are worked out in tables III.8, III.9, III.10, III.11, III.12, III.13, III.14, III.15 and III.16. Consequently, the sub soil distributions of water applied along length of the field per unit width are shown on the graph papers in figures III.28, III.29, III.30, III.31, III.32, III.33, III.34, III.35 and III.36.

The water distribution hydrographs clearly show the volumes of water in the root zone, under irrigation, over irrigation, seepage into adjacent down field and optimum water requirement of the fields.

The total soil moisture deficits in the root zones were determined upto 1.5 meter depth in six increments of 0 to 0.15 meter, 0.15 to 0.30 meter, 0.3 to 0.6 meter, 0.6 to 0.9 meters, 0.9 to 1.2 meter and 1.2 to 1.5 meter. However, keeping in view the root depth (medium) and stage (initial) of crops sown on the fields, the proportionate soil moisture deficits were estimated for the 0.3 meter topsoil profile as shown on the distribut hydrographs by dotted horizontal lines along the length of the field as worked out in the tables-III.17, III.18, III.19, III.20, III.21, III.22, III.23, III.24 and III.25. Field capacity moisture level was calculated fro the values of water holding capacity/saturation percentage as follows Field capacity = ½ satiruation % (water holding (water holding capacity).

The water application efficiency, water requirement efficiency, tail water ratio and percolation ratio in case of each irrigation experiment are given in table-III.26.

The irrigation designs could be adjusted appropriately by increasing or decreasing the flow rates, field dimensions and irrigation times and by under taking precision land levelling so as to ensure 100 percent requirement efficiencies without under/over irrigation and with maximum application efficiencies.

<u>Ground Water:-</u> There are 13 tubewells in the command areas of the sample watercourses. Their specifications are given in table-III.27 which reveal that the ground water table might be deeper in the command areas of other watercourses and everywhere there is no possibility of utilizing the ground water by field crops through capillary action to compensate root zone moisture deficit without applying proper drilling technology. This also shows a natural protection against water-logging and salinity. That is why the water removal off the field has not yet become a serious problem in the project area.

R E S U L T S

After careful analysis of the data as per tables-III.1 to III.27 and graphs in figures III.1 to III.36, according to the procedure discussed earlier, the following results could be established.

Main System:- As detailed in table-III.1, the canal remained dry for about eighty five days besides the seasonal closure during January which clearly shows that the irrigation system is un-reliable. Moreover the bar charts in figure III.1 also shows that the system is unreliable with reference to authorised flow rate. The figures III.1 to III.4 further elaborate that the main system is inequitable. For example, the main system performance during the first fortnight of November was about 63% at the in-flow, about 94% at off-tale of Regi Minor, about 149% at off-take of Mashugaggar Minor, about 66% at off-take of Badaber Minor and 0% at off-take of Surizai Minor which remained dry during the entire study period. Similar comparison for the next three fortnights of the study period also establish that the main system was quite inequitable. The flow rate fluctuations as evident from the available data also reveal that the main system was unreliable as well as inequitable. Also the watercourses discharge data as per figures III.5 to III.9 show that the system is unreliable and inequitable.

Water Courses:- The average mean conveyance efficiencies for water courses range between 72.88% and 83.58%. The conveyance efficiencies also depend on the soil, design and maintenance of the watercourses besides their length. However, it may be pointed out that watercourse No. RD-22000 is a

new one and its soil is gravel where as watercourse No. RD-53700-L is bifurcated in the Middle reach and Bara River water is added into it in the head reach while another water course off-takes from it above the bifurcation point. Otherwise, the conveyance efficiency of a water course is inversely proportional to its length and inflow volume. The greater the volume the larger is the wetted perimeter hence greater seepage losses and less conveyance efficiency.

Distribution Uniformity:- Apparently, the unreliable main system coupled with inequitable main and onfarmconveyance system resulted in the un-reliable and inequitable warabandi schedules. That is why the official warabandi could not be finalized. The actual water allowances on RD-22000-L, RD-45800-L, RD-53700-L, RD-70000-L and RD-110000-L are 0.0074, 0.0042, 0.0082, 0.004 and 0.0026 respectively against the authorised water allowance of 0.004. Moreover, the authorised discharge of water course No.RD-22000-L is not known. It means that the water distribution system is quite inequitable.

Field level Irrigation Performance Parameters:- Both the empirical and adjusted infiltration functions can be seen in the corresponding tables III.8 to III.16. The subsoil water distributions as shown in figures III.28 to III.36 give the field level irrigation performance parameters as summarised in table-III.26. The application efficiencies range between 75% and 95% and the requirement efficiencies lie between 62 % and 100%. The low requirement efficiencies are due to the unreliable irrigation system causing unreliable warabandi and greater soil moisture deficits

accumulated on account of preceding under-irrigations and lengthy warabam intervals. However, the application efficiencies are satisfactory because of the basin/border irrigation methods on small size fields in which naked eye levelling could also serve the purpose of uniform water applicat The application efficiencies could be further improved with precision land levelling. The land slopes per unit width range between 0.0003 to 0.003 as shown in figures III.10 to III.18.

Ground Water:- As shown in table III.27, the minimum depth of water table is 30 feet. This area needs further exploration through trial bores in ord to enable assessment of the ground water potential in the project area.

TABLE - III.1

WARSAK LIFT CANAL's DOWNTIMES

S.No.	Date	Duration	Reason of closure of canal
1.	12-7-87	One day	Traish Rark (Pumps closed)
2.	26-8-87	12 Hrs	Necessary repairs.
3.	8-9-87	12 Hrs	Electrical disruption
4.	9-9-87	One day	Electrical disruption
5.	28-9-87	One day	Due to storm
6.	11/16-10-87	6 days	Heavy rains
7.	30-10-87	One day	Necessary repairs of pumps.
8.	4-12-87	One day	Mechanical disruption
9.	Jan.-88	One month	Seasonal closure
10.	Feb.-88	One month	Lining of canal
11.	Mar.-88	One month	Lining of canal
12.	8-4-88	One day	Necessary repairs in Tunnel
13.	20-4-88	One day	Drowning of a boy in the canal
14.	22-4-88 23-4-88	Two days	Removal of silt from damside
15.	3-5-88	One day	Electrical failure
16.	24-5-88	2 Hrs	Clearance at head
17.	5-6-88 6-6-88	2½ days	Mechanical failure
18.	17-6-88 20-6-88	4½ days	Breach in canal
19.	29-6-88	One day	Electrical disruption
	TOTAL =	85 days 2 Hrs (excluding Jan-88 seasonal closure)	
	=	2042 Hours	

Table - III.2

WATER COURSE CONVEYANCE EFFICIENCY

Water Course No.RD. 22000-L
Head Flume Distance From Mogha = 31.4m

Sr. No.	Dated	Q_{in} (M^3S^{-1})	Q_{out} (M^3S^{-1})	Q_{out} distance(M)	Length (M)	Mean Conv.Efficiency (%)	Con Los (M^3
1.	3-3-88	0.057	0.047	2025	3933	82.963	0.
2.	4-3-88	0.059	0.047	2025	3933	80.248	0.
3.	4-3-88	0.059	0.052	1203.3	3933	89.224	0.
4.	6-3-88	0.057	0.05	1203.3	3933	79.93	0.
5.	6-3-88	0.057	0.044	2025	3933	77.852	0.
6.	3-3-88	0.051	0.047	811.7	3933	80.998	0.
7.	4-3-88	0.052	0.047	811.7	3933	76.705	0.
8.	6-3-88	0.05	0.044	811.7	3933	70.928	0.
					Average =	79.856%	0.

Table - III.3

WATER COURSE CONVEYANCE EFFICIENCY

Water Course No.RD. 45800-L
Head Flume Distance From Mogha = 9m

Sr. No.	Dated	Q_{in} (M^3S^{-1})	Q_{out} (M^3S^{-1})	Q_{out} distance(M)	Length (M)	Mean Conv.Efficiency (%)	Conv Loss (M^3S
1.	2-6-88	0.019	0.0167	1493	2195	91.101	0.
2.	2-6-88	0.019	0.0187	773	2195	97.758	0.
3.	2-6-88	0.0187	0.0167	720	2195	83.697	0.
4.	3-6-88	0.0177	0.013	1493	2195	80.48	0.
5.	3-6-88	0.019	0.0166	773	2195	82.066	0.
6.	3-6-88	0.0166	0.013	720	2195	66.943	0.
7.	4-6-88	0.023	0.018	1493	2195	84.02	0.
8.	4-6-88	0.023	0.022	773	2195	93.827	0.
9.	4-6-88	0.022	0.018	720	2195	72.285	0.
					Average =	83.575	0.

Table - III.4

WATER COURSE CONVEYANCE EFFICIENCY

Water Course No.RD. 53700-L
Head Flume Distance From Mogha = 32.2m

Sr. No.	Dated	Q_{in} (M^3S^{-1})	Q_{out} (M^3S^{-1})	Q_{out} distance(M)	Length (M)	Mean Conv.Efficiency (%)	Conveyance Losses (M^3S^{-1})
1.	26-12-87	0.059	0.054	930	7456	66.029	0.04
2.	27-12-87	0.055	0.053	930	7456	85.423	0.016
3.	28-12-87	0.065	0.058	930	7456	56.83	0.056
4.	26-12-87	0.06	0.055	912	7456	65.936	0.04
5.	27-12-87	0.058	0.056	912	7456	85.904	0.016
6.	28-12-87	0.067	0.066	912	7456	81.697	0.008
7.	26-12-87	0.120	0.111	2470	7456	88.68	0.027
8.	27-12-87	0.117	0.106	2470	7456	85.81	0.033
9.	28-12-87	0.123	0.114	2470	7456	88.956	0.027
					Average	78.362	0.029

Table - III.5

WATER COURSE CONVEYANCE EFFICIENCY

Water Course No.RD. 70800-L
Head Flume Distance From Mogha = 20.4m

Sr. No.	Dated	Q_{in} (M^3S^{-1})	Q_{out} (M^3S^{-1})	Q_{out} distance(M)	Length (M)	Mean Conv.Efficiency (%)	Conveyance Losses (M^3S^{-1})
1.	12-12-87	0.066	0.041	2548	2745	79.596	0.026
2.	12-12-87	0.066	0.061	1456	2745	92.859	0.009
3.	12-12-87	0.061	0.041	1092	2245	58.791	0.05
4.	13-12-87	0.063	0.044	2548	2745	83.755	0.02
5.	13-12-87	0.063	0.058	1456	2745	92.519	0.009
6.	13-12-87	0.058	0.044	1092	2745	69.662	0.003
7.	16-12-87	0.059	0.041	2548	2745	83.566	0.019
8.	16-12-87	0.059	0.052	1456	2745	73.412	0.013
9.	16-12-87	0.052	0.041	1092	2745	73.412	0.027
					Average =	80.33	0.0195

Table - III.6

WATER COURSE CONVEYANCE EFFICIENCY

Water Course No.RD. 115806-L
Head Flume Distance From Mogha = 70m

Sr. No.	Dated	Q_{in} (M^3S^{-1})	Q_{out} (M^3S^{-1})	Q_{out} distance(M)	Length (M)	Mean Conv.Efficiency (%)	Conv Loss (M^3S
1.	25-11-87	0.016	0.008	1650	2414	63.424	0.
2.	25-11-87	0.016	0.011	800	2414	52.852	0.
3.	25-11-87	0.011	0.008	850	2414	61.273	0.
4.	26-11-87	0.026	0.018	1650	2414	77.492	0.
5.	26-11-87	0.026	0.021	800	2414	70.986	0.
6.	26-11-87	0.021	0.018	850	2414	79.714	0.
7.	27-11-87	0.023	0.018	1650	2414	84.097	0.
8.	27-11-87	0.023	0.02	800	2414	80.321	0.
9.	27-11-87	0.02	0.018	850	2414	85.8	0.
					Average =	72.884	0.

Table - III.7

WATER ALLOWANCE

Sr. No.	Water Course No.	Actual Discharge (Ft^3S^{-1})	Sanctioned Discharge (Ft^3S^{-1})	C.C.A (Acres)	Actual Water allowance in Ft^3S^{-1} Per Acre
1.	RD-22000 - L	1.97	-	264	0.0074
2.	RD-45800 _ L	0.629	0.59	147	0.0042
3.	RD-53700 - L	3.88	1.89	473	0.0082
4.	RD-70800 - L	2.05	2.01	505	0.004
5.	RD-115806 - L	0.812	1.22	308	0.0026

WATER COURSE NO. RD. 22.000-L HEAD
INFILTRATION FUNCTION

Length (meters)	0	2	6	10	14	18	22	26	29	32	36	38
Opportunity Time (Minutes)	37	43.42	36	37.58	40.71	37.43	46.43	45.5	33.71	22.00	10.00	-
$\bar{Z} = Kt^a$ Where K= 2.54 a= 0.41	11.16	11.92	11.03	11.23	11.6	10.7	12.25	12.15	10.71	9.02	6.53	-
Average	5.77	11.47	11.13	11.41	11.15	11.47	12.2	11.43	5.71	7.77	1.63	-

Average Predicted Applied Depth =101.14 ÷ 9.5 = 10.64 (mm)

Total Volume Applied = 45.12 M^3

Area = 532 M^2

Average Width = 532 ÷ 28 = 19 M

Imaginary Area = 38 x 19 = 722 M^2

Actual Applied Depth = 45.12 ÷ 722 =62.49 MM

Length (meters)	0	2	6	10	14	18	22	26	29	32	36	38
Opportunity Time (Minutes)	37	43.42	36	37.58	40.71	37.43	46.43	45.5	33.71	22.00	10.00	-
$\bar{Z} = Kt^a$ Where K= 15.0 a= 0.41	65.92	70.39	65.18	66.36	68.55	66.23	72.35	71.75	63.45	53.27	38.55	-
Average	34.07	67.78	65.77	67.45	67.39	69.29	72.05	67.6	38.9	45.91	9.63	-

Average Predicted Applied Depth = 506.84 ÷ 9.5 = 63.77 mm

Average Predicted Applied Depth = 63.77 mm

Actual Applied Depth =62.49 MM

Difference = 1.28 mm

Percent Difference=1.28x100÷ 62.49=2.05

WATER COURSE NO. RL 23,000-L (TAIL)
INFILTRATION FUNCTION TABLE

Length (Meters)	0	2	6	10	14	18	22	26	30	34	38	42	46	50	54	58	60.5
Opportunity Time (Minutes)	29.09	15.31	26.85	27.79	39.76	[illegible]	31.89	29.69	51.98	53.78	52.28	51.97	51.97	51.97	34.39	14.59	0
F = [illegible] where a = [illegible] a= [illegible]	[illegible]	25.16	26.77	[illegible]	35.39	39.07	[illegible]	31.15	39.61	40.41	39.91	39.81	39.81	39.81	33.20	22.76	0
Average	15.93	27.46	29.99	30.9	37.38	39.5	[illegible]	[illegible]	[illegible]	40.15	39.86	39.81	39.81	36.58	27.98	11.38	0

Average Predicted Applied Depth = 519.39 ÷ 15.0 = 34.62 MM

Total Volume Applied = 25.5 M³

Area = 648.89 M²

Average Width = 648.89 ÷ 58 = 11.18 M

Imaginary Area = 11.18 x 60.5 = 676.39 M²

Actual Depth Applied = 25.5 ÷ 676.39 = 37.7 MM

Length (Meters)	0	2	6	10	14	18	22	26	30	34	38	42	46	50	54	58	60.5
Opportunity Time (Minutes)	29.09	15.31	26.85	27.79	39.76	51.89	31.89	29.69	51.98	53.78	52.28	51.97	51.97	51.97	34.39	14.59	0
F = [illegible] where a = 7.7 a= 0.4[illegible]	35.93	27.47	33.76	33.25	39.4[illegible]	43.39	31.64	34.33	43.19	44.48	44.24	43.80	43.80	43.80	36.52	25.02	0
Average	15.40	34.22	33.06	36.17	41.17	39.[illegible]	34.53	35.91	44.08	44.35	44.02	43.80	43.80	40.16	30.76	12.52	0

Average Predicted Applied Depth = 571.59 ÷ 15.0 = 38.1 MM

Average Predicted Applied Depth = 38.1 MM

Actual Applied Depth= 37.7 MM

Difference = 0.406

Percent Difference= 1.07

Table - III.10

WATER COURSE NO. RD.45,800-L (TAIL)
INFILTRATION FUNCTION

Length (meters)	0	2	6	10	14	18	22	26	30	34	37	38.5
Opportunity Time (Minutes)	44.14	44.14	51.66	54.29	60.57	54.79	66.58	64.5	49.17	52.5	15.5	-
$\bar{Z} = Kt^a$ Where K= 10.1 a= 0.23	24.13	2[illegible].13	2[illegible].22	25.3[illegible]	25.95	25.[illegible]	26.52	26.23	24.7[illegible]	[illegible].11	18.97	-
Average	12.06	2[illegible].57	25.16	25.[illegible]	25.[illegible]	2[illegible].9[illegible]	26.[illegible]2	25.5[illegible]	24.72	[illegible]	5.42	-

Average Predicted Applied Depth = 243.25 ÷ 9.6 = [illegible].35 MM

Total Volume Applied = 22.91 M³

Area = 664.75 M²

Average Width = 664.75 ÷ 37 =17.96 M

Imaginary Area = 17.96 x 38.5 = 691.46 M²

Actual Applied Depth =22.91 ÷ 691.46=33.13 MM

Length (meters)	0	2	6	10	14	18	22	26	30	34	37	38.5
Opportunity Time (Minutes)	44.14	44.14	51.66	54.29	60.57	54.79	66.58	64.5	49.17	52.5	15.5	-
$\bar{Z} = Kt^a$ Where K= 13.3 a= 0.23	31.78	31.78	32.95	35.33	34.17	33.4	34.93	34.67	32.57	33.07	24.98	-
Average	15.89	32.26	33.14	33.75	33.78	34.16	34.8	33.62	32.82	29.05	14.27	-

Average Predicted Applied Depth = 326.93 ÷ 9.6 = 34.05 MM

Averge Predicted Applied Depth = 34.05 MM

Actual Applied Depth = 33.13 MM

Difference = 0.91 MM

Percent Difference=0.91x100 ÷ 33.13=2.74

WATER COURSE NO. RD.53,700-L (HEAD)
INFILTRATION FUNCTION

Length (Meters)	0	2	6	10	14	18	22	26	30	34	38	42	46	50	53.5
Opportunity Time (Minutes)	52.39	52.02	44.89	43.34	45.56	44.78	48.67	49.34	54.33	56.89	45.5	33.00	21.5	11.4	0
$\bar{Z} = Kt^a$ Where K= 5.3 a= 0.4	25.82	25.74	24.27	23.93	24.41	24.24	25.07	25.2	26.2	26.68	24.4	21.46	18.08	14.03	0
Average	12.89	25.00	24.1	24.17	24.32	24.65	25.13	25.7	26.44	25.54	22.93	19.77	16.05	7.0	0

Average Predicted Applied Depth = 303.69÷14.43 = 21.04 MM

Total Volume Applied = 69.72 M³

Area = 916.5 M²

Average Width = 916.5/34 =26.95 M

Imaginary Area =53.5÷26.95 =1441.82 M²

Actual Applied Depth= 69.72÷1441.82=48.35 MM

Length (Meters)	0	2	6	10	14	18	22	26	30	34	38	42	46	50	53.5
Opportunity Time Minutes)	52.39	52.02	44.89	43.34	45.56	44.78	48.67	49.34	54.33	56.89	45.5	33.00	21.5	11.4	0
$\bar{Z} = Kt^a$ Where K= 12.5 a= 0.4	60.89	60.72	57.25	56.45	57.58	57.19	59.13	59.45	61.79	62.93	57.56	50.62	42.64	35.08	0
Average	30.4	58.98	56.85	57.01	57.38	58.16	59.29	60.62	62.36	60.24	54.09	40.63	37.86	16.5	0

Average Predicted Applied Depth = 716.41÷14.43 = 49.64 MM

Average Predicted Applied Depth = 49.64 MM

Actual Applied Depth= 48.35 mm

Difference = 1.29 MM

Percent Difference = 2.66

Table - III.12

WATER COURSE NO. RD.53,700-L (TAIL)
INFILTRATION FUNCTION

Length (Meters)	0	2	6	10	14	18	22	26	30	32.5
Opportunity Time (Minutes)	50.50	45.00	50.10	52.00	51.70	50.30	46.48	45.40	22.00	0
$\bar{Z} = Kt^a$ Where K= 5.6 a= 0.41	27.95	26.66	27.36	28.29	28.23	27.91	27.02	25.76	19.88	0
Average	13.85	27.26	28.07	28.32	28.07	27.46	26.39	22.82	9.94	0

Average Predicted Applied Depth =211.92 ÷ 9.12 = 26.09 MM

Total Volume Applied = 46.83 M³

Area = 715.5 M²

Average Width = 715.29 =24.67 M

Imaginary Area =24.67x32.5 =801.75 M²

Actual Applied Depth= 46.83÷801.75 = 58.4 MM

Length (Meters)	0	2	6	10	14	18	22	26	30	32.5
Opportunity Time (Minutes)	50.50	45.00	50.10	52.00	51.70	50.30	46.48	45.40	22.00	0
$\bar{Z} = Kt^a$ Where K= 13.0 a= 0.41	64.90	61.90	64.69	65.69	65.53	64.80	62.73	62.13	46.16	0
Average	31.70	63.29	65.19	65.61	65.16	63.76	62.43	54.14	23.08	0

Average Predicted Applied Depth =494.36 ÷ 8.12 = 60.88 MM

Average Predicted Applied Depth = 60.88 MM

Actual Applied Depth = 58.4 MM

Difference = 2.48

Percent Difference =2.48x100÷58.4 =4.24

WATER COURSE NO. RD.70,800-L (MIDDLE)
INFILTRATION FUNCTION

Length (Meters)	0	2	6	10	14	18	22	26	30	34	38	42	46	50	54	57	60
Opportunity Time (Minutes)	47.11	51.23	56.22	63.12	66.33	61.95	66.39	76.17	78.78	79.61	68.78	78.22	65.80	72.80	78.45	30.00	0
$\bar{Z}$ =Kt^a Where K= 3.1 a= 0.23	7.51	7.63	7.83	8.04	8.13	8.00	8.13	8.39	8.46	8.48	8.20	8.44	8.12	8.31	8.45	6.77	0
Average	3.79	7.73	7.94	8.09	8.07	8.07	8.26	8.43	8.47	8.34	8.32	8.26	8.22	8.38	7.61	2.53	0

Average Predicted Applied Depth = 120.48 ÷ 15.25 = 7.90 MM

Total Volume Applied=83.74 M³

Area = 1644 M²

Average Width = 1644÷57 =28.84 M

Imaginary Area =28.84x60=1730.4 M²

Actual Applied Depth= 83.74÷1730.4=48.3 MM

Length (Meters)	0	2	6	10	14	18	22	26	30	34	38	42	46	50	54	57	60
Opportunity Time (Minutes)	47.11	51.23	56.22	63.12	66.33	61.95	66.39	76.17	78.78	79.61	68.78	78.22	65.80	72.80	78.45	30.00	0
$\bar{Z}$ =Kt^a Where K= 17.7 a= 0.23	42.90	43.57	44.71	45.92	46.44	45.72	46.44	47.94	48.32	48.43	46.85	48.24	46.41	47.45	48.24	38.70	0
Average	21.62	44.14	45.32	46.18	46.08	46.08	47.19	48.13	48.38	47.64	47.55	47.33	46.93	47.85	43.47	14.51	0

Average Predicted Applied Depth = 688.37 ÷ 15.25 =45.13 MM

Average predicted Applied Depth = 45.13 MM

Actual Applied Depth = 48.39 MM

Difference = 3.26

Percent Difference = 3.25 x 100 ÷48.39 = 6.73

Table - III.14

WATER COURSE NO. RD.70,800-L (TAIL)
INFILTRATION FUNCTION

Length (Meters)	0	2	6	10	14	18	22	26	30	34	38	42	46	50	54	58	61
Opportunity Time (Minutes)	50.33	56.17	55.59	58.14	54.43	61.49	61.26	64.67	68.91	68.91	70.08	83.67	86.29	62.58	35.50	11.00	0
$\bar{Z}$ =Kt^a Where K= 4.6 a= 0.24	12.29	12.62	12.59	12.72	12.52	12.89	12.88	13.05	13.19	13.25	13.31	13.88	13.99	12.90	11.30	8.53	0
Average	6.22	12.60	12.65	12.62	12.70	12.88	12.96	13.12	13.22	13.28	12.59	13.93	13.47	12.10	9.91	4.87	0

Average Predicted Applied Depth = 190.12 ÷ 15.25 =12.46 MM

Total Volume Applied = 2.80 M³

Area = 470.7 M²

Average Width = 470.7÷50 = 9.41 M

Imaginary Area =61 x 9.41 =574.01 M²

Actual Applied Depth= 28.0 ÷ 574.01 = 48.77 MM

Length (Meters)	0	2	6	10	14	18	22	26	30	34	38	42	46	50	54	58	61
Opportunity Time (Minutes)	50.33	56.17	55.59	58.14	54.43	61.49	61.26	64.67	68.91	68.91	70.08	83.67	86.29	62.58	35.50	11.00	0
$\bar{Z}$ =Kt^a Where K= 19.0 a= 0.24	48.66	49.96	49.83	50.37	49.58	51.05	51.01	51.68	52.06	52.47	52.68	54.97	55.38	51.27	44.25	33.78	0
Average	24.65	49.89	50.10	49.97	50.31	51.03	51.34	51.87	52.26	52.57	53.82	55.17	53.32	48.01	39.26	19.30	0

Average Predicted Applied Depth = 752.87 ÷ 15.25 =49.36 MM

Average Predicted Applied Depth = 49.37 MM

Actual Applied Depth = 48.77 MM

Difference = 0.59

Percent Difference = 1.22

Table - III.15

WATER COURSE NO. RD.115,906-L (HEAD)
INFILTRATION FUNCTION

Length (Meters)	0	2	6	10	14	18	22	26	30	34	37.5
Opportunity Time (Minutes)	14.67	38.12	55.62	52.38	56.75	38.50	33.75	24.08	15.62	7.50	0
$\bar{Z} = Kt^a$ Where K= 13.5, a= 0.4	39.52	59.90	67.36	65.76	67.90	58.14	55.16	48.19	40.53	30.22	0
Average	24.86	62.63	66.56	66.83	63.02	56.65	51.67	44.86	35.88	16.16	0

Average Predicted Applied Depth = 490.12 ÷ 9.40 = 52.14 MM

Total Volume Applied = 14.37 M^3

Area = 678.75 M^2

Average Width = 678.75 ÷ 30 =22.62 M

Imaginary Area =22.62x37.5 =848.2 M^2

Actual Applied Depth= 14.37 ÷ 848.26 = 16.94 MM

Length (Meters)	0	2	6	10	14	18	22	26	30	34	37.5
Opportunity Time (Minutes)	14.67	38.12	55.62	52.38	56.75	38.50	33.75	24.08	15.62	7.50	0
$\bar{Z} = Kt^a$ Where K= 4.5, a= 0.4	13.17	19.30	22.42	21.92	22.63	19.38	18.38	16.06	13.51	10.07	0
Average	8.11	20.86	22.17	22.27	21.01	18.88	17.22	14.78	11.79	5.38	0

Average Predicted Applied Depth = 162.48 ÷ 9.40 =17.28 MM

Average Predicted Applied Depth = 17.28 MM

Actual Applied Depth =16.94 MM

Difference = 0.34

Percent Difference = 2.0

Table - III.16

WATER COURSE NO. RD.115,896-L (TAIL)
INFILTRATION FUNCTION

Length (Meters)	0	2	6	10	14	18	22	26	30	34	38	42	46	50	52.5
Opportunity Time (Minutes)	49.00	42.67	33.17	35.41	49.96	49.11	55.38	57.50	67.68	52.60	55.39	35.57	35.00	16.00	0
$\bar{Z} = Kt^a$ Where K= 3.6 a= 0.46	21.56	20.23	16.02	18.57	21.75	21.59	22.82	23.21	25.02	22.28	22.82	18.61	18.47	12.88	0
Average	10.44	19.12	18.29	20.16	21.67	22.20	23.01	24.11	23.65	22.55	20.71	18.54	15.67	8.50	0

Average Predicted Applied Depth = 268.63 ÷ 12.00 =22.38 MM

Total Volume Applied = 24.69 M^3

Area = 722.5 M^2

Average Width = 722.5 ÷ 42 = 17.2 M

Imaginary Area =52.5x17.2 =903.0 M^2

Actual Applied Depth= 24.69 ÷ 903 = 27.34 MM

Length (Meters)	0	2	6	10	14	18	22	26	30	34	38	42	46	50	52.5
Opportunity Time (Minutes)	49.00	42.67	33.17	35.41	49.96	49.11	55.38	57.50	67.68	52.60	55.39	35.57	35.00	16.00	0
$\bar{Z} = Kt^a$ Where K= 4.4 a= 0.46	26.36	24.73	22.02	22.70	26.59	26.38	27.88	28.37	30.58	27.23	27.88	22.74	22.58	15.75	0
Average	12.77	23.37	22.36	24.64	26.48	27.13	28.12	29.47	28.90	27.55	25.31	22.66	19.16	10.50	0

Average Predicted Applied Depth = 328.65 ÷ 12.00 =27.38 MM

Average Predicted Applied Depth = 27.38 MM

Actual Applied Depth = 27.34 MM

Difference = 0.04

Percent Difference = 0.146

Table - III.17

Soil Moisture Deficit in the Rootzone of Field Selected
For Gross Irrigation Evaluation at Outlet No.RD-22000-L(Head)

Sampling Date 21-12-1987

Sr. No.	Depth (Cm)	Moisture content on Wt. basis %	Bulk Density g/c.c	Moisture content on Vol. basis %	Saturation Water Holding Capacity %	Field capacity Moisture Level %	Water Holding capacity on Vol. basis %	Soil Moisture Deficit %	Soil Moisture Deficit (Cm)
1.	0 - 15	14.79	1.46	21.59	48.46	24.23	35.37	13.78	2.06
2.	15 - 30	14.75	1.46	21.53	49.24	24.62	35.94	14.41	2.16
3.	30 - 60	16.42	1.46	23.97	52.92	26.46	38.63	14.66	4.39
4.	60 - 90	18.94	1.46	27.65	52.92	26.46	38.63	10.98	3.29
5.	90 - 120	17.18	1.46	25.08	52.92	26.46	38.63	13.55	4.06
6.	120- 150	18.12	1.46	26.45	52.92	26.46	38.63	12.18	3.65
								TOTAL =	19.61

Proportionate Soil Moisture Deficit for the 0.3 m topsoil profile in the root zone = $\frac{19.61 \times 0.3}{1.5}$ = 3.92Cm

Table - III.18

Soil Moisture Deficit in the Rootzone of Field Selected
For Gross Irrigation Evaluation at Outlet No.RD-22000-L(Tail)

Sampling Date = 30-12-87

Sr. No.	Depth (Cm)	Moisture content on Wt. basis %	Bulk Density g/c.c	Moisture content on Vol. basis %	Saturation/ Water Holding Capacity %	Field capacity Moisture Level %	Water Holding capacity on Vol. basis %	Soil Moisture Deficit %	Soil Moisture Deficit (Cm)
1.	0 - 15	10.00	1.43	14.30	44.53	22.26	31.83	17.53	2.63
2.	15 - 30	8.56	1.43	12.24	39.08	19.54	27.94	15.70	2.35
3.	30 - 60	7.59	1.43	10.85	35.61	17.80	25.45	14.60	4.38
4.	60 - 90	8.02	1.43	11.46	35.61	17.80	25.45	13.99	4.19
5.	90 - 120	10.40	1.43	14.87	36.20	18.60	26.59	11.72	3.51
6.	120-150	9.60	1.43	13.73	36.40	18.20	26.02	12.29	3.68
								TOTAL =	20.74

Proportionate soil moisture deficit for the 0.3 m topsoil profile in the root zone = $\frac{20.74}{1.5} \times 0.3 = 4.14$Cm

Table III.19

Soil Moisture Deficit in the Rootzone of Field Selected
For Gross Irrigation Evaluation at Outlet No.RD-45800-L(Tail)

Sampling Date= 15-12-87

Sr. No.	Depth (Cm)	Moisture content on Wt. basis %	Bulk Density g/c.c	Moisture content on Vol. basis %	Saturation/ Water Holding Capacity %	Field capacity Moisture Level %	Water Holding capacity on Vol. basis %	Soil Moisture Deficit %	Soil Moisture Deficit (Cm)
1.	0 - 15	10.15	1.38	14.00	43.39	21.69	29.93	15.93	2.38
2.	15 - 30	10.73	1.38	14.80	46.32	23.16	31.96	17.16	2.57
3.	30 - 60	12.24	1.38	16.89	43.89	21.94	30.27	13.38	4.01
4.	60 - 90	12.70	1.38	17.52	45.64	22.82	31.49	13.97	4.19
5.	90 - 120	13.50	1.38	18.63	44.73	22.36	30.85	12.22	3.66
6.	120-150	13.20	1.38	18.21	44.97	22.48	31.02	12.81	3.84

TOTAL = 20.65

Proportionate soil moisture deficit for the 0.3 m topsoil profite in the root zone = $\frac{20.65}{1.5} \times 0.3 = 4.13$ Cm

Table - III.20

Soil Moisture Deficit in the Rootzone of Field Selected
For Gross Irrigation Evaluation at Outlet No.RD-53700-L(Head)

Sampling Date 9-12-1987

Sr. No.	Depth (Cm)	Moisture content on Wt. basis %	Bulk Density g/c.c	Moisture content on Vol. basis %	Saturation/ Water Holding Capacity %	Field capacity Moisture level %	Water Holding capacity on Vol. basis %	Soil Moisture Deficit %	Soil Moisture Deficit (Cm)
1.	0 - 15	11.96	1.46	17.46	54.34	27.17	39.66	22.20	3.33
2.	15 - 30	14.13	1.46	20.63	54.40	27.20	39.71	19.08	2.86
3.	30 - 60	13.96	1.46	20.38	55.73	27.86	40.67	20.29	6.08
4.	60 - 90	13.61	1.46	19.87	55.73	27.86	40.67	20.80	6.24
5.	90 - 120	10.39	1.46	15.17	55.73	27.86	40.67	25.50	7.65
6.	120-150	11.73	1.46	17.12	55.73	27.86	40.67	23.55	7.06
								TOTAL =	33.22

Proportionate soil moisture dificit for the 0.3 m topsoil in the root zone = $\frac{33.22 \times 0.3}{1.5}$ = 6.64 Cm

Table - III.21

Soil Moisture Deficit in the Rootzone of Field Selected
For Gross Irrigation Evaluation at Outlet No.RD 2700-L(Tail)

Sampling Date 25-12-1987

Sr. No.	Depth (Cm)	Moisture content on Wt. basis %	Bulk Density g/c.c	Moisture content on Vol. basis %	Saturation/Water Holding Capacity %	Field capacity/Moisture Level %	Water Holding Capacity on Vol. basis %	Soil Moisture Deficit %	Soil Moisture Deficit (Cm)
1.	0 - 15	20.73	1.48	30.63	50.50	25.25	37.37	6.74	1.01
2.	15 - 30	16.36	1.48	24.21	48.26	24.13	35.71	11.50	1.72
3.	30 - 60	16.29	1.48	24.10	51.27	25.63	37.93	13.83	4.14
4.	60 - 90	17.79	1.48	26.33	51.27	25.63	37.93	11.60	3.48
5.	90 - 120	18.96	1.48	28.06	51.27	25.63	37.93	9.37	2.96
6.	120-150	19.29	1.48	28.55	51.27	25.63	37.93	9.36	2.81
								TOTAL =	16.12

Proportionate soil moisture deficit for the 0.3 m topsoil porfile in the root zone = $\frac{16.12 \times 0.3}{1.5}$ = 3.22 Cm

Table - III.22

Soil Moisture Deficit in the Rootzone of Field Selected
For Gross Irrigation Evaluation at Outlet No.RD-70800-L(Middle)

Sampling Date= 08-12-1987

Sr. No.	Depth (Cm)	Moisture content on Wt. basis %	Bulk Density g/c.c	Moisture content on Vol. basis %	Saturation/Water Holding Capacity %	Field capacity Moisture Level %	Water Holding capacity on Vol. basis %	Soil Moisture Deficit %	Soil Moisture Deficit (Cm)
1.	0 - 15	7.99	1.44	11.50	46.92	23.46	33.78	22.28	3.34
2.	15 - 30	13.52	1.44	19.46	47.67	23.83	34.31	14.85	2.22
3.	30 - 60	13.38	1.44	19.26	48.11	24.05	34.63	15.37	4.61
4.	60 - 90	14.01	1.44	20.17	48.11	24.05	34.63	14.46	4.33
5.	90 - 120	15.16	1.44	21.83	48.11	24.05	34.63	12.80	3.84
6.	120-150	15.24	1.44	21.94	48.11	24.05	34.63	12.69	3.80
								TOTAL =	22.14

Proportionate soil moisture deficit for the 0.3 m topsoil profile in the root zone = $\frac{22.14 \times 0.3}{1.5}$ = 4.42 Cm

Table - III.23

Soil Moisture Deficit in the Rootzone of Field Selected
For Gross Irrigation Evaluation at Outlet No.RD-70800-L(Tail)

Sampling Date= 11-12-87

Sr. No.	Depth (Cm)	Moisture content on Wt. basis %	Bulk Density g/c.c	Moisture content on Vol. basis %	Saturation/ Water Holding Capacity %	Field capacity Moisture Level %	Water Holding capacity on Vol. basis %	Soil Moisture Deficit %	Soil Moisture Deficit (Cm)
1.	0 - 15	9.65	1.45	13.99	45.15	22.57	32.73	18.74	2.81
2.	15 - 30	11.88	1.45	17.22	47.55	23.77	34.46	17.24	2.58
3.	30 - 60	13.63	1.45	19.76	45.87	22.93	33.24	13.48	4.04
4.	60 - 90	16.20	1.45	23.49	45.87	22.93	33.24	9.75	2.92
5.	90 - 120	16.97	1.45	24.60	45.87	22.93	33.24	8.64	2.59
6.	120-150	15.98	1.45	23.17	45.87	22.93	33.24	10.07	3.02
								TOTAL =	17.96

Proportionate soil moisture deficit for the 0.3 m topsoil profile in the root zone = $\frac{17.96 \times 0.3}{1.5}$ = 3.59 Cm

Table - III.24

Soil Moisture Deficit in the Rootzone of Field Selected
For Gross Irrigation Evaluation at Outlet No.RD-115806-L(Head)

Sampling Dated.16-12-1987

Sr. No.	Depth (Cm)	Moisture content on Wt. basis %	Bulk Density g/c.c	Moisture content on Vol. basis %	Saturation/ Water Holding Capacity %	Field capacity Moisture Level %	Water Holding capacity on Vol. basis %	Soil Moisture Deficit %	Soil Moisture Deficit (Cm)
1.	0 - 15	7.90	1.49	11.77	42.48	21.24	31.64	19.87	2.98
2.	15 - 30	8.54	1.49	12.72	40.13	20.06	29.88	17.17	2.57
3.	30 - 60	10.72	1.49	15.97	36.01	18.005	26.82	10.85	3.25
4.	60 - 90	10.96	1.49	16.33	36.01	18.005	26.82	10.49	3.14
5.	90 - 120	16.07	1.49	23.94	36.01	18.005	26.82	2.88	0.86
								TOTAL =	12.8

Proportionate soil moisture deficit for the 0.3 m topsoil profile in the root zone = $\frac{12.8 \times 0.3}{1.2}$ = 3.2 Cm

Table - III.25

Soil Moisture Deficit in the Rootzone of Field Selected
For Gross Irrigation Evaluation at Outlet No.RD-115806-L(Tail)

Sampling Date= 16-11-87

Sr. No.	Depth (Cm)	Moisture content on Wt. basis %	Bulk Density g/c.c	Moisture content on Vol. basis %	Saturation/ Water Holding Capacity %	Field capacity Moisture Level %	Water Holding capacity on Vol. basis %	Soil Moisture Deficit %	Soil Moisture Deficit (Cm)
1.	0 - 15	8.02	1.5	12.03	39.97	19.98	29.97	17.94	2.69
2.	15 - 30	8.54	1.5	12.81	39.56	19.78	29.67	16.86	2.53
3.	30 - 60	10.72	1.5	16.08	38.03	19.01	28.51	12.43	3.73
4.	60 - 90	12.60	1.5	18.90	38.43	19.21	28.81	9.91	2.97
5.	90 - 120	12.04	1.5	18.06	38.21	19.10	28.65	10.59	3.17
6.	120-150	12.87	1.5	19.30	37.33	18.66	27.88	8.69	2.60
								TOTAL =	17.69

Proportionate soil moisture deficit for 0.3 m topsoil profile in the root zone = $\frac{17.69 \times 0.3}{1.5}$ = 3.53 Cm

Table - III.26

FIELD LEVEL IRRIGATION PERFORMANCE PARAMERTERS

Sr. No.	Water Course No.	Location of field on water course	Vol. of Water stored in Rootzone (Wrz) M^3/M	Vol. of Water run off. (Wu) M^3/M	Vol. of water deep percolated (Wp) M^3/M	Vol. of Water applied (Wa) M^3/M	Vol. of Water required (Wr) M^3/M	% Application Efficiency $Ea=\frac{Wrz}{Wa}x100$	% Requirement Efficiency $Er=\frac{Wrz}{Wr}x100$	Tail Water Ratio $Rt=\frac{Wu}{Wa}$	Deep Percolation Ratio $Rp=\frac{Wp}{Wa}$
1.	RD.22,000-L	Head	2.74	1.12	2.02	5.88	2.74	46.6	100.00	0.190	0.34
		Tail	5.40	0.08	0.143	5.63	6.003	95.91	89.95	0.014	0.025
2.	RD.45,800-L	Head	Soil Samples for ananlysis could not be taken because the soil was of gravel type. Aslo, the infiltration test could not be done.								
		Tail	2.94	0.045	-	2.985	3.81	98.65	77.16	0.015	-
3.	RD. 53,700-L	Head	4.93	2.07	-	7.00	5.64	70.42	87.41	0.295	-
		Tail	2.33	0.20	2.26	4.79	2.33	48.64	100.00	0.041	0.47
4.	RD. 70,800-L	Middle	6.20	0.09	0.36	6.74	6.29	91.98	98.56	0.013	0.053
		Tail	4.47	0.98	2.00	7.45	4.47	60.00	100.00	0.131	0.268
5.	RD. 115,806-L	Head	1.50	0.16	-	1.66	2.40	90.36	62.50	0.096	-
		Tail	2.72	0.47	-	3.19	3.70	85.26	73.50	0.147	-

Table - III.27

TUBE WELLS

Sr. No.	Watercourse No. RD	Village Name	Owner's Name	Land holding (Acres) Total	Under T.W.	Depth (Ft) Open well/ W.T	Boring	Total depth	Pipe Size (in) Suction	Delivery	Motor Horse Power	Source of Power	Discharge LPS	Class (Quality) water	Operation and Maintenance cost (Rs.)
1.	115806	Mariamzai	Qadar shah	3.25	3.25	51	100	150	2.5	2	12	Diesel Engine	9.2	C2 S1	227/Irrigation
2.	115806	Mariamzai	Adam Khan	17.5	2.5	75	70	145	2.5	2	12	Diesel Engine	8.26	C3 S1	200/Irrigation
3.	115806	Mariamzai	Firdaus	3.25	3.25	50	-	50	2.5	2	6	Diesel Engine	7.55	C3 S2	292/Irrigation
4.	-	Tela band	Waqif Sher	2.5	2.5	75	30	105	1.5	1.25	2	Electr-icity	-	-	-
5.	-	Tela band	Abdul Jamil Ghulam	1.5	1.5	50	20	70	2.5	2	2	Diesel Engine	-	-	200/Irrigation
6.	-	Tela band	Muhammad	15.0	2.0	30	30	60	2.5	2	5	Electr-icity	9.19	-	-
7.	-	Tela band	Meva Khan	67.5	4.0	55	-	55	2.5	2	5	Electr-icity	7.4	-	300/month
8.	-	Tela band	Hukam Khan	10.0	3.0	30	35	65	2.5	2	5	Electr-icity	6.82	-	300/month
9.	-	Tela band	Zarif Khan	87.5	3.0	54	-	54	2.5	2	5	Electr-icity	5.55	-	250/month
10.	-	Tela band	Mujra Khan	40.0	6.0	60	-	60	2.5	2	5	Electr-icity	-	-	400/month
11.	-	Tela band	Ruhul Amin	6.25	6.25	45	40	85	2.5	2	5	Electr-icity	-	-	500/month
12.	-	Tela band	Sheeraz Khan	40.0	6.0	60	-	60	2.5	2	5	Electr-icity	-	-	350/month
13.	-	Zangalae	Mumtaz	-	-	84	-	84	2.5	2	7.5	Electr-icity	-	-	1000/month

M.Khan/**

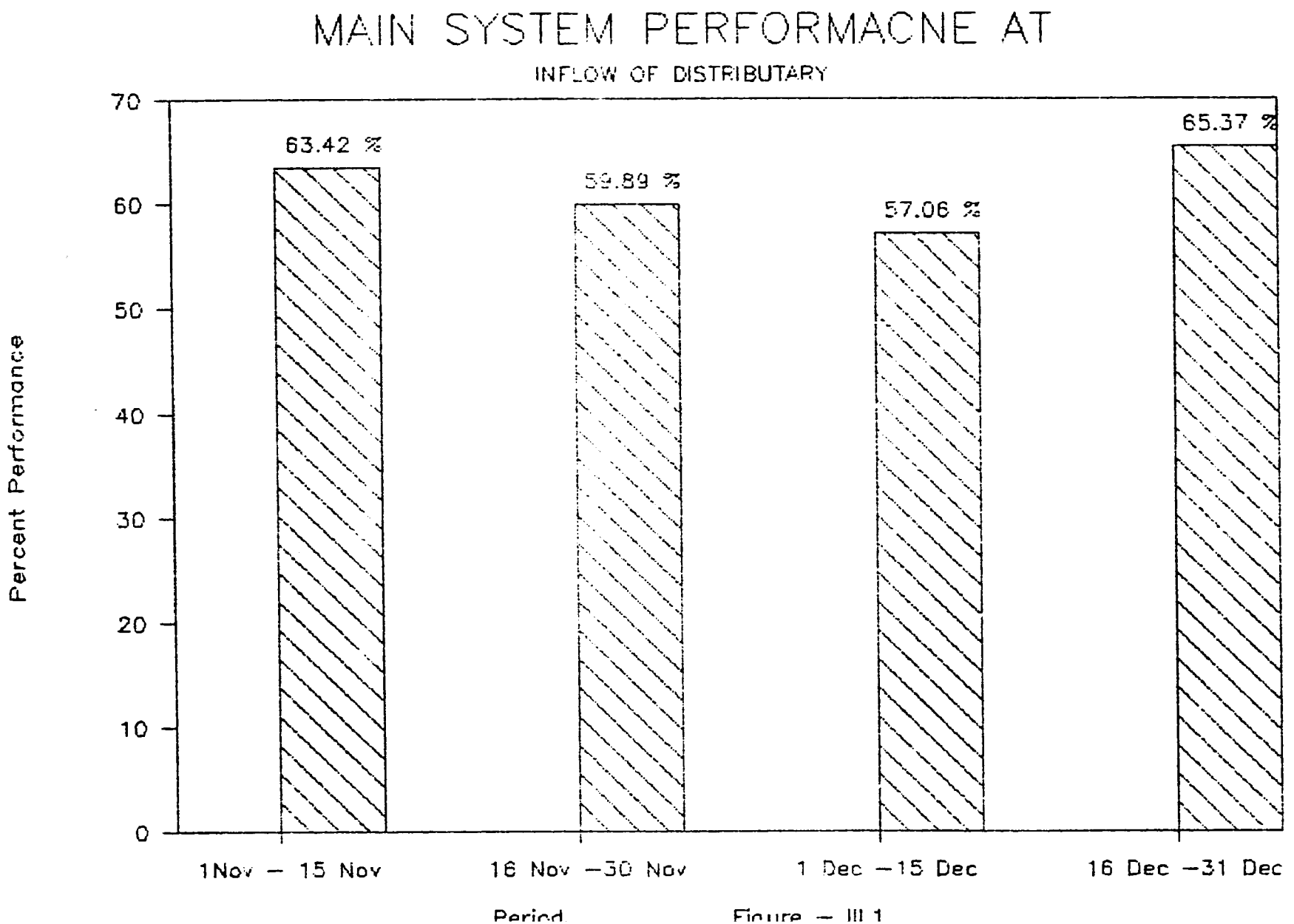

MAIN SYSTEM PERFORMACNE AT
INFLOW OF DISTRIBUTARY
Percent Performance
70
60
50
40
30
20
10
0
63.42 %
59.89 %
57.06 %
65.37 %
1Nov – 15 Nov
16 Nov –30 Nov
1 Dec –15 Dec
16 Dec –31 Dec
Period

Figure – III.1

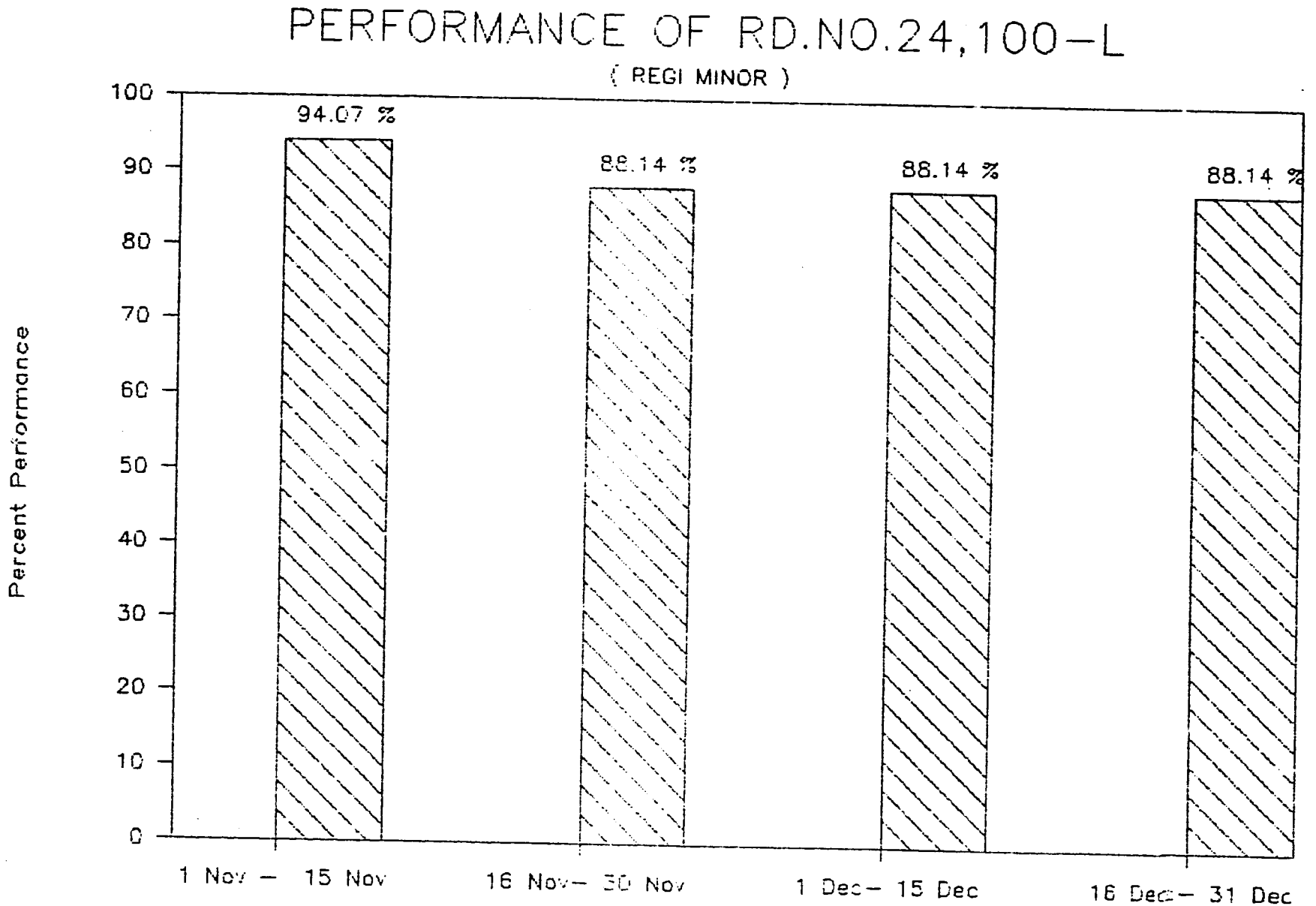

PERFORMANCE OF RD.NO.24,100-L
(REGI MINOR)
Percent Performance
100
90
80
70
60
50
40
30
20
10
0
94.07 %
88.14 %
88.14 %
88.14 %
1 Nov - 15 Nov
16 Nov- 30 Nov
1 Dec- 15 Dec
16 Dec- 31 Dec
Period

Figure - III.2

PERFORMANCE OF RD.NO.90,700-L

(MASHUGAGGAR MINOR)

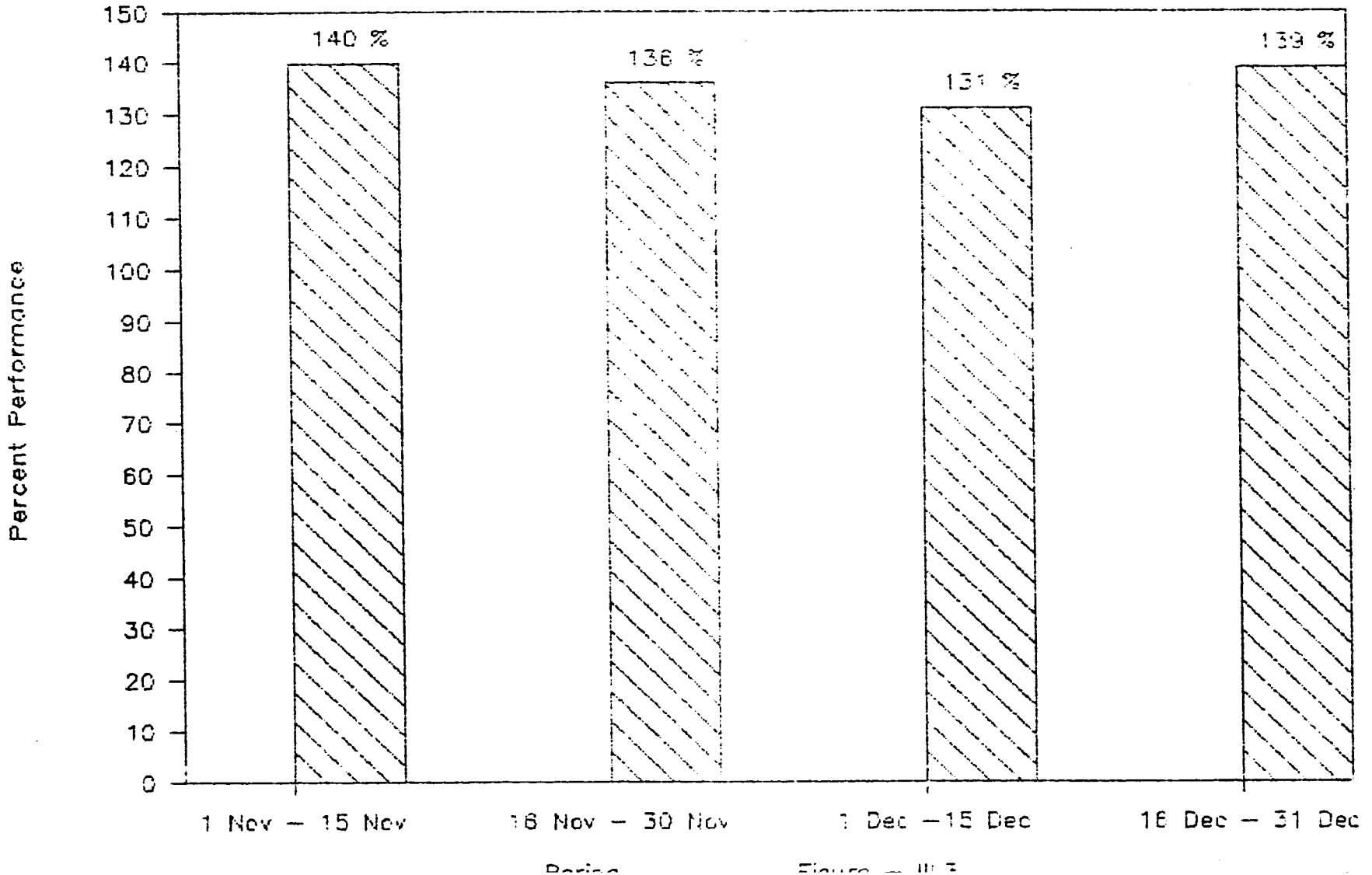


Figure – III.3

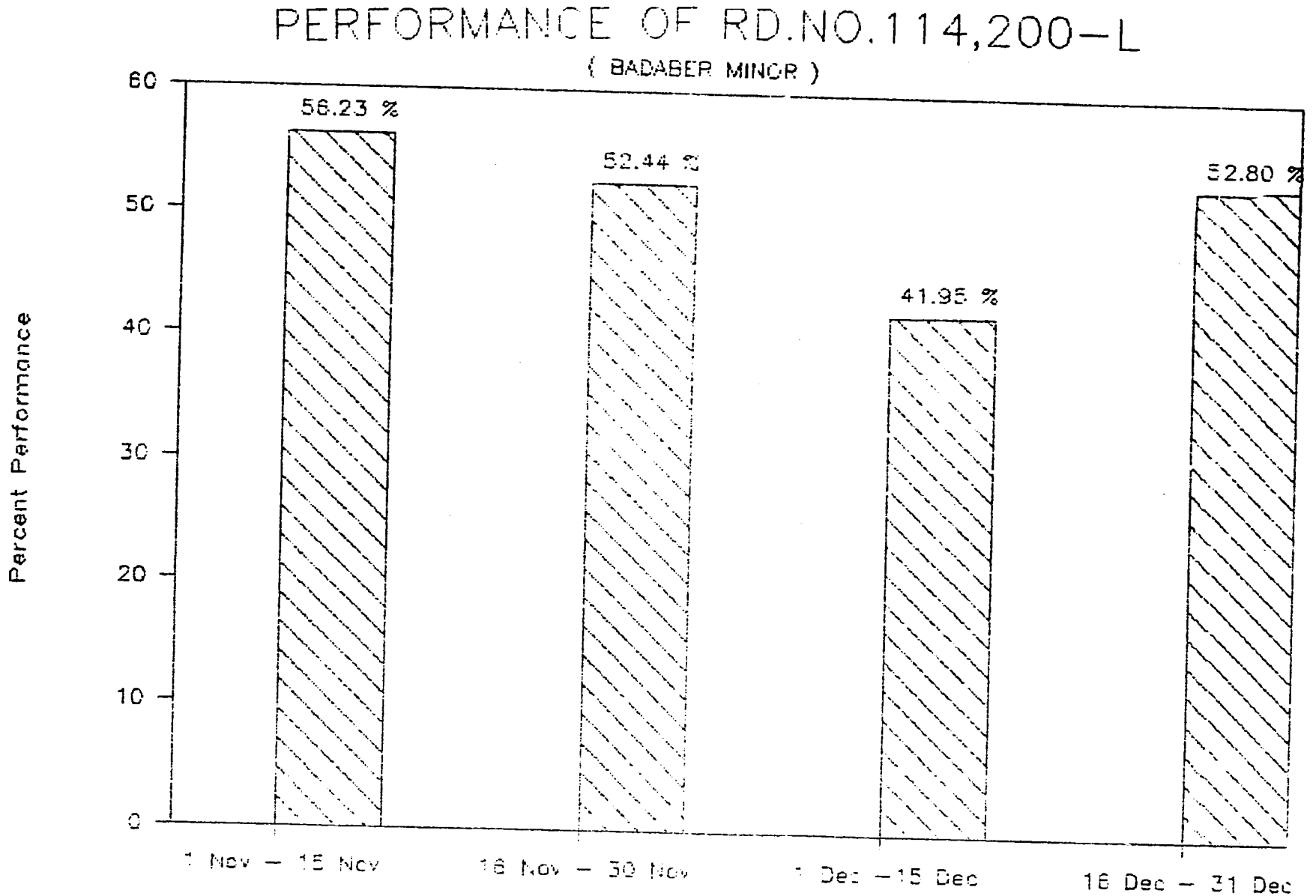

PERFORMANCE OF RD.NO.114,200-L
(BADABER MINOR)
Percent Performance
60
50
40
30
20
10
0
56.23 %
52.44 %
41.95 %
52.80 %
1 Nov - 15 Nov
16 Nov - 30 Nov
1 Dec - 15 Dec
16 Dec - 31 Dec
Period

Figure - III.4

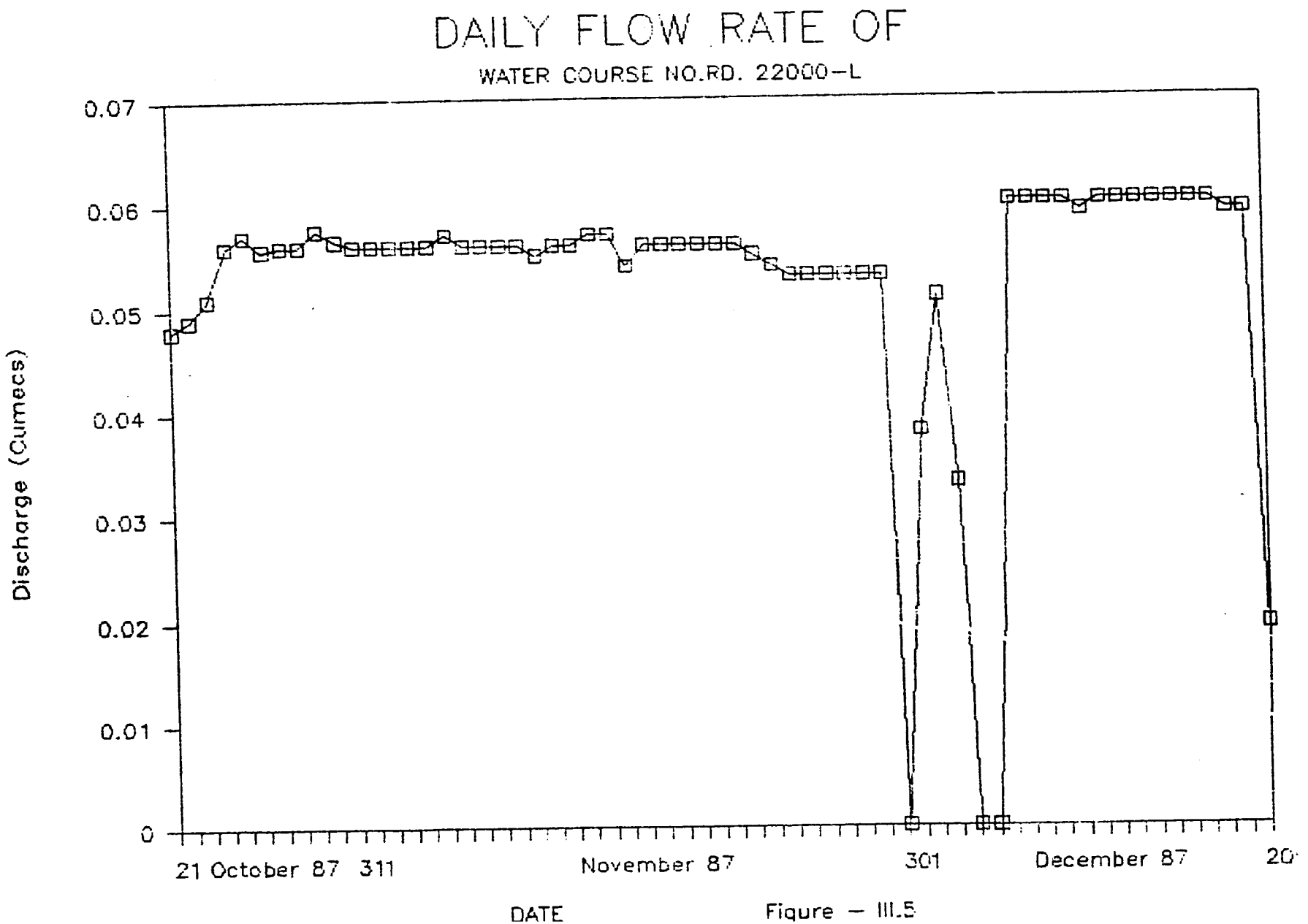

DAILY FLOW RATE OF
WATER COURSE NO.RD. 22000-L
Discharge (Cumecs)
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
21 October 87
311
November 87
301
December 87
20
DATE

Figure – III.5

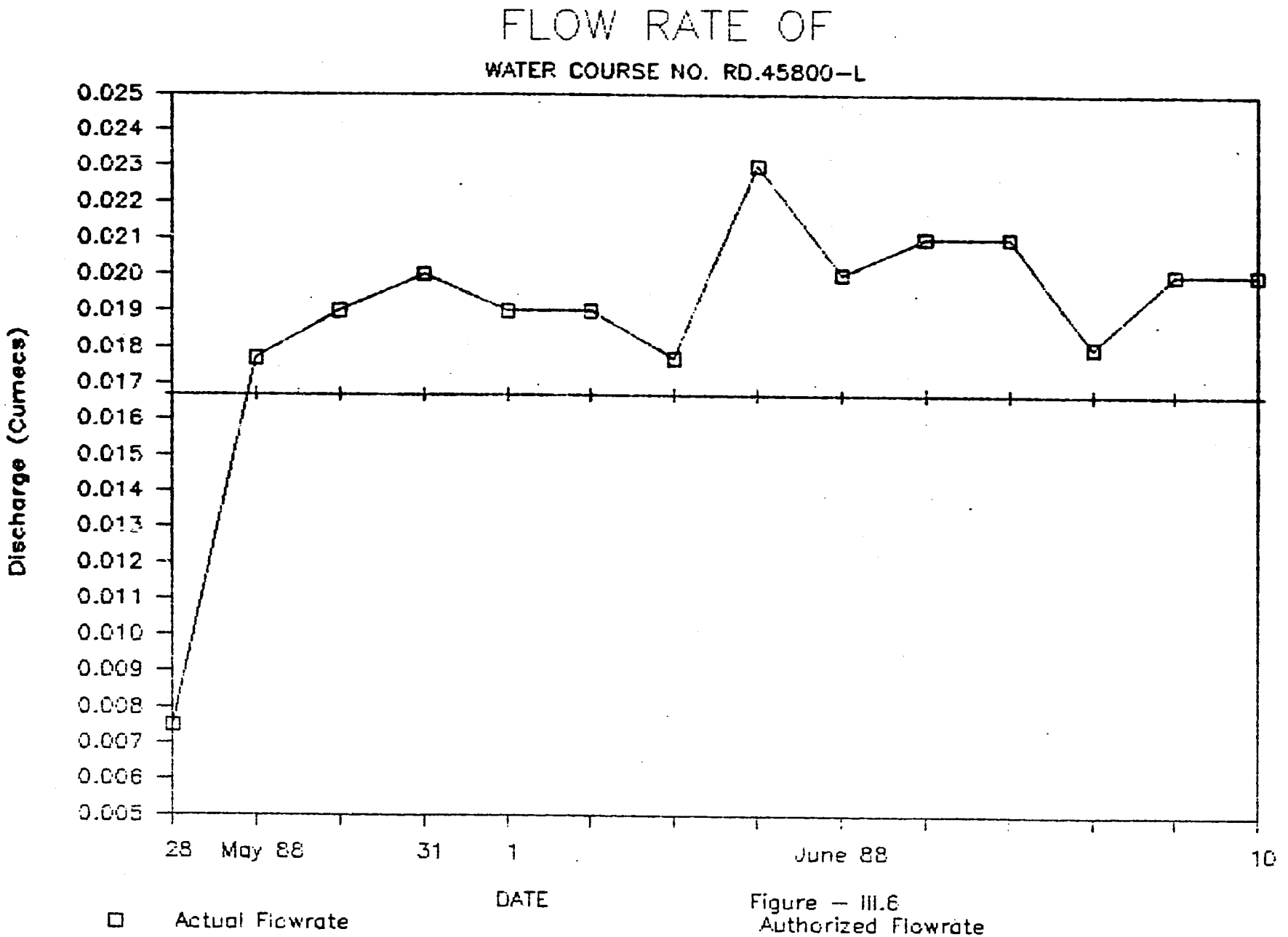

FLOW RATE OF
WATER COURSE NO. RD.45800-L
Discharge (Cumecs)
0.025
0.024
0.023
0.022
0.021
0.020
0.019
0.018
0.017
0.016
0.015
0.014
0.013
0.012
0.011
0.010
0.009
0.008
0.007
0.006
0.005
28
May 88
31
1
June 88
10
DATE
Actual Flowrate
Authorized Flowrate

Figure – III.6

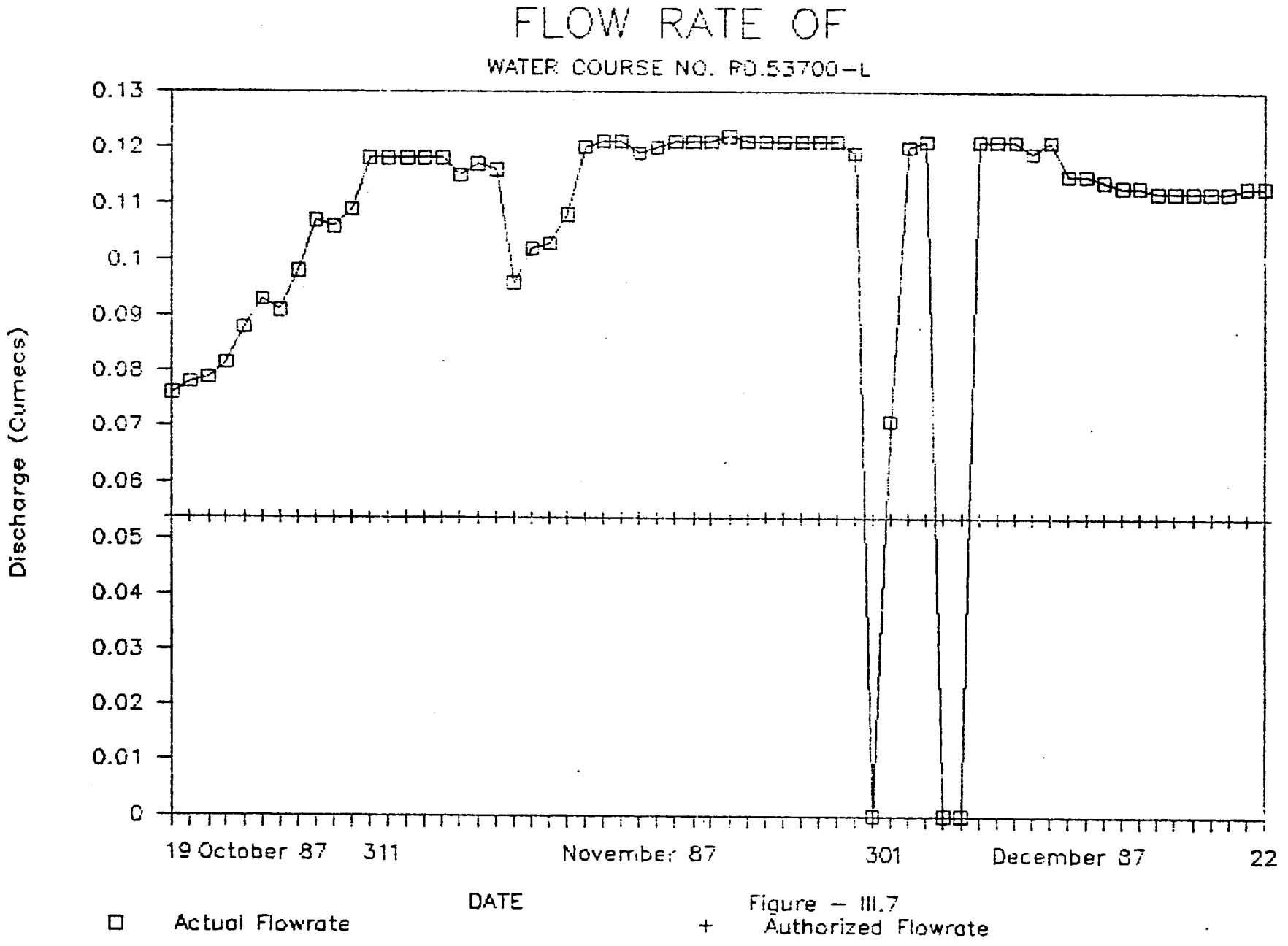

FLOW RATE OF
WATER COURSE NO. R0.53700-L
Discharge (Cumecs)
0.13
0.12
0.11
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
19 October 87
311
November 87
301
December 87
22
DATE
Actual Flowrate
Authorized Flowrate

Figure – III.7

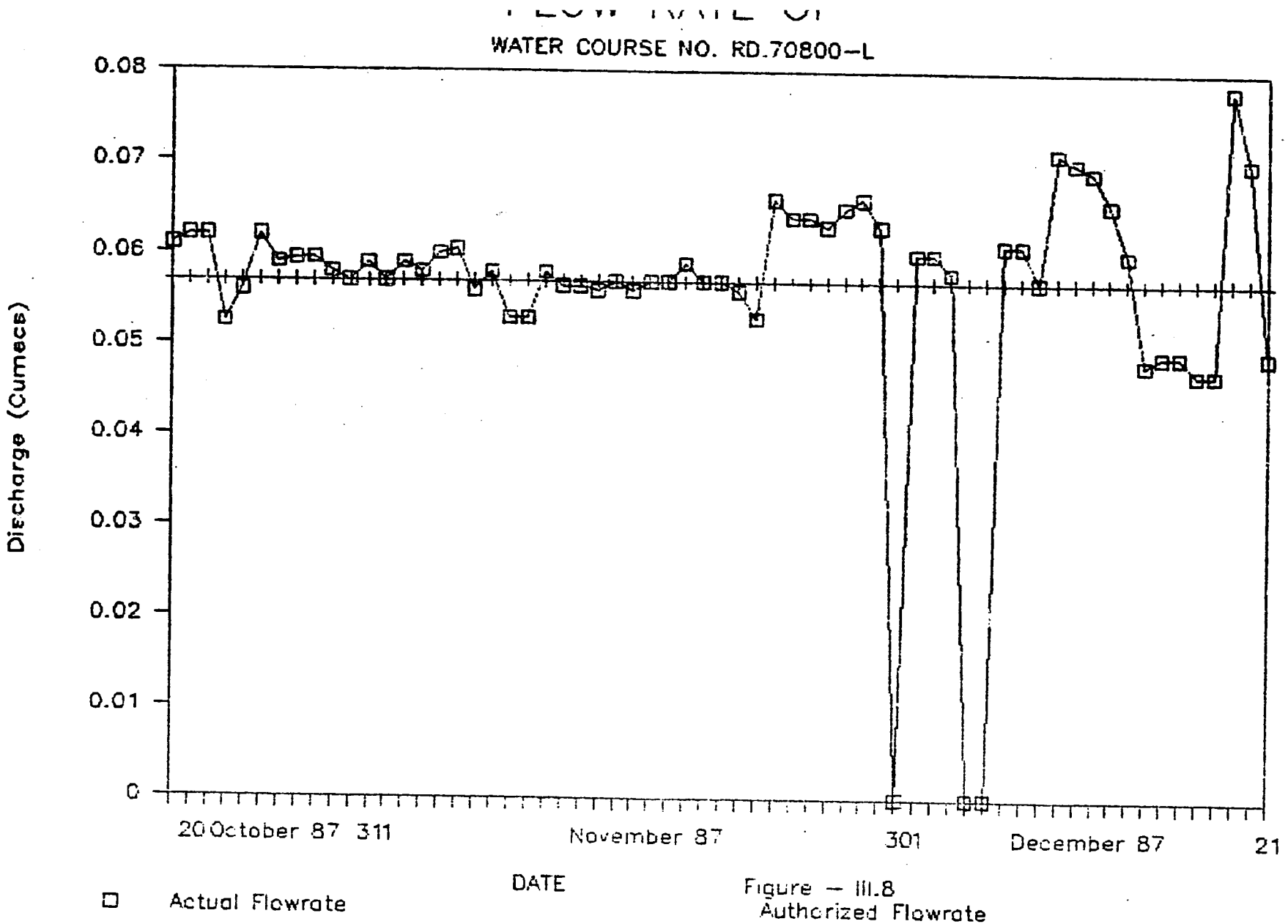

WATER COURSE NO. RD.70800-L
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
Discharge (Cumecs)
20 October 87
311
November 87
301
December 87
21
DATE
Actual Flowrate
Authorized Flowrate

Figure – III.8

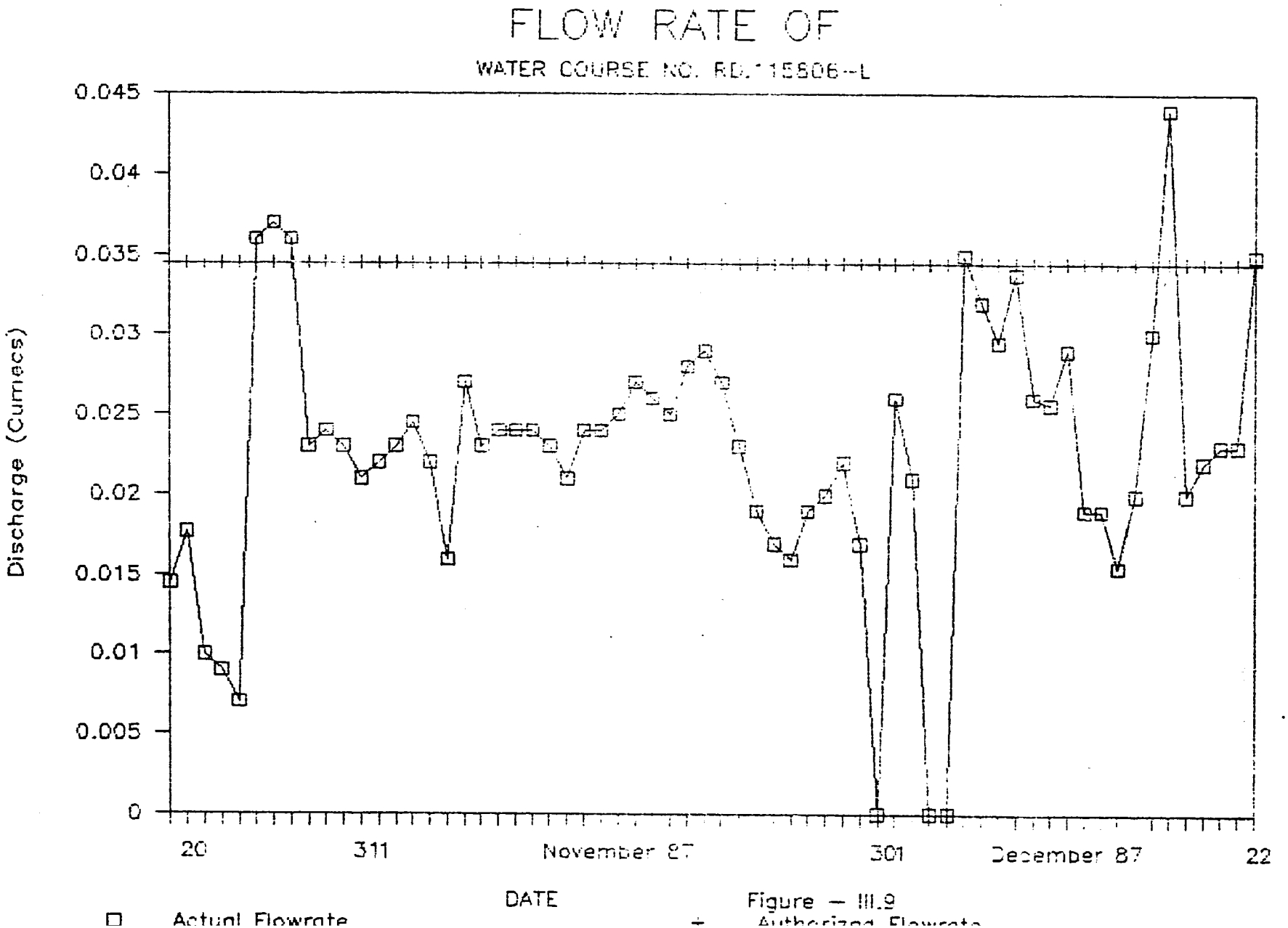
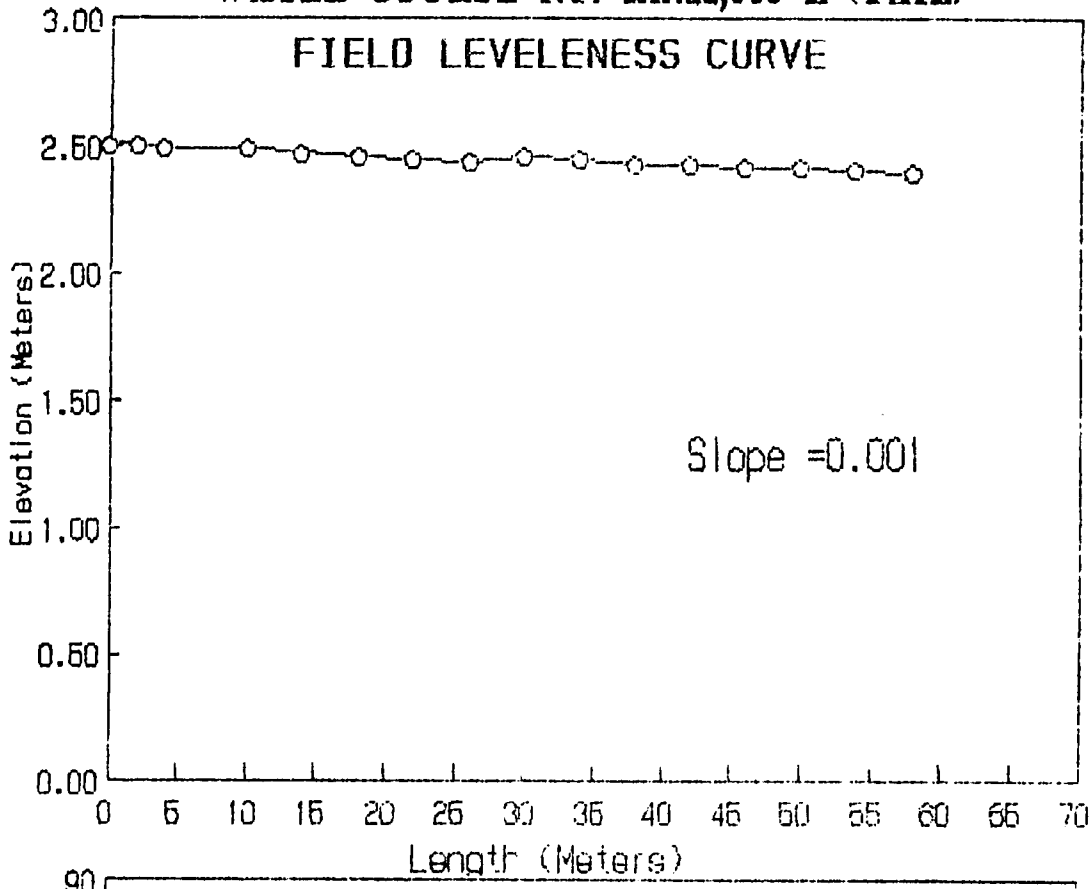
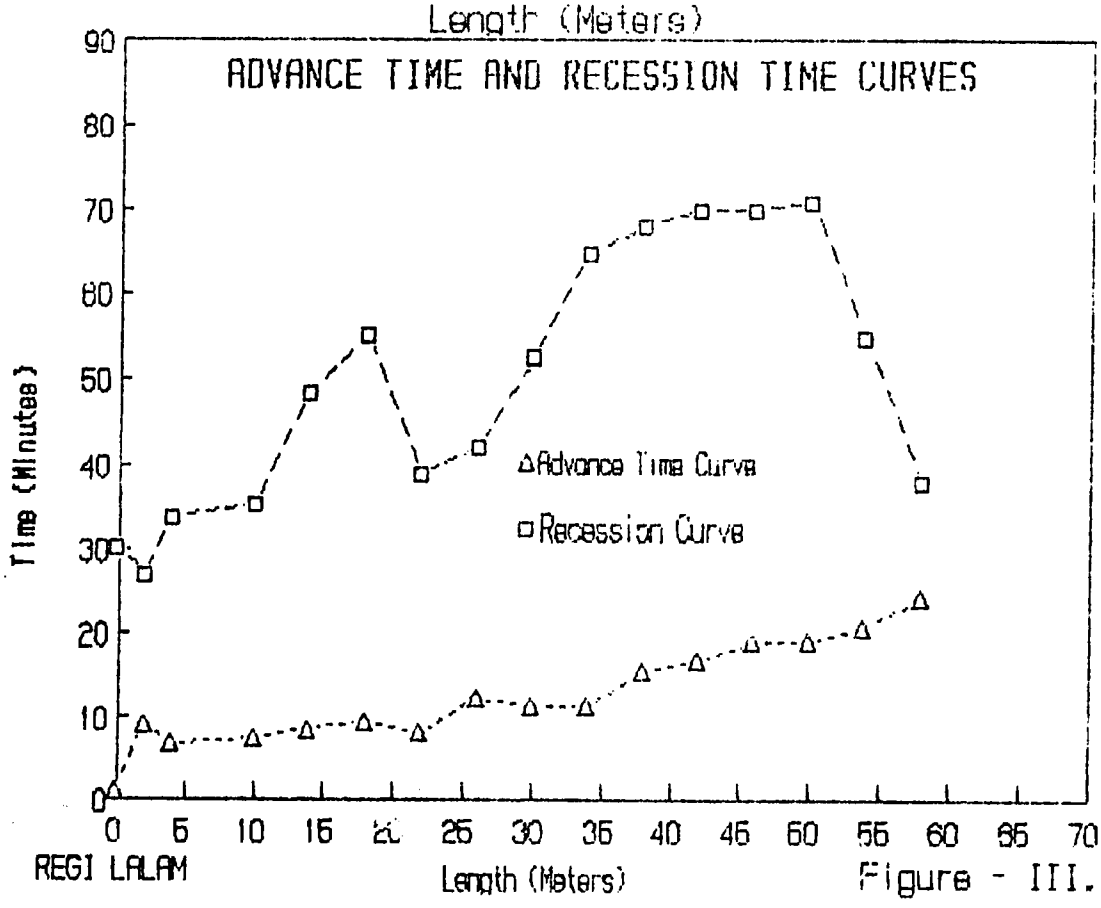

FLOW RATE OF
WATER COURSE NO. RD.'15806--L
Discharge (Cumecs)
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
20
311
November 87
301
December 87
22
DATE
Actual Flowrate
Authorized Flowrate

Figure — III.9

WATER COURSE NO. RD.22,000-L (TAIL)

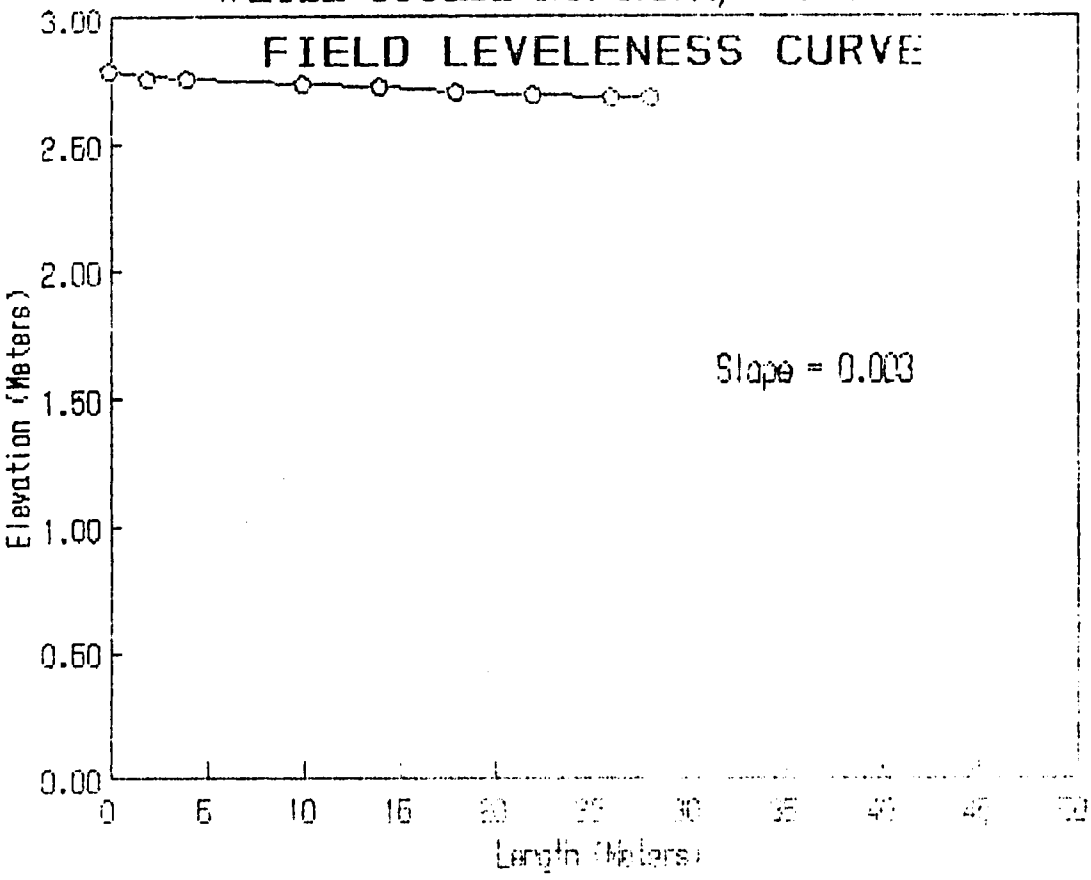


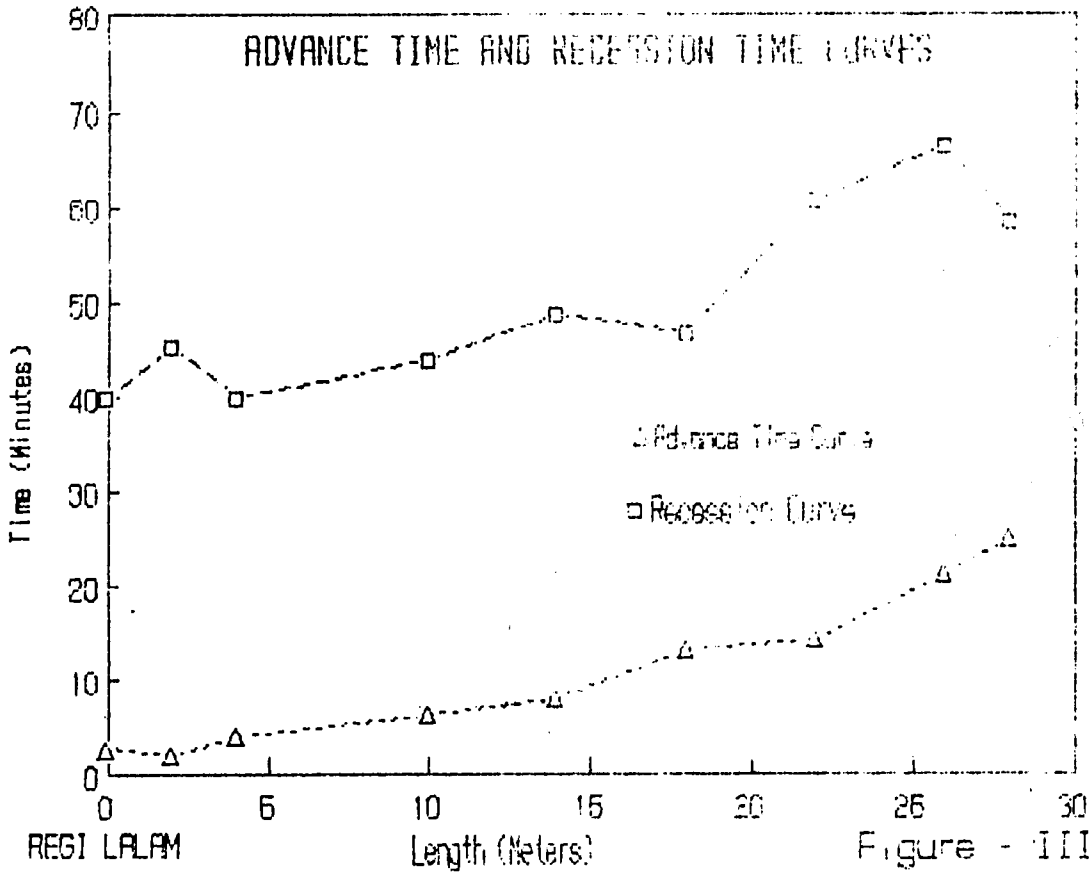


REGI LALAM

Figure - III.10

WATER COURSE NO. RD.22,000-L (HEAD)

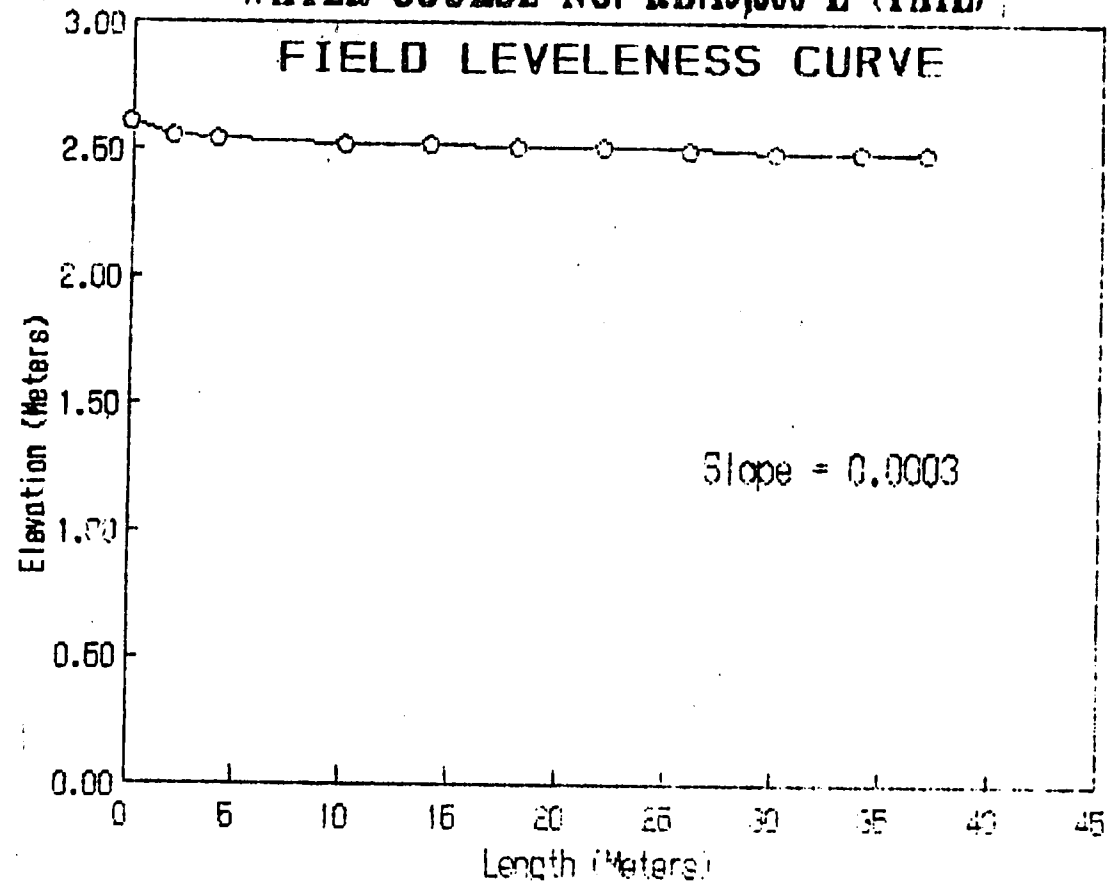




REGI LALAM

Figure - III.11

WATER COURSE NO. RD.45,800-L (TAIL)



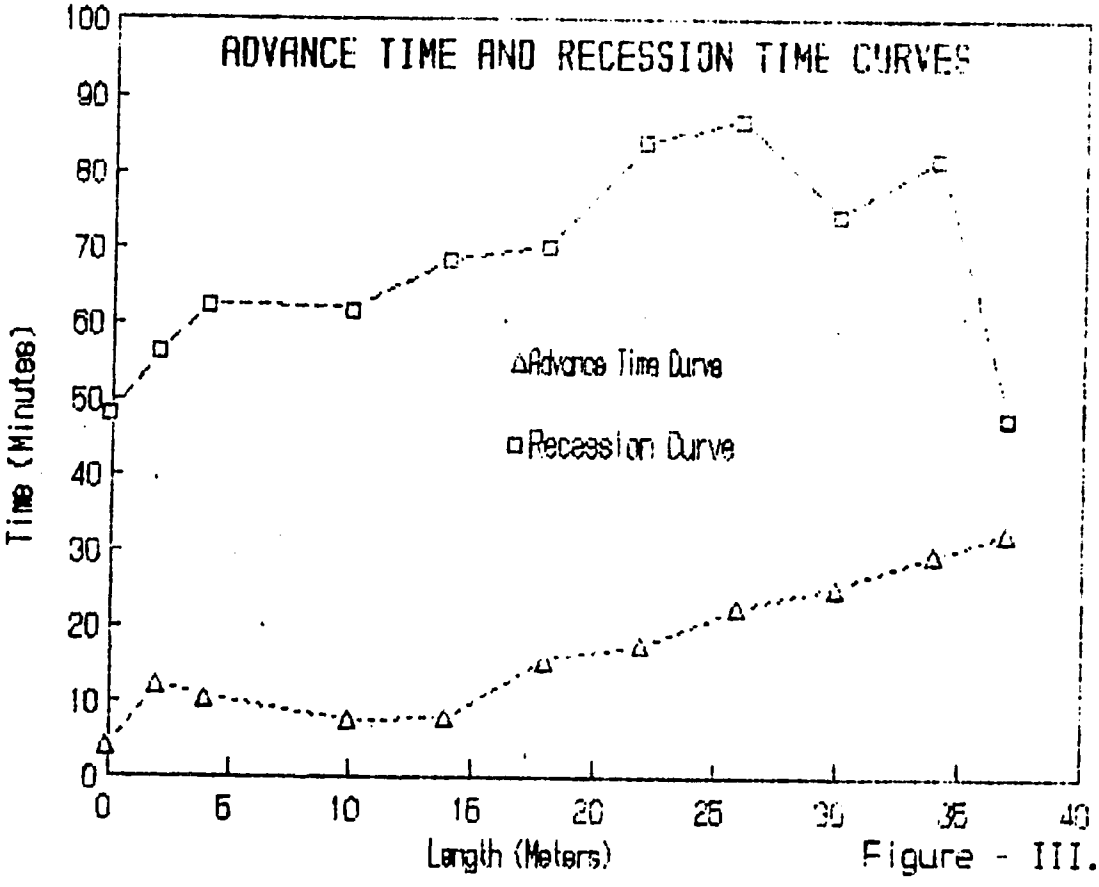
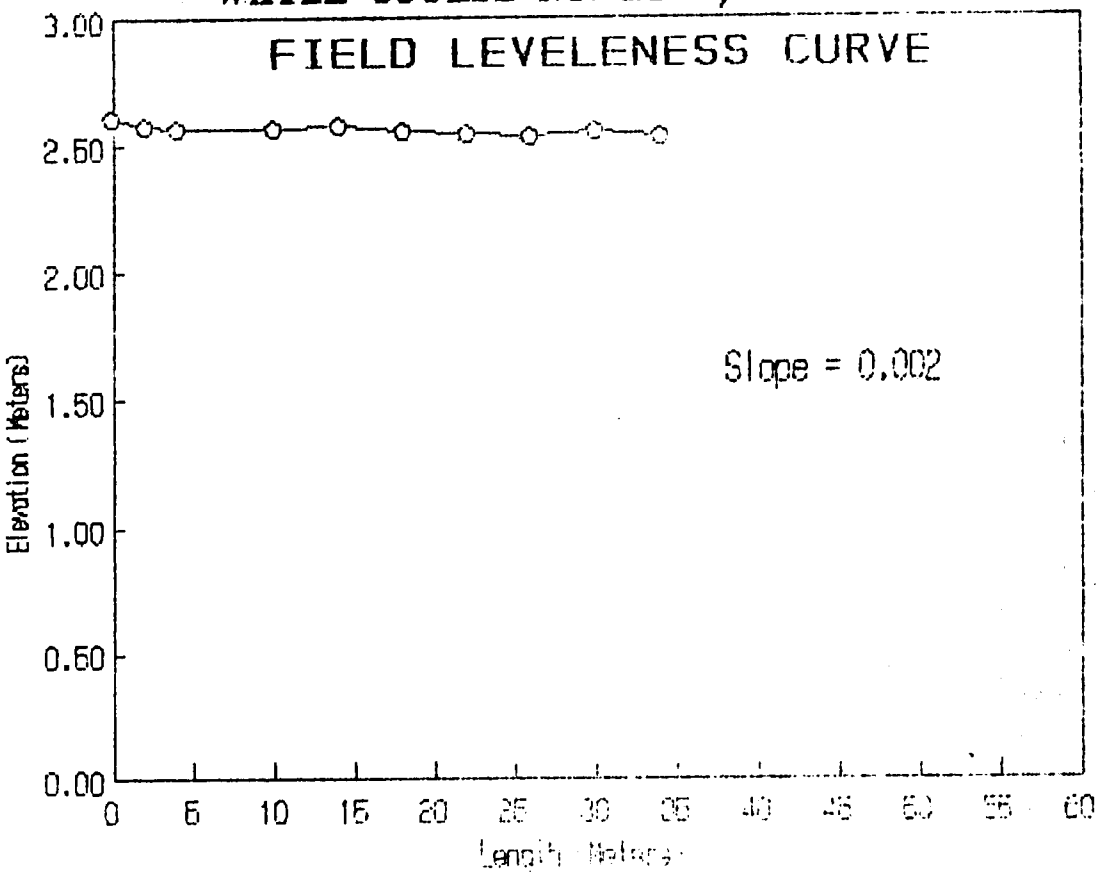


Figure - III.1

WATER COURSE NO. RD.53,700-L (HEAD)



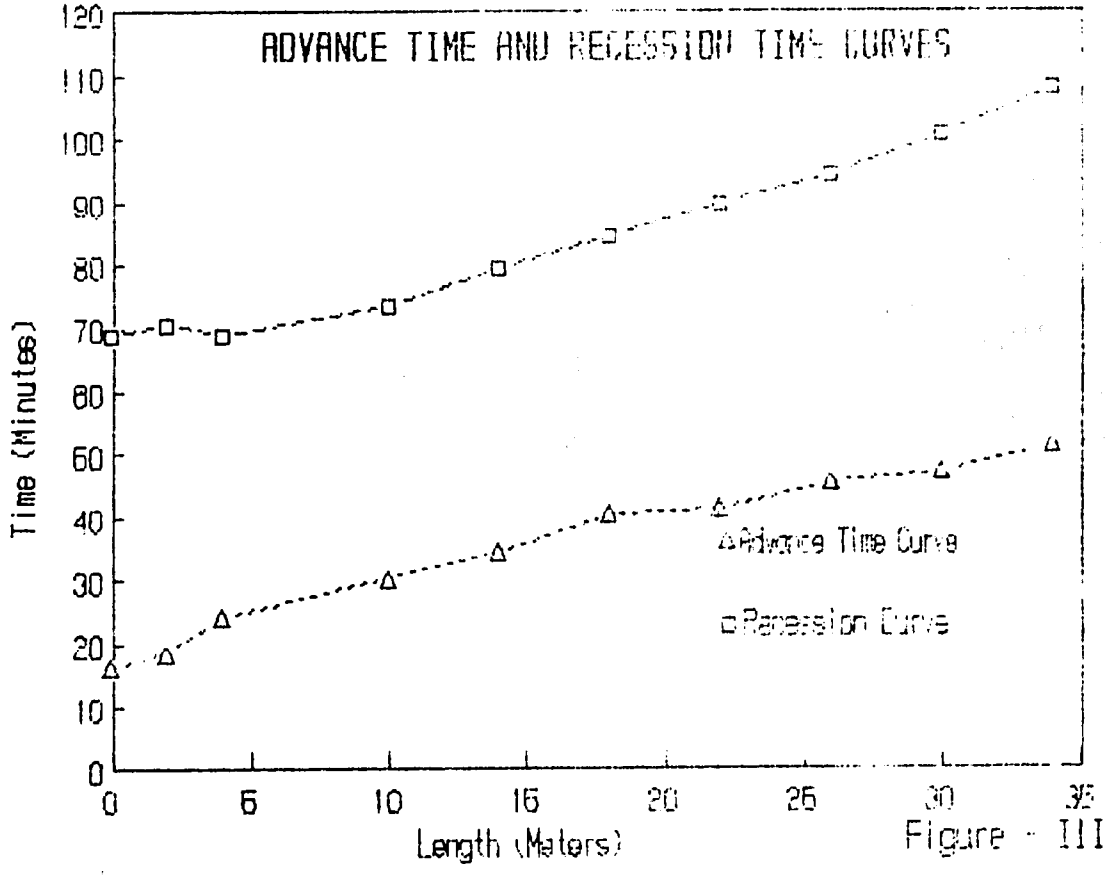
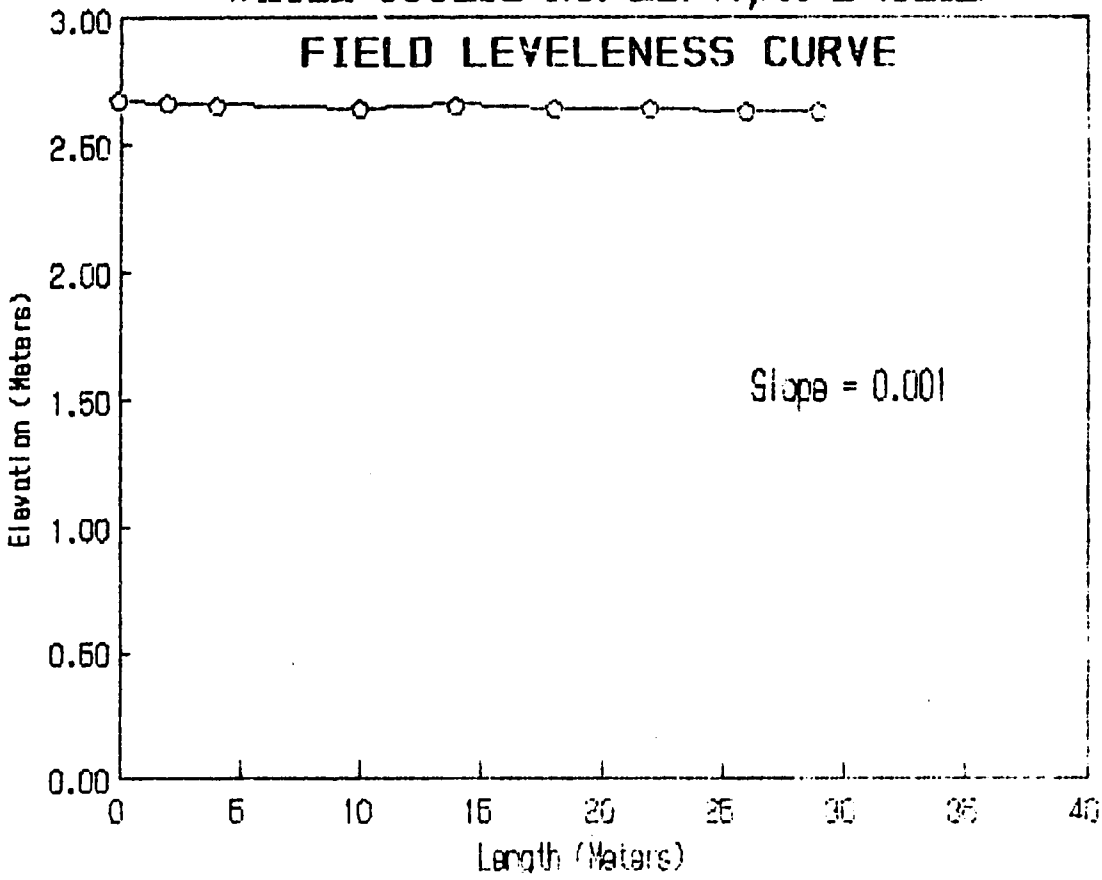


Figure - III.13

WATER COURSE NO. RD. 53,700-L (TAIL)



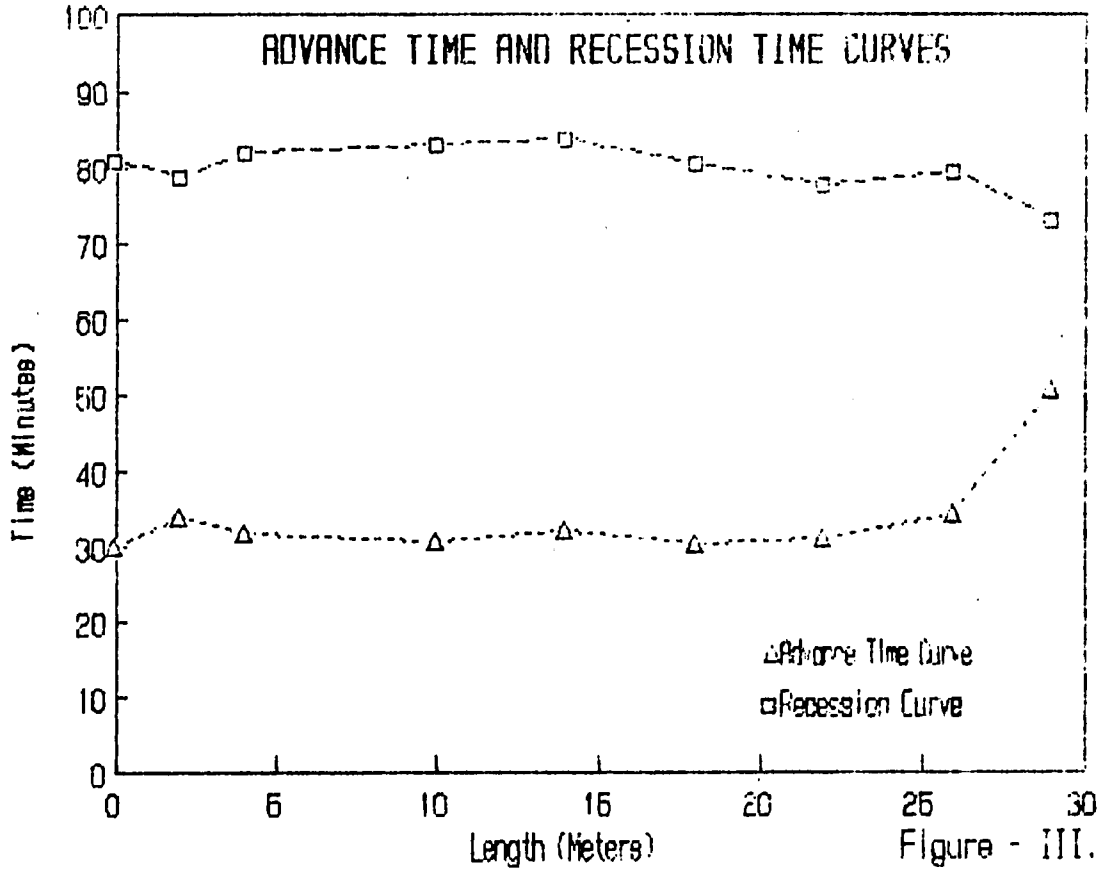
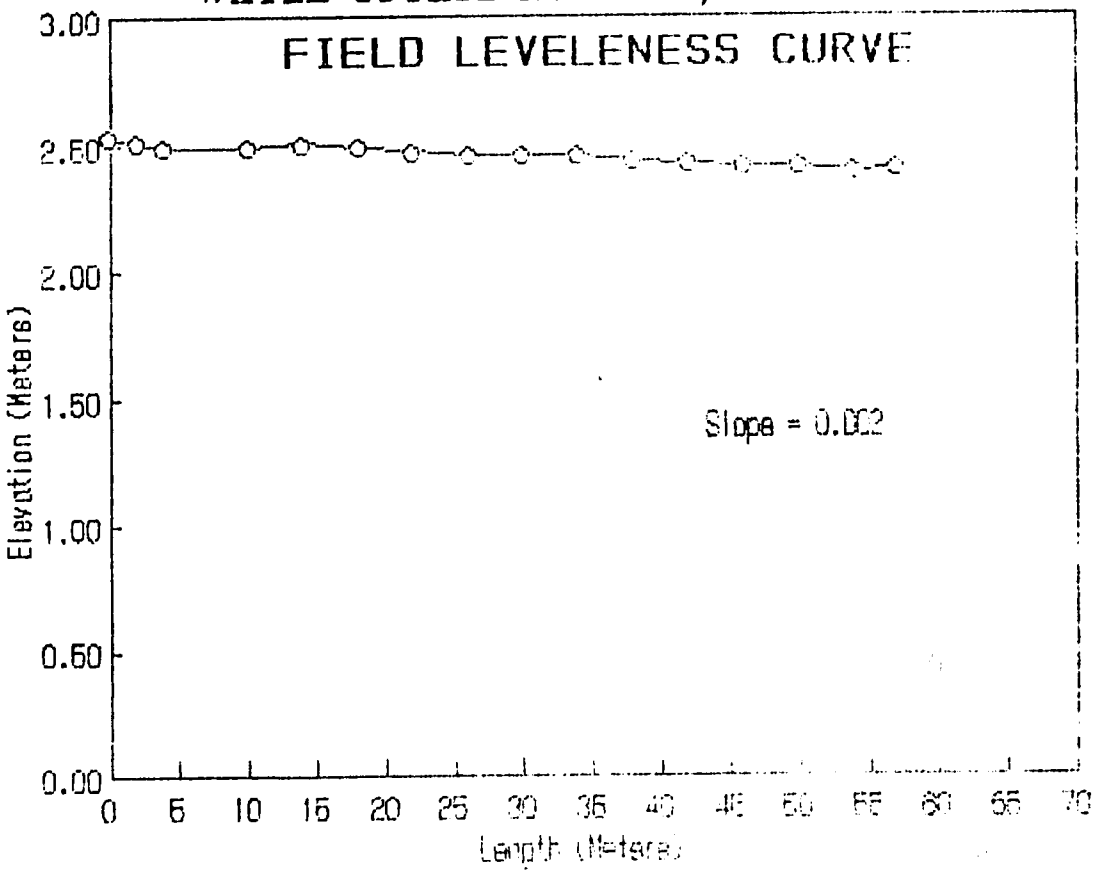


Figure - III.14

WATER COURSE NO. RD.70,800-L (MIDDLE)



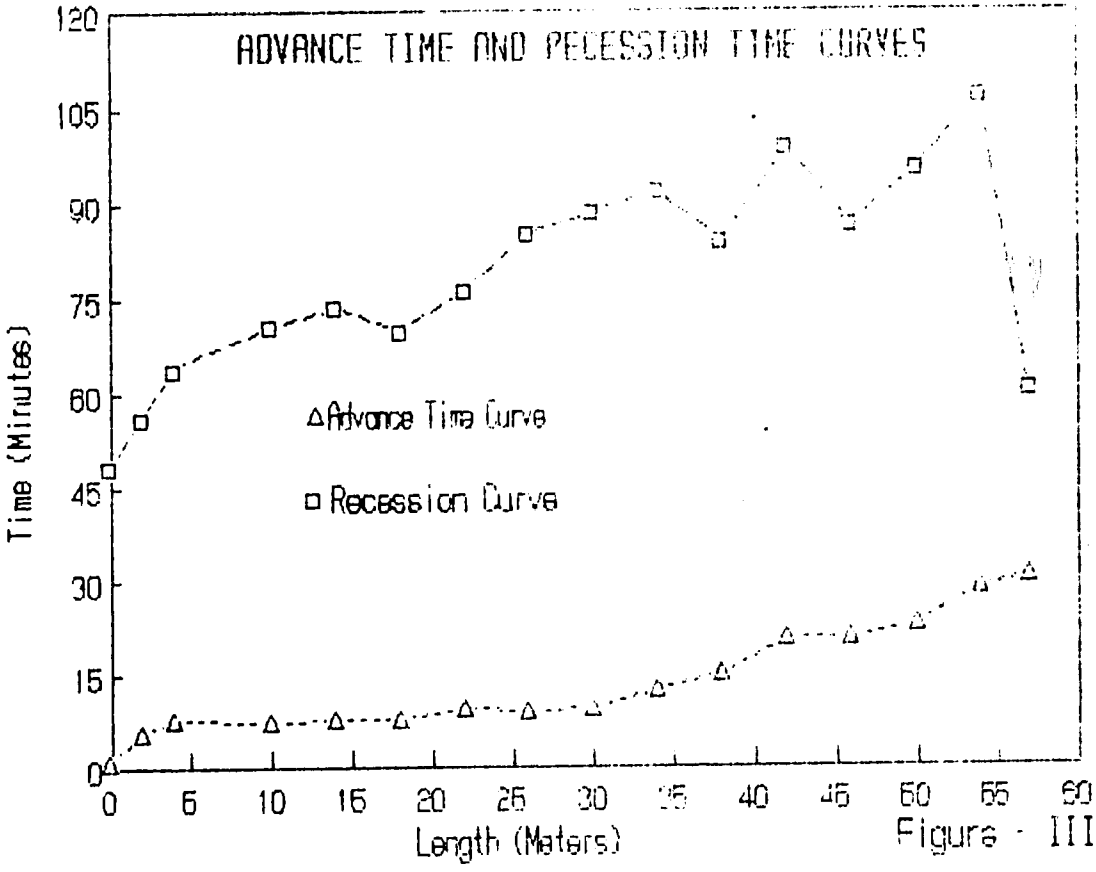
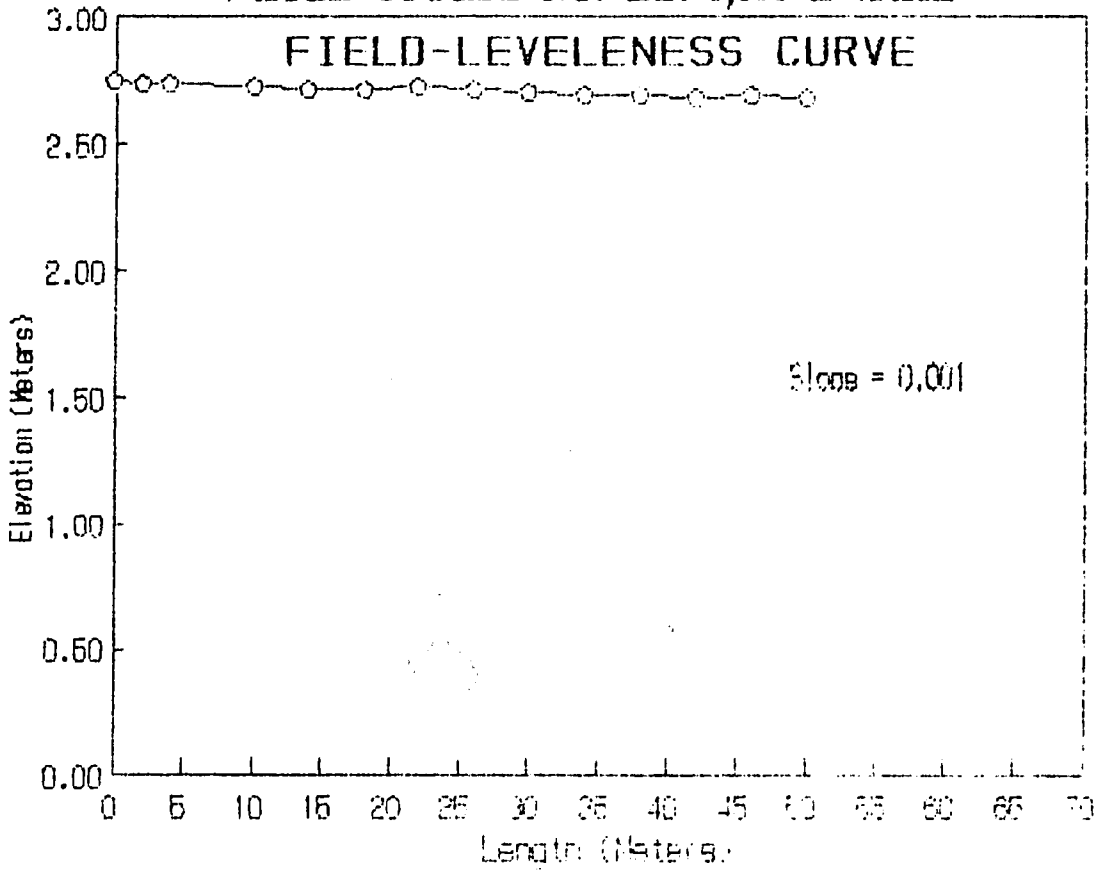
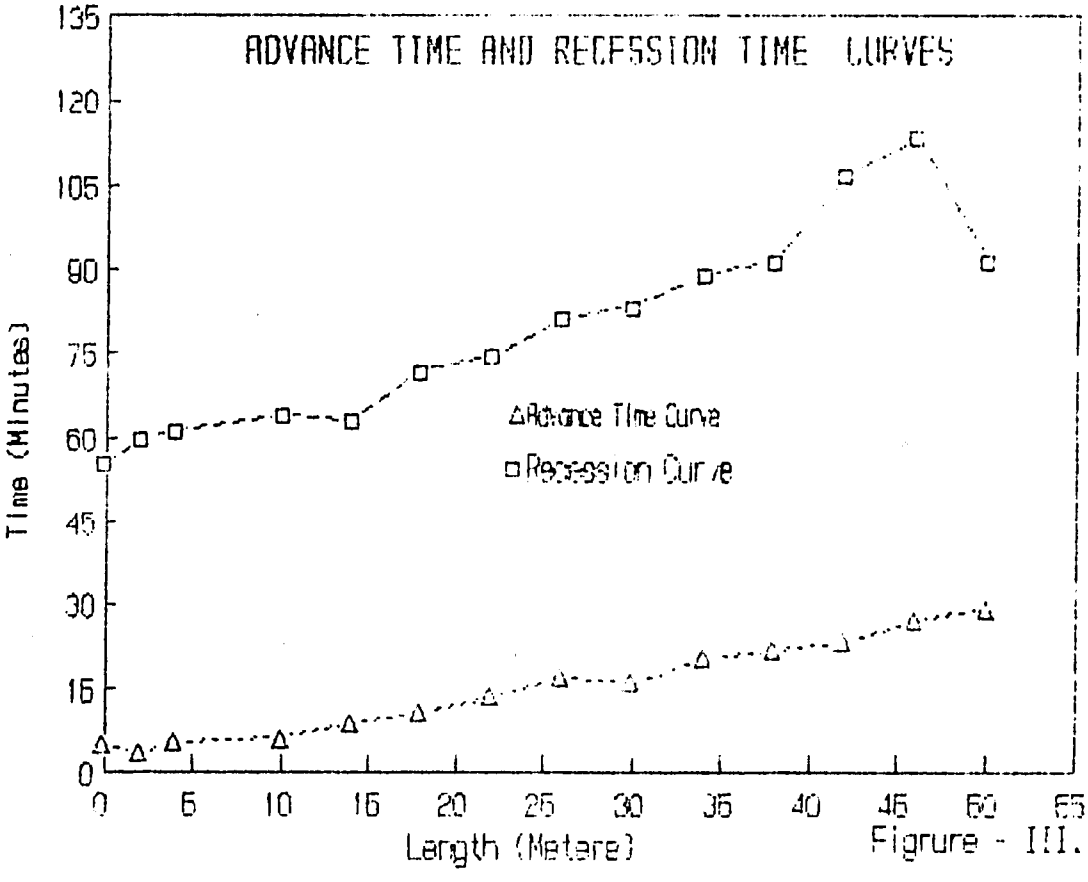


Figure - III.15

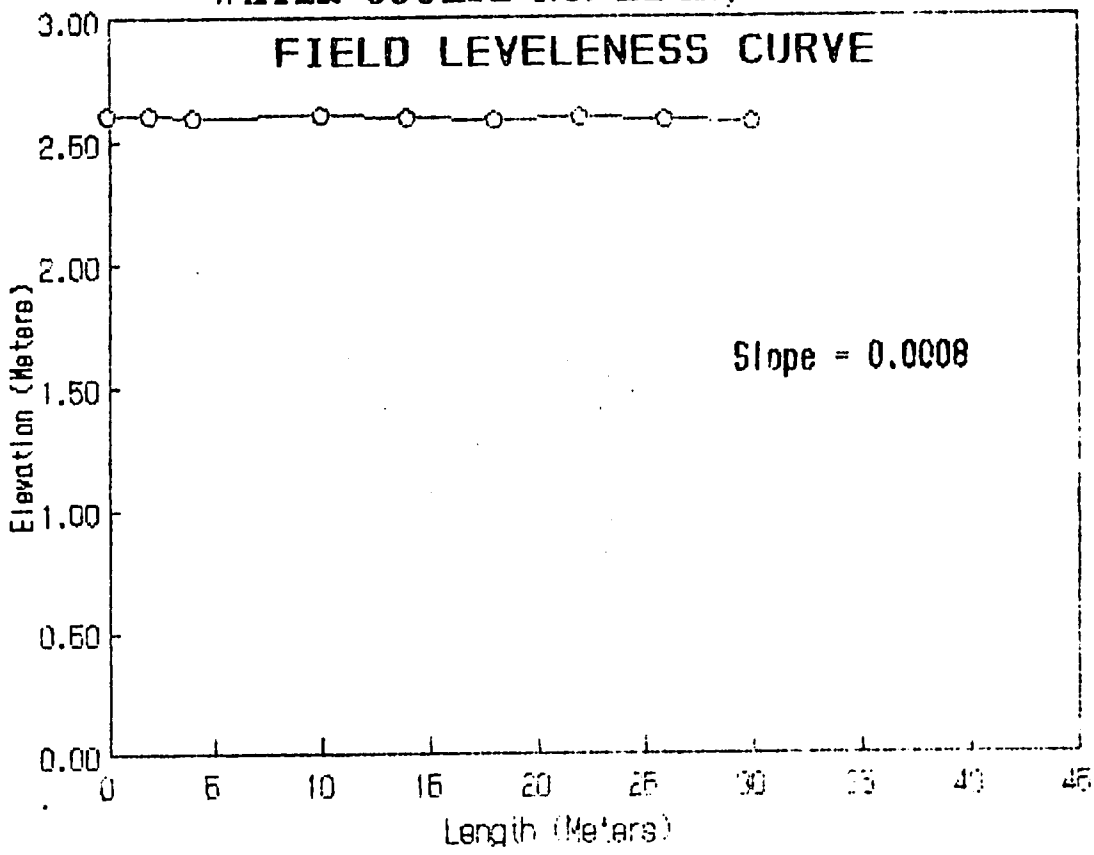
WATER COURSE NO. RD.70,800-L (TAIL)





Figrure - III.16

WATER COURSE NO. RD.115,806-L (HEAD)



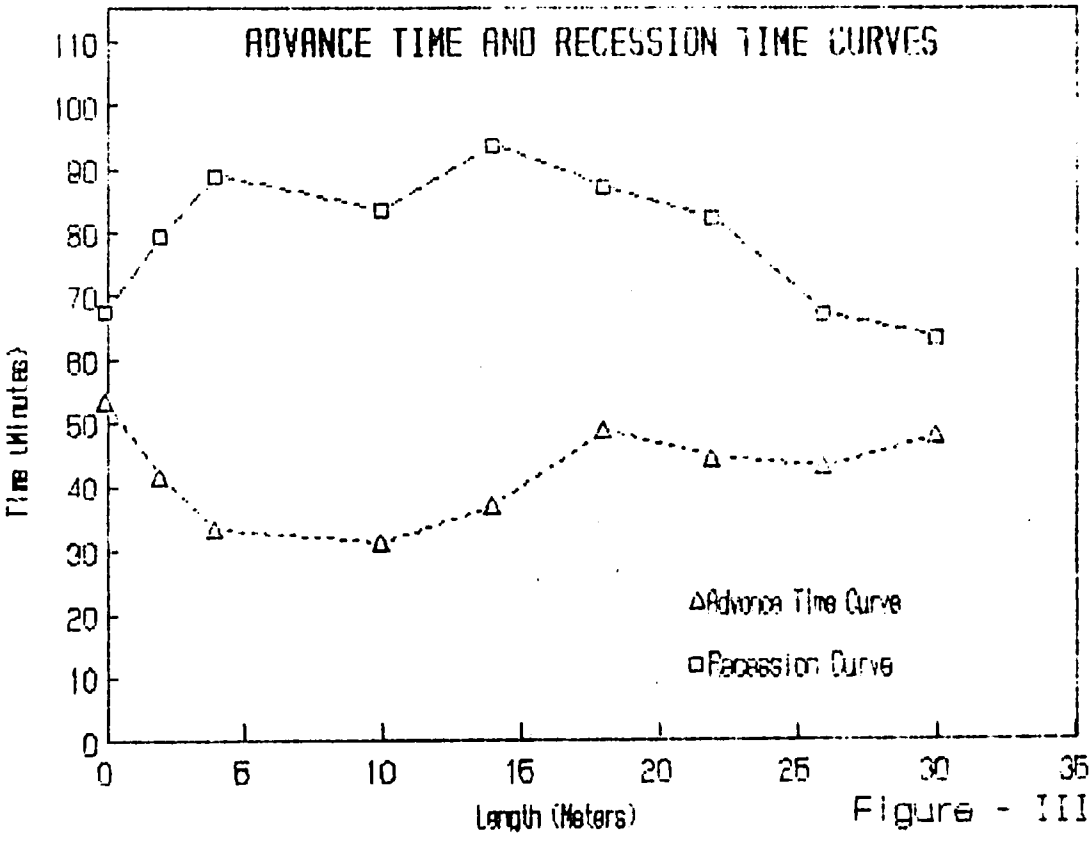
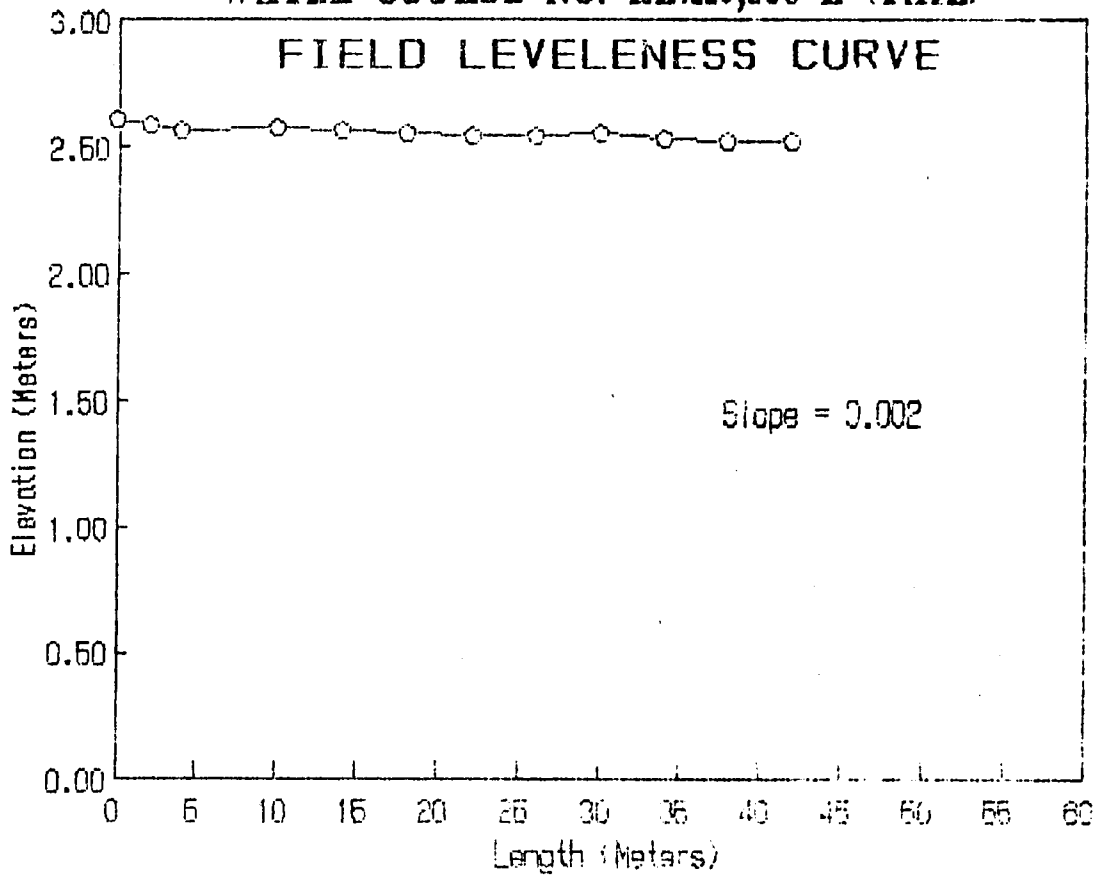


Figure - III.17

WATER COURSE NO. RD.115,806-L (TAIL)



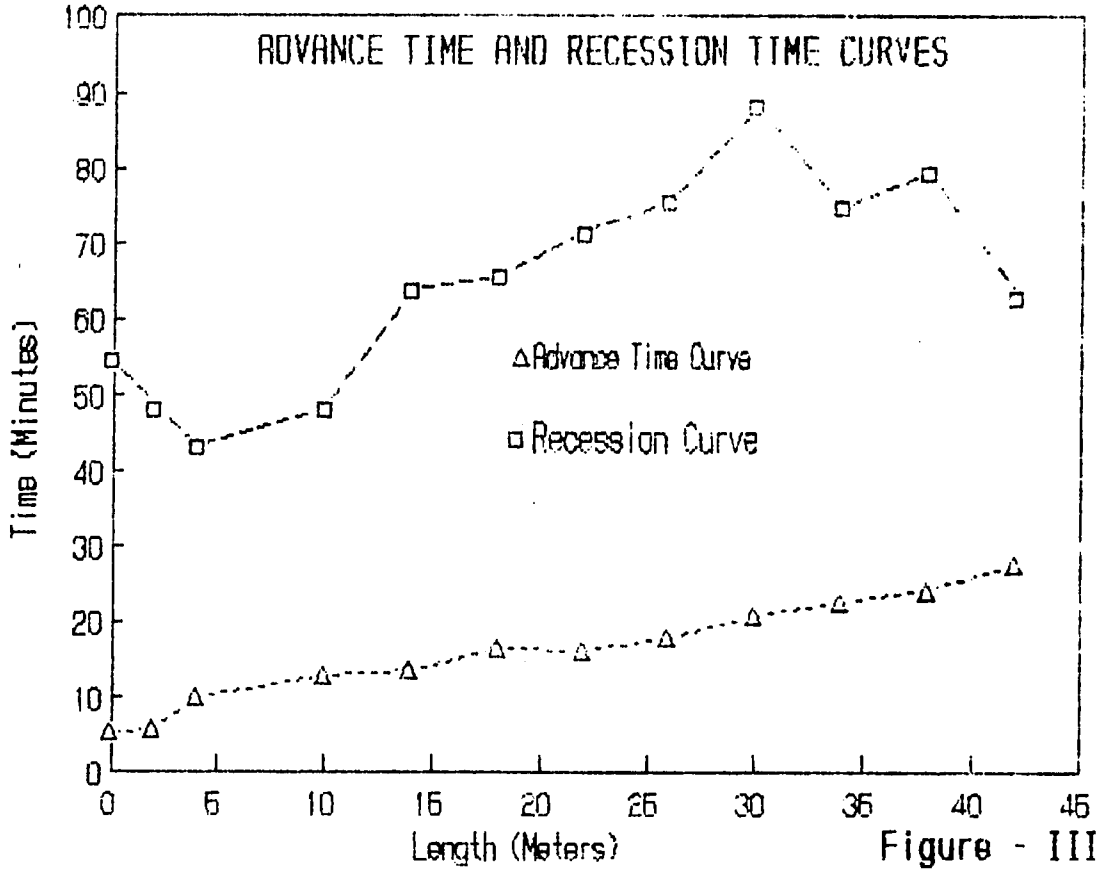
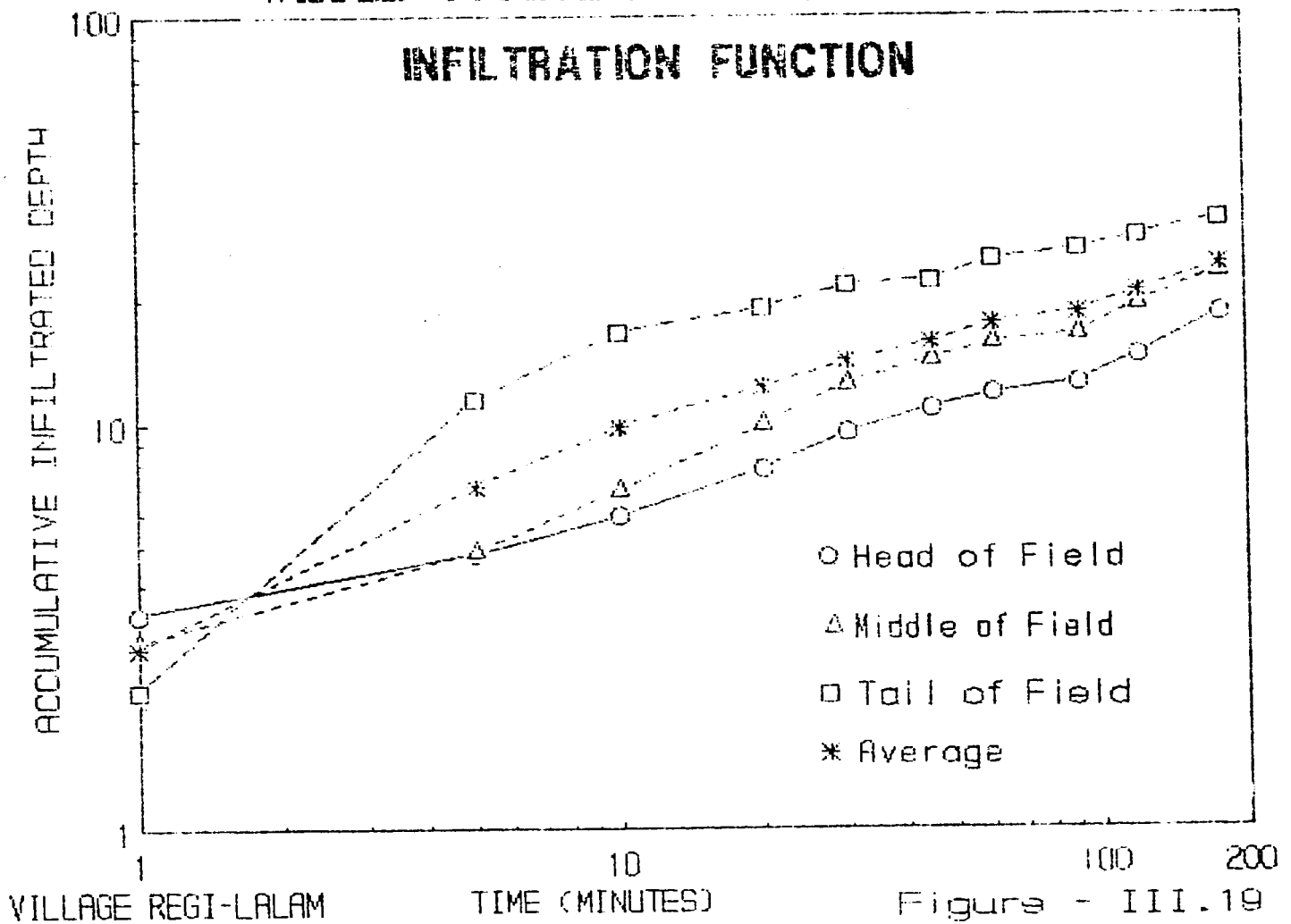


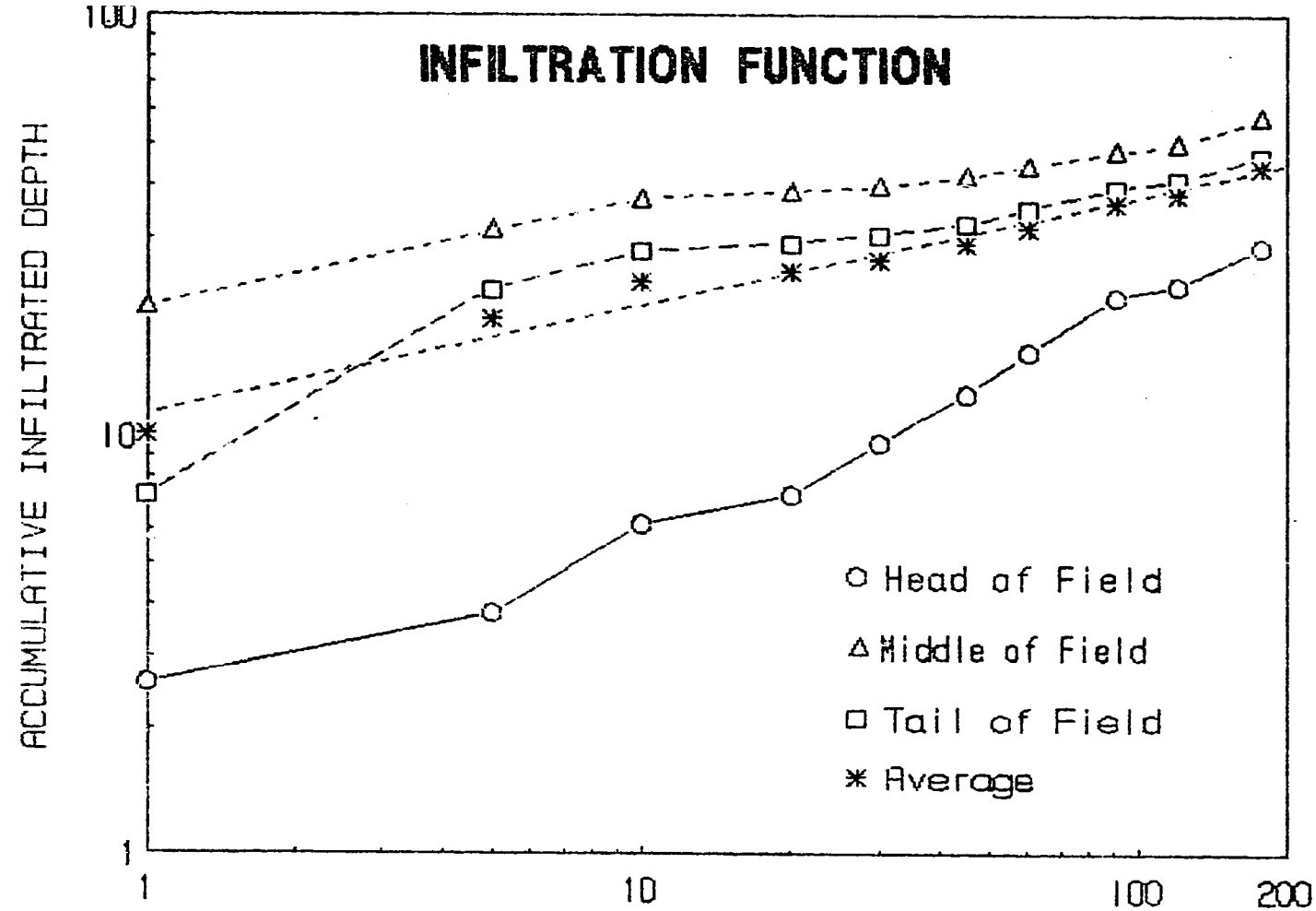
Figure - III.

WATER COURSE NO.RD. 22000-L (HEAD)



VILLAGE REGI-LALAM

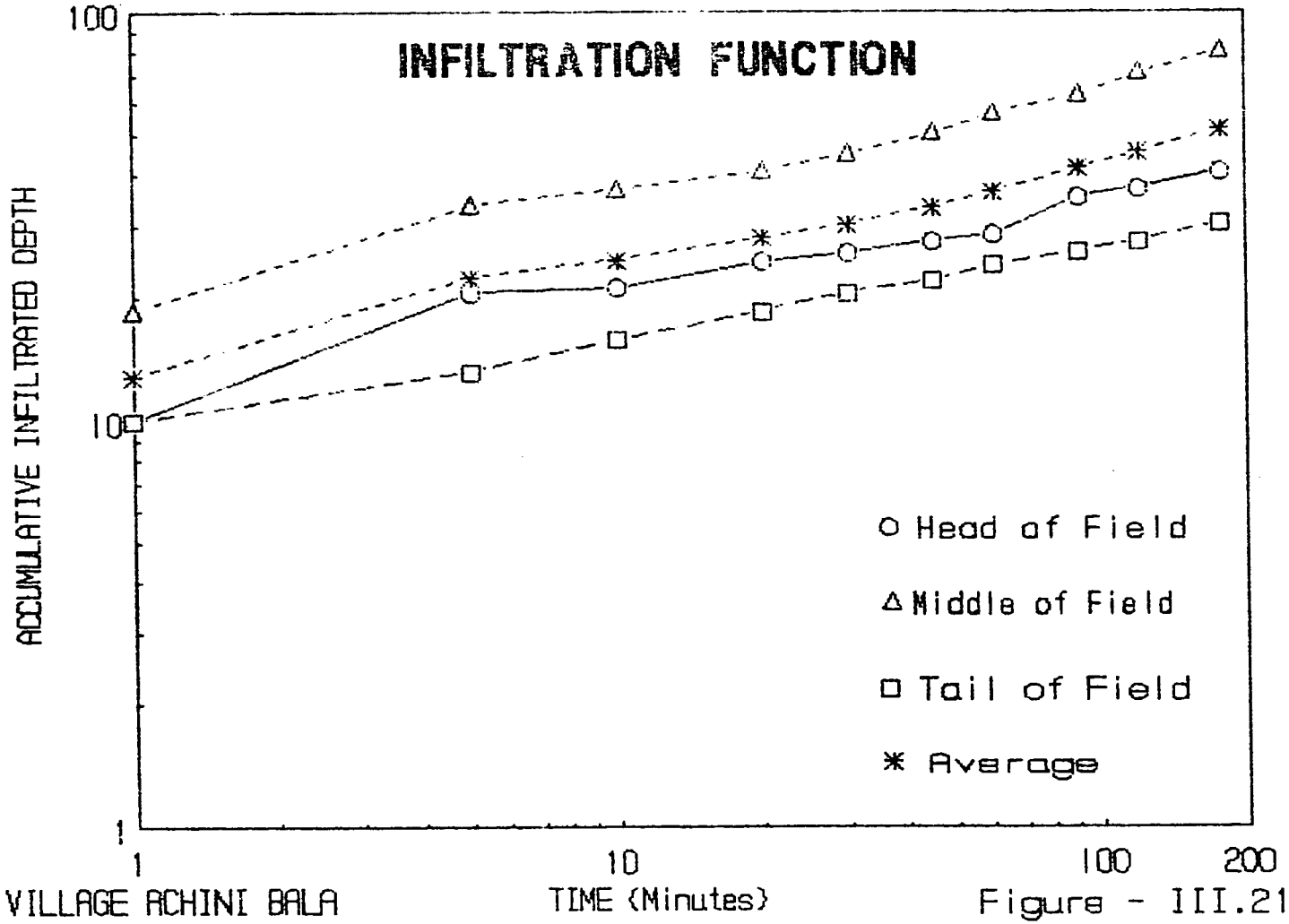
Figure - III.19



VILLAGE REGI-LALAM

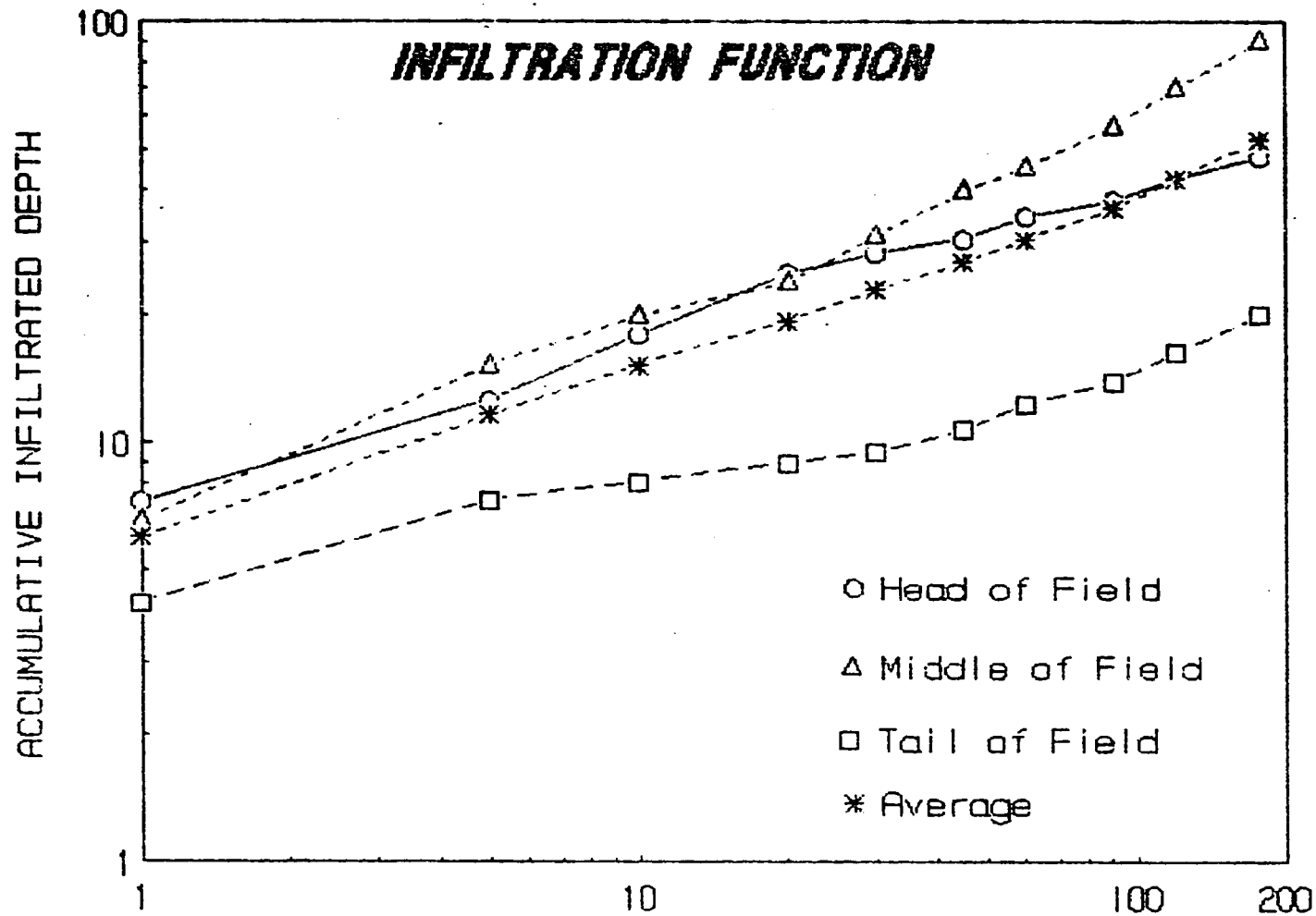
Figure - III.20

WATER COURSE NO. RD. 45800-L (TAIL)



VILLAGE ACHINI BALA

Figure - III.21



VILLAGE SUFAID DHERI

Figure - III.22

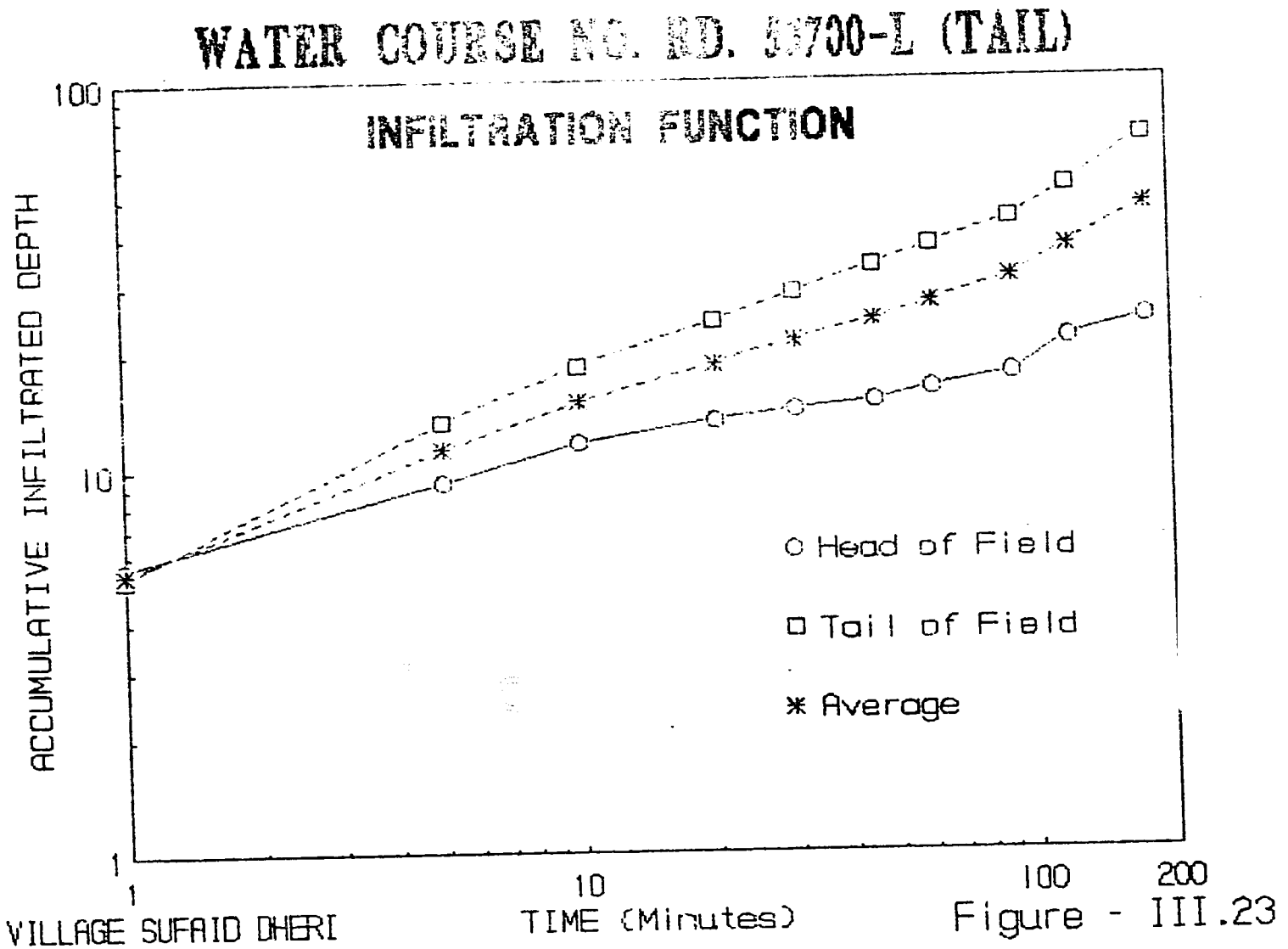
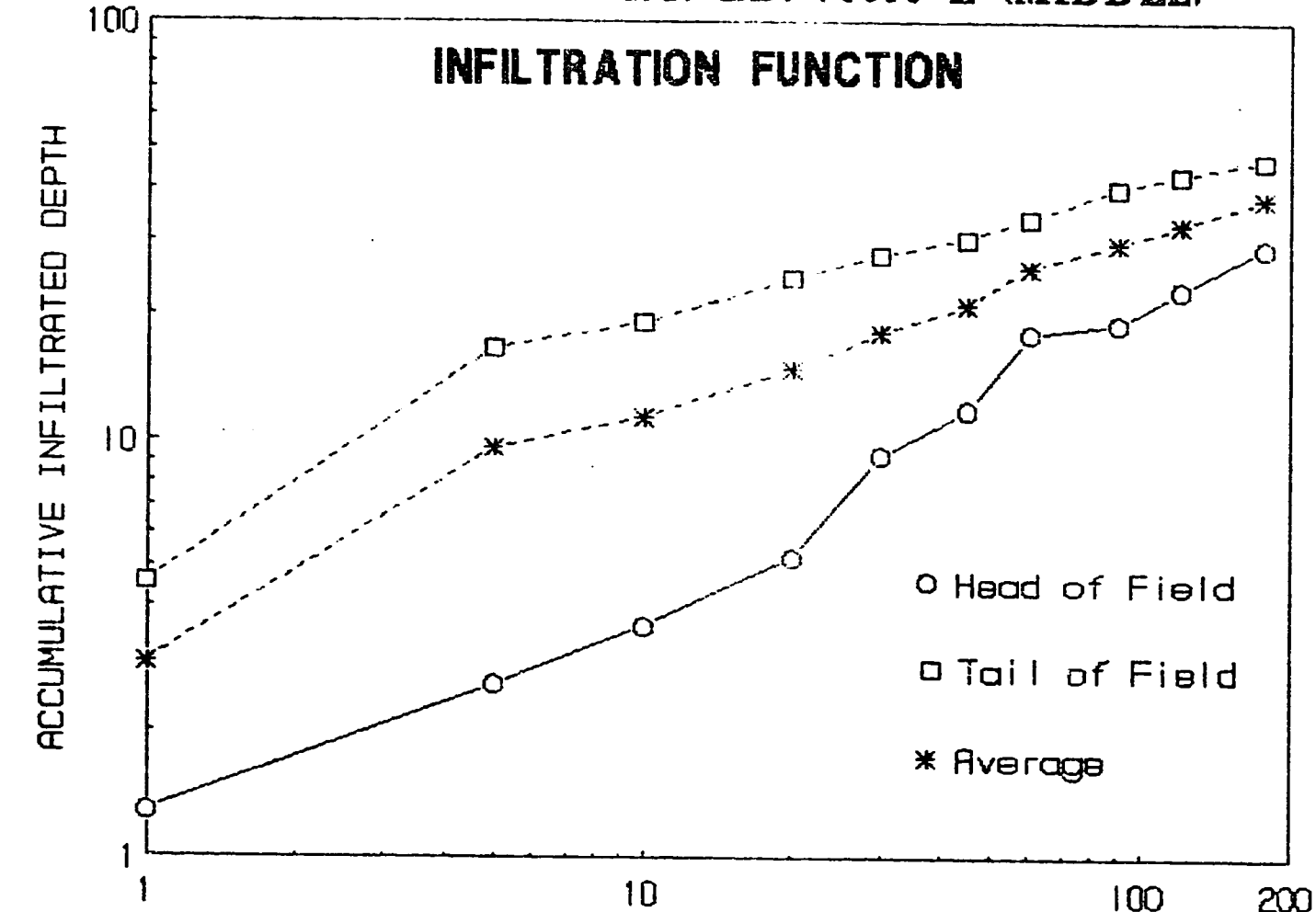


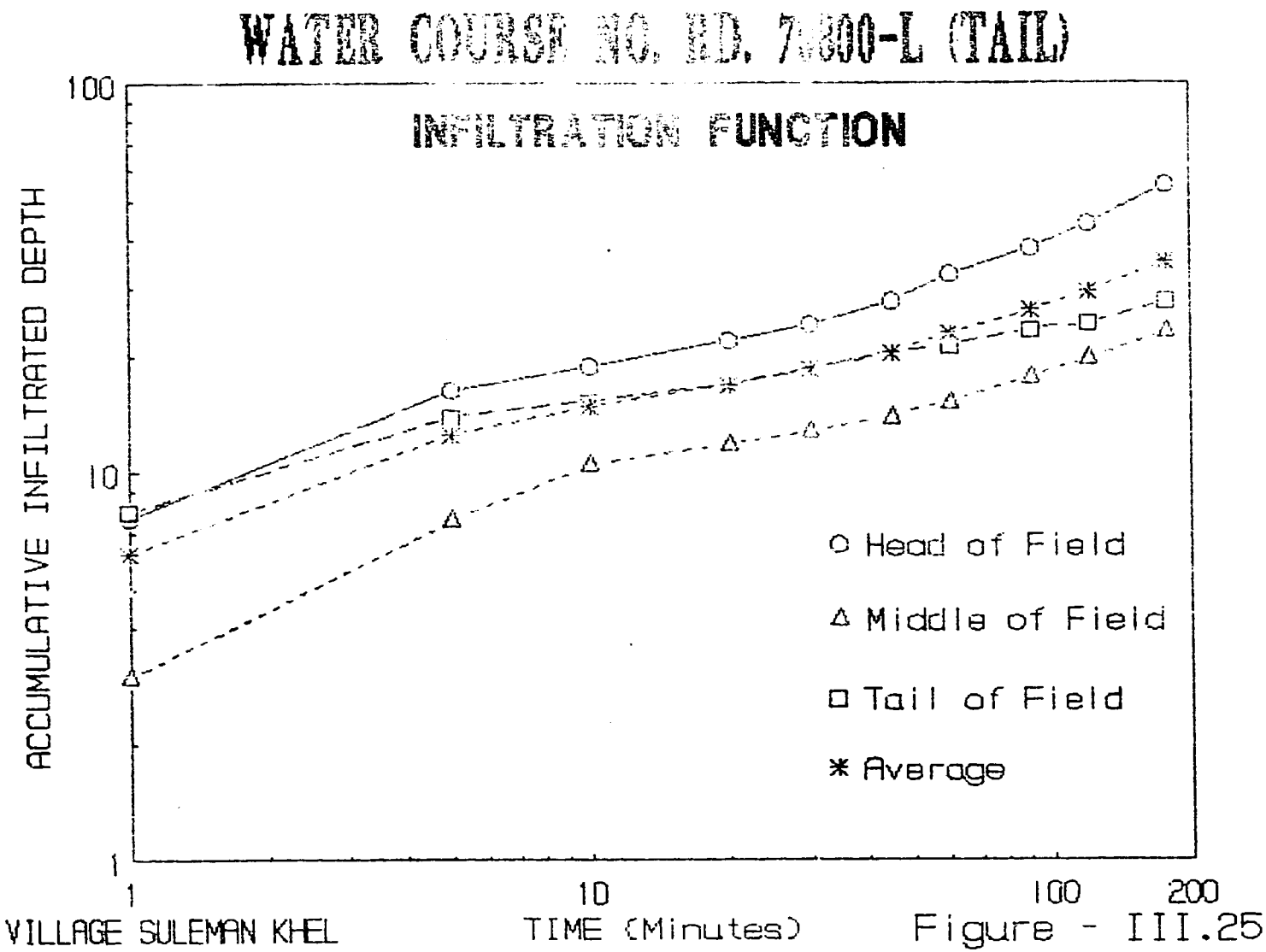
Figure - III.23

WATER COURSE NO. RD. 70800-L (MIDDLE)



VILLAGE SULEMAN KHEL

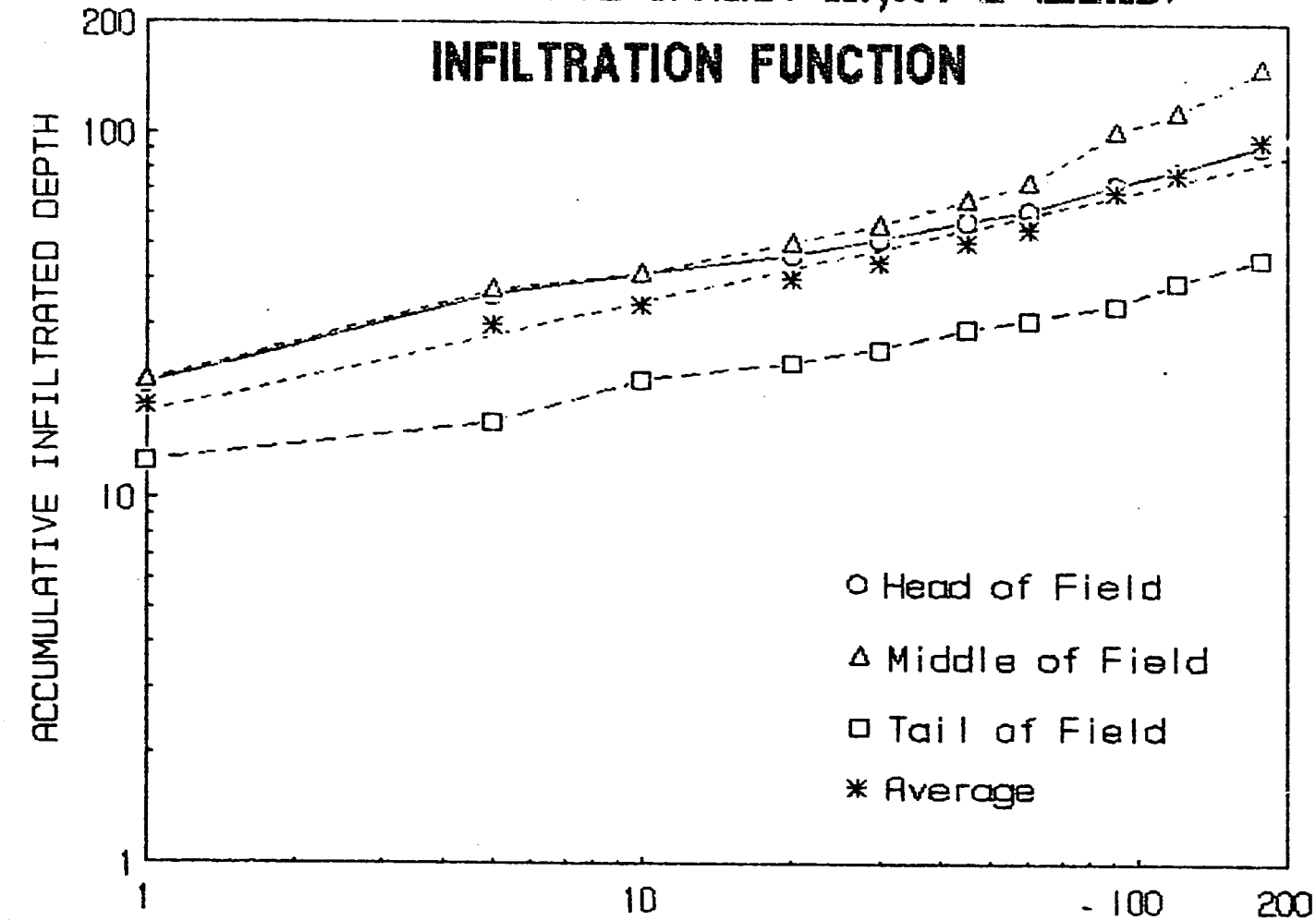
Figure - III.24



VILLAGE SULEMAN KHEL

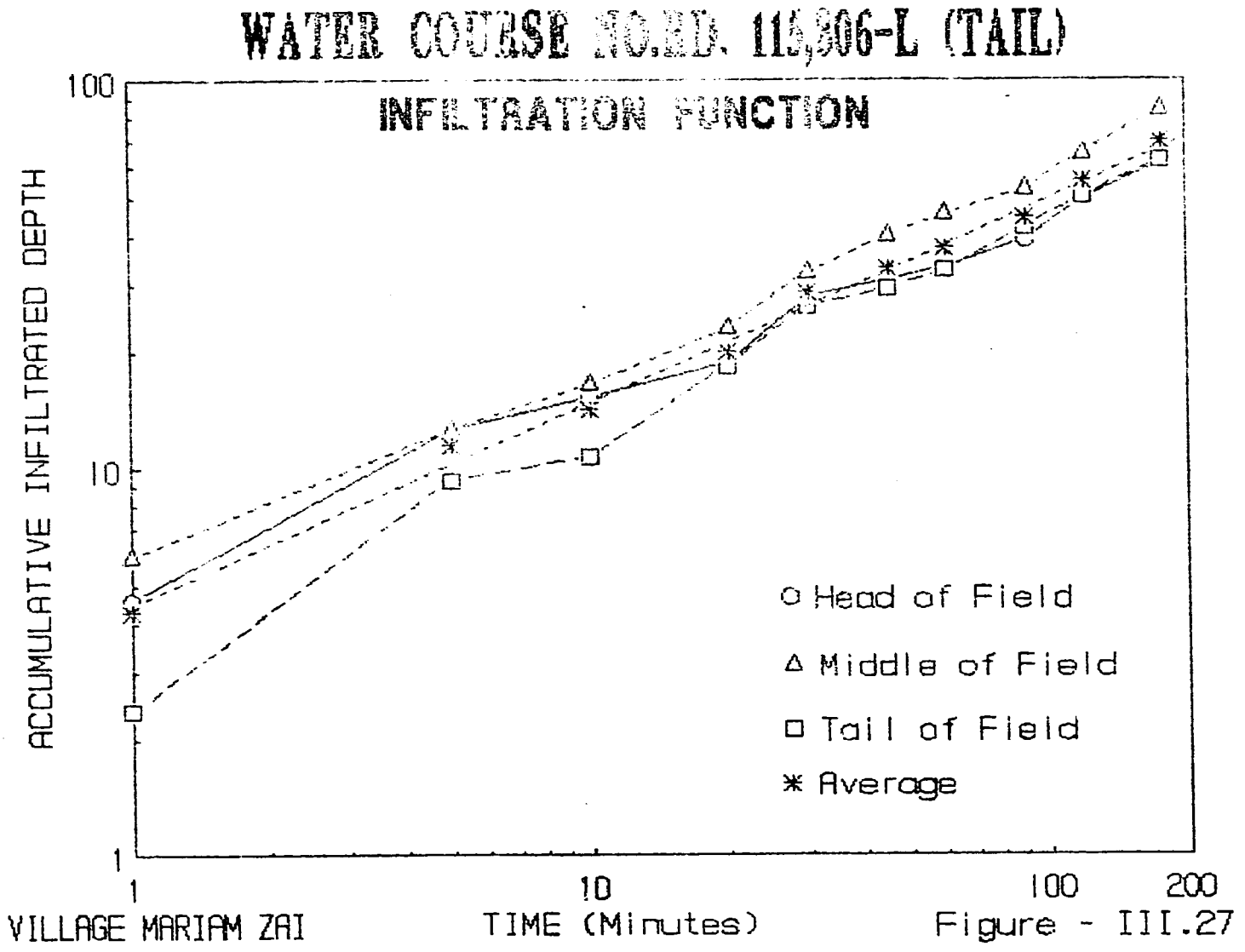
Figure - III.25

WATER COURSE NO.RD. 115,806-L (HEAD)



VILLAGE MARIAM ZAI

Figure - III.26



VILLAGE MARIAM ZAI

Figure - III.27

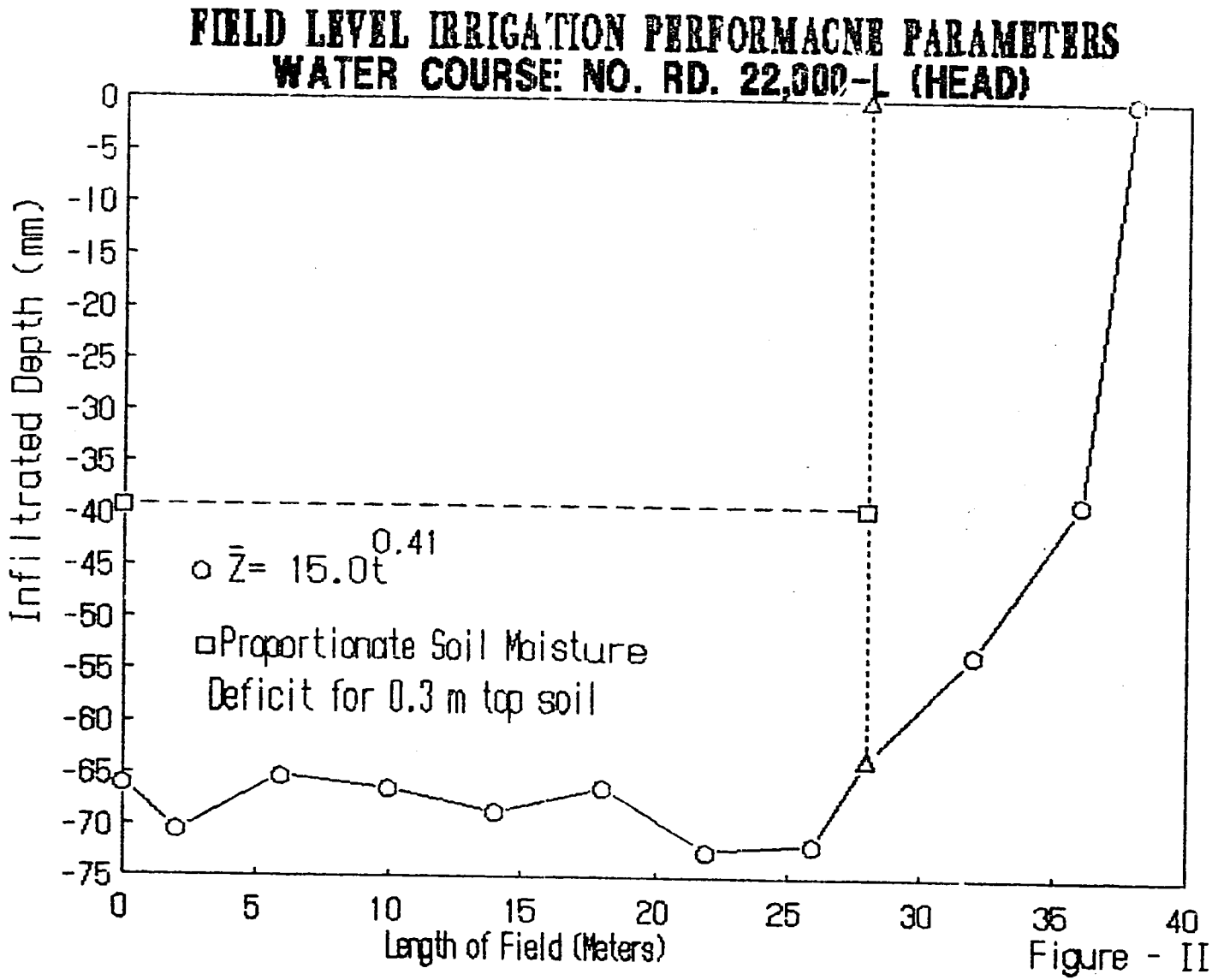


Figure - III.28

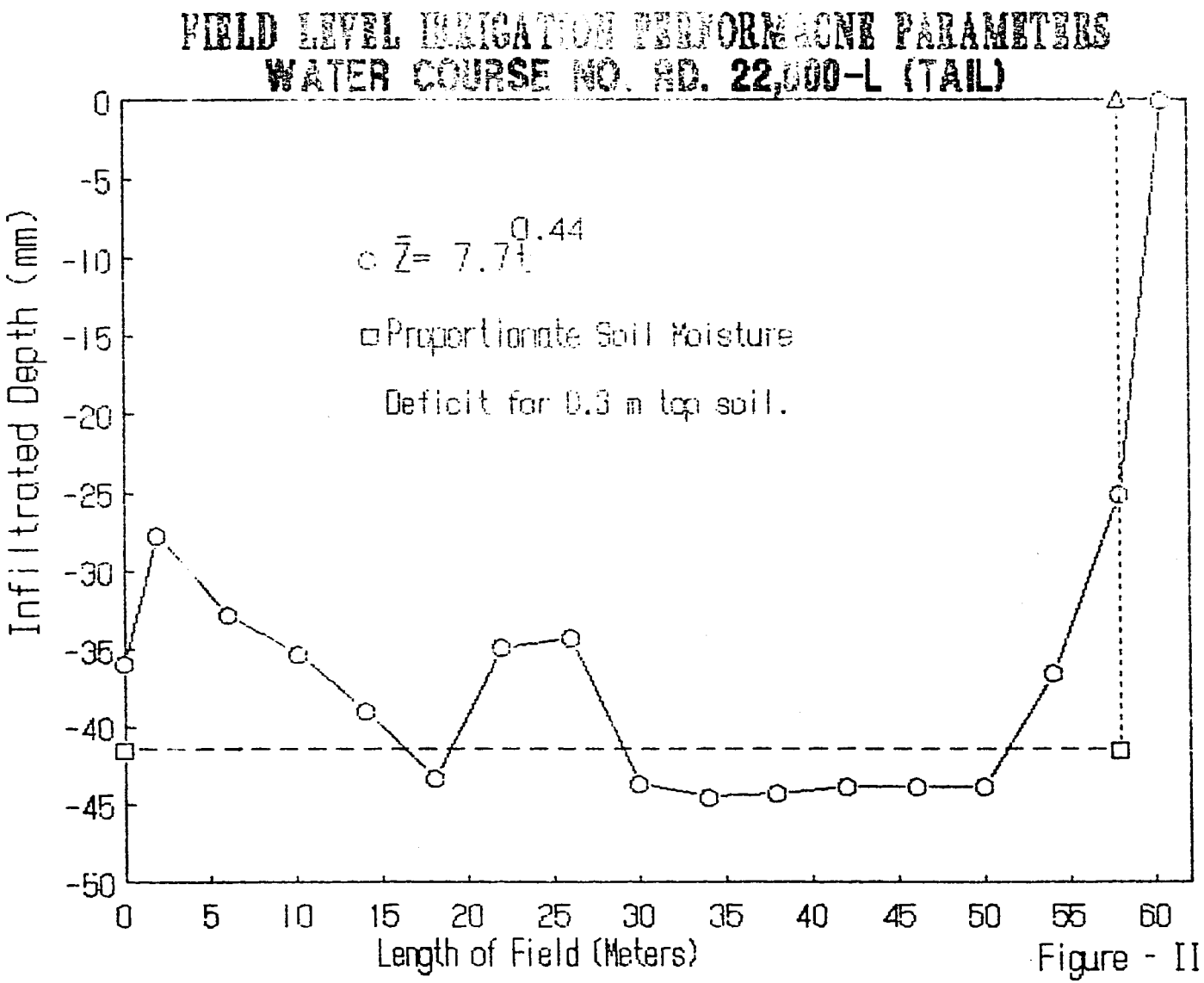


Figure - III.29

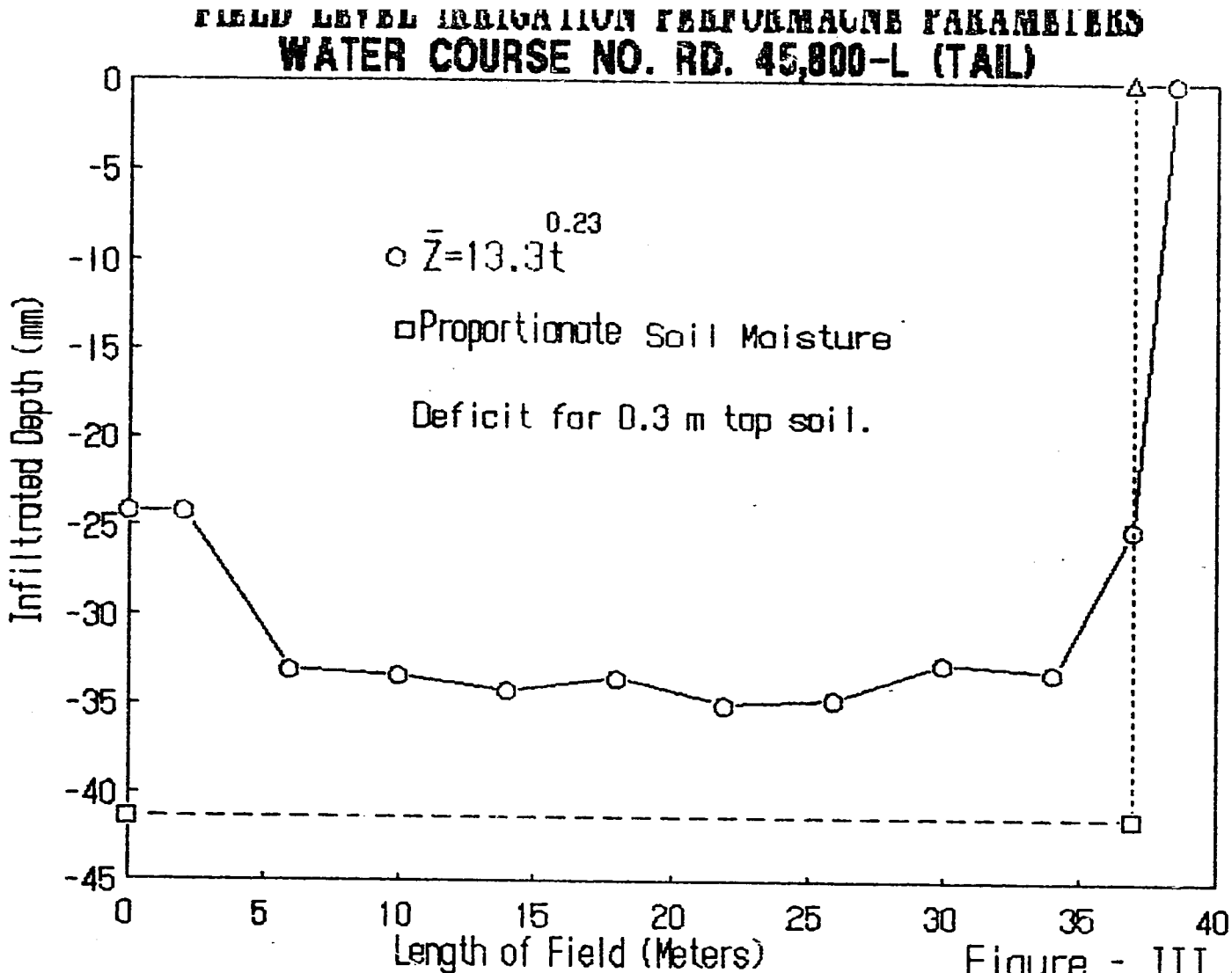


Figure - III.30

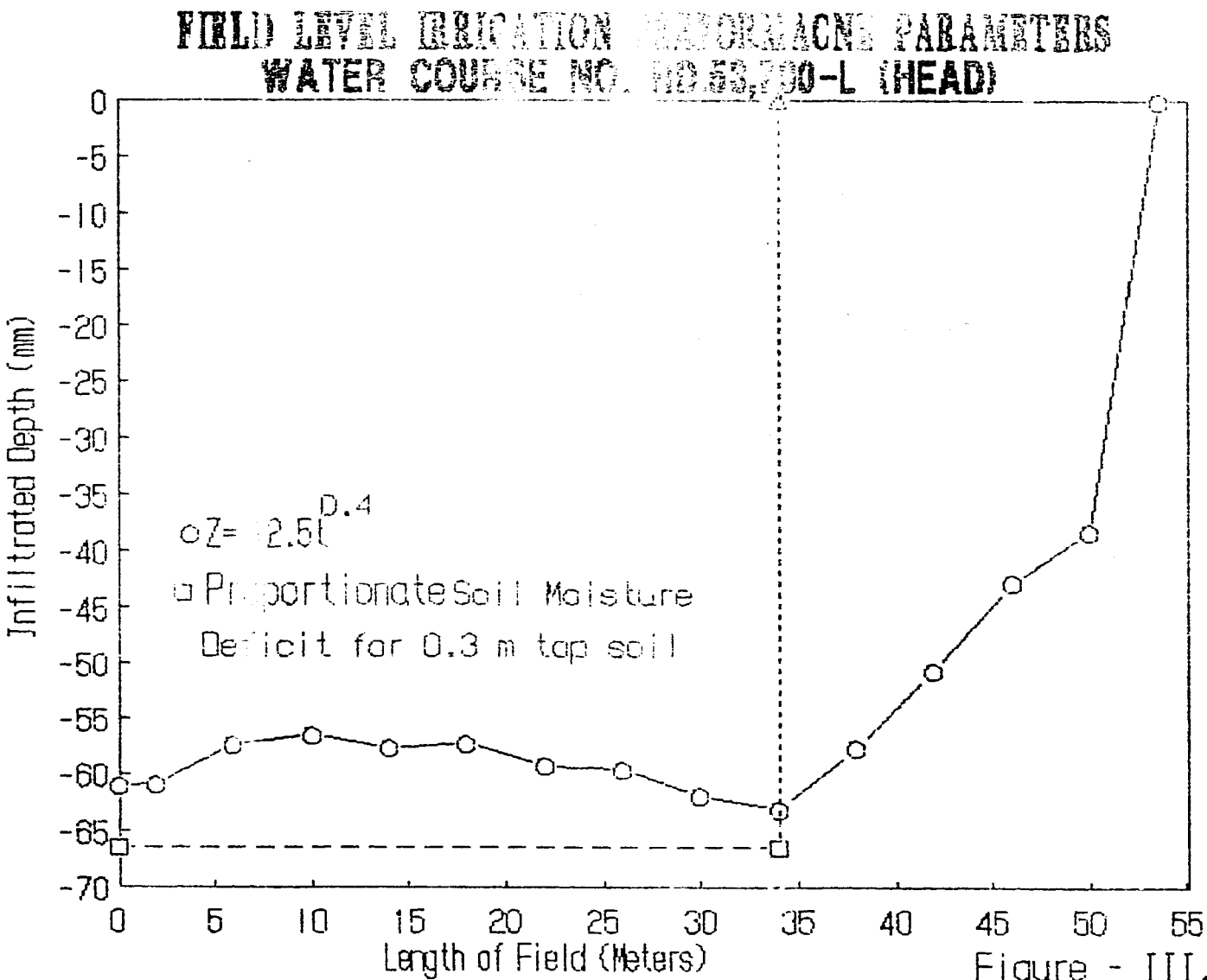


Figure - III.31

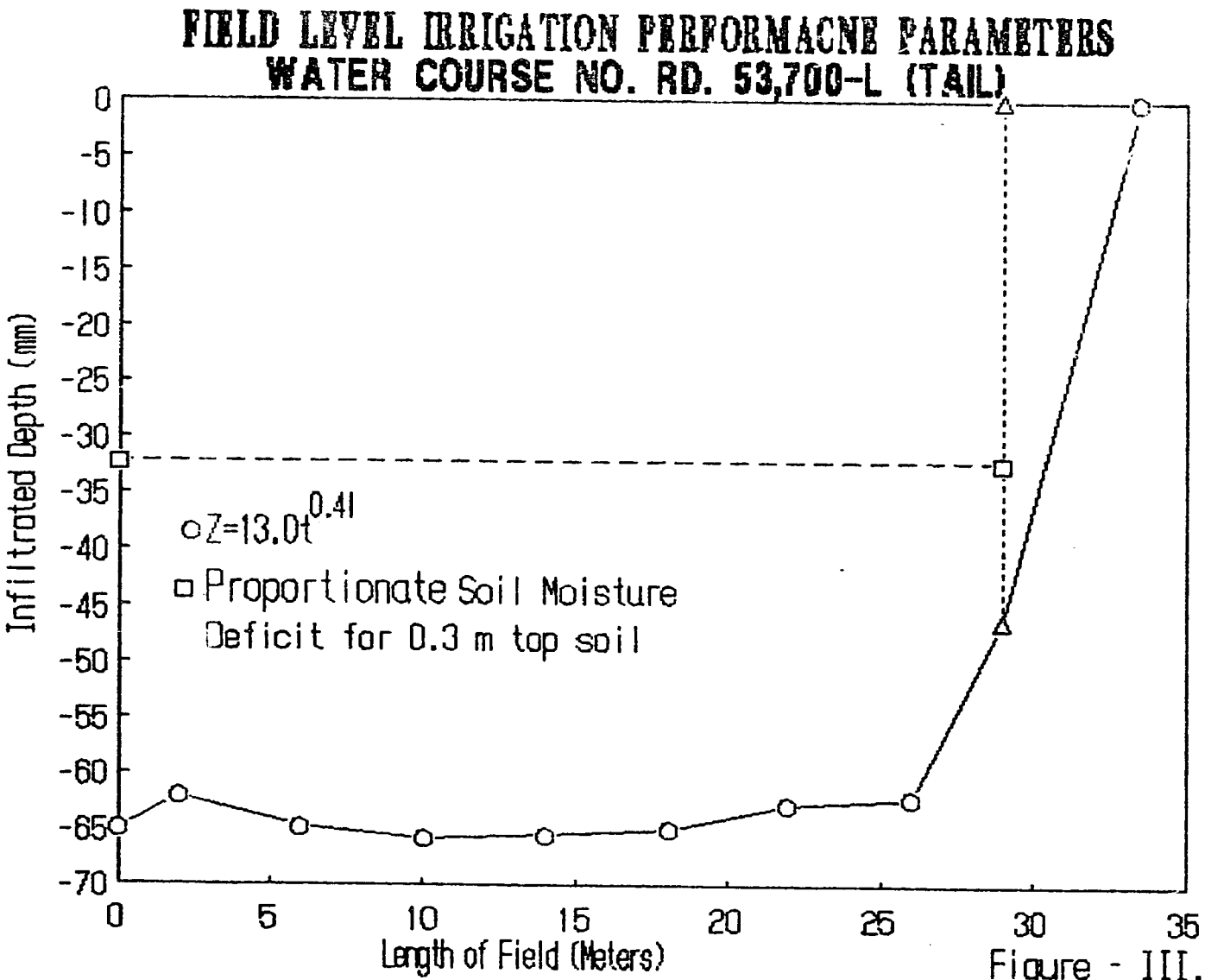


Figure - III.32

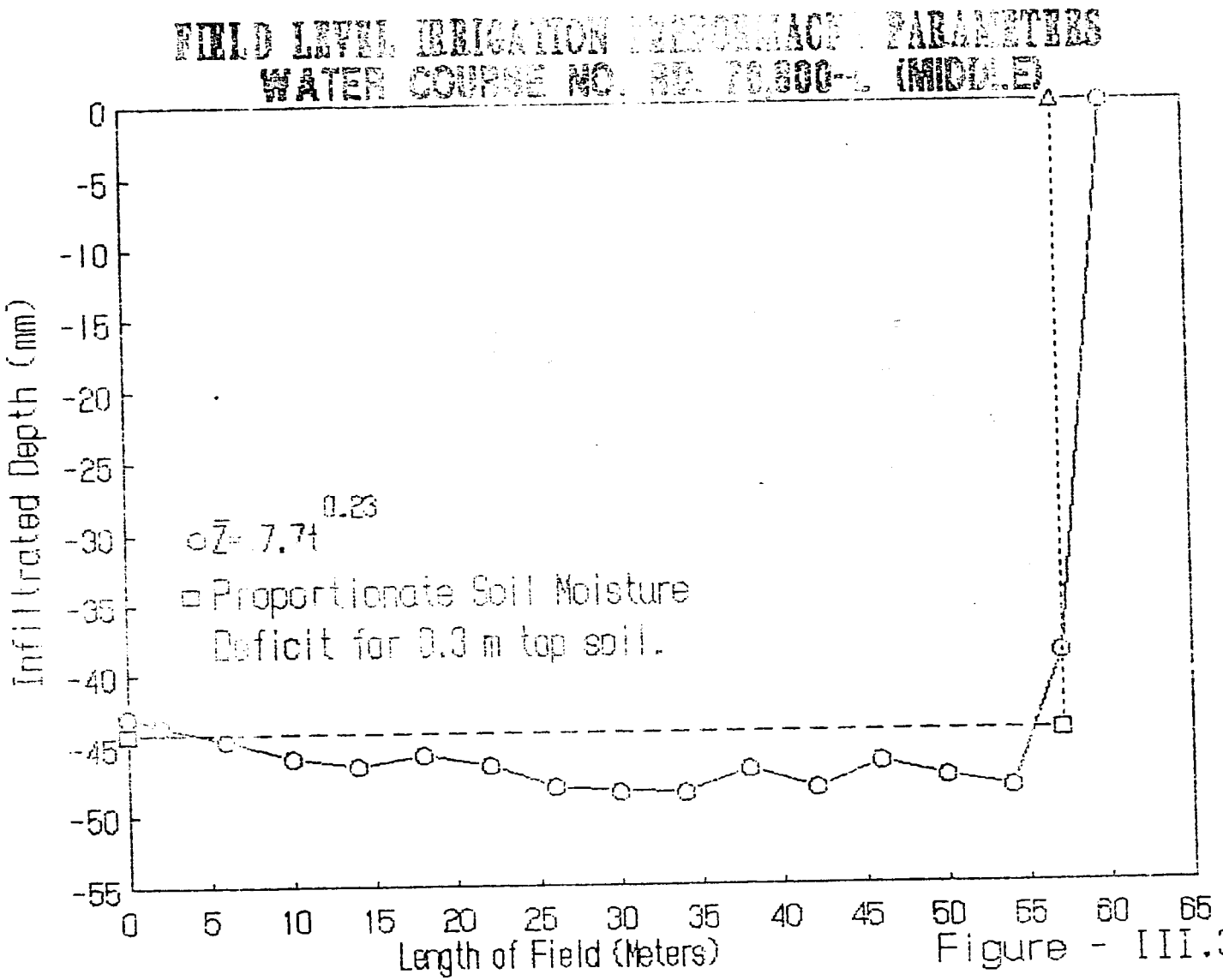


Figure - III.33

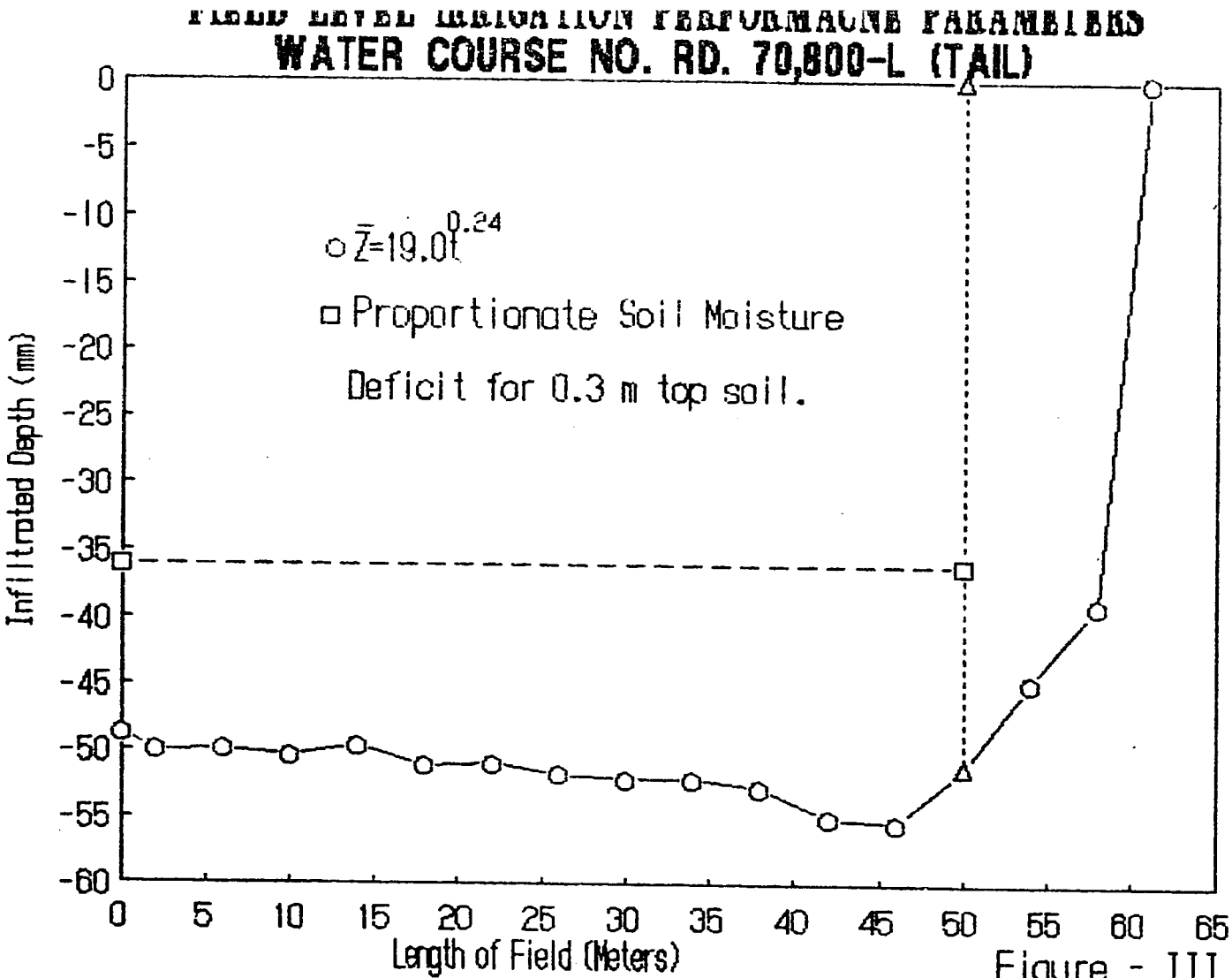


Figure - III.34

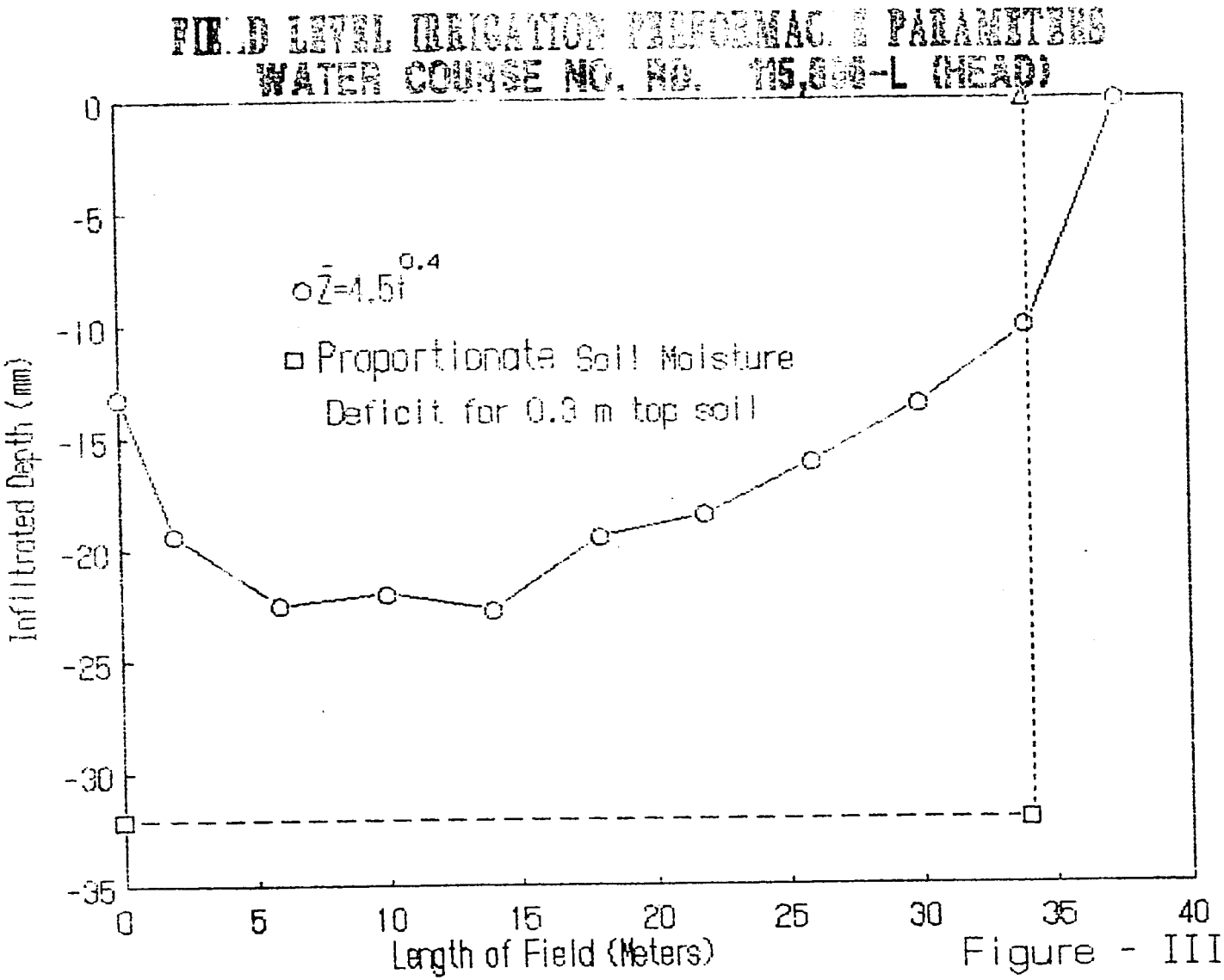


Figure - III.35

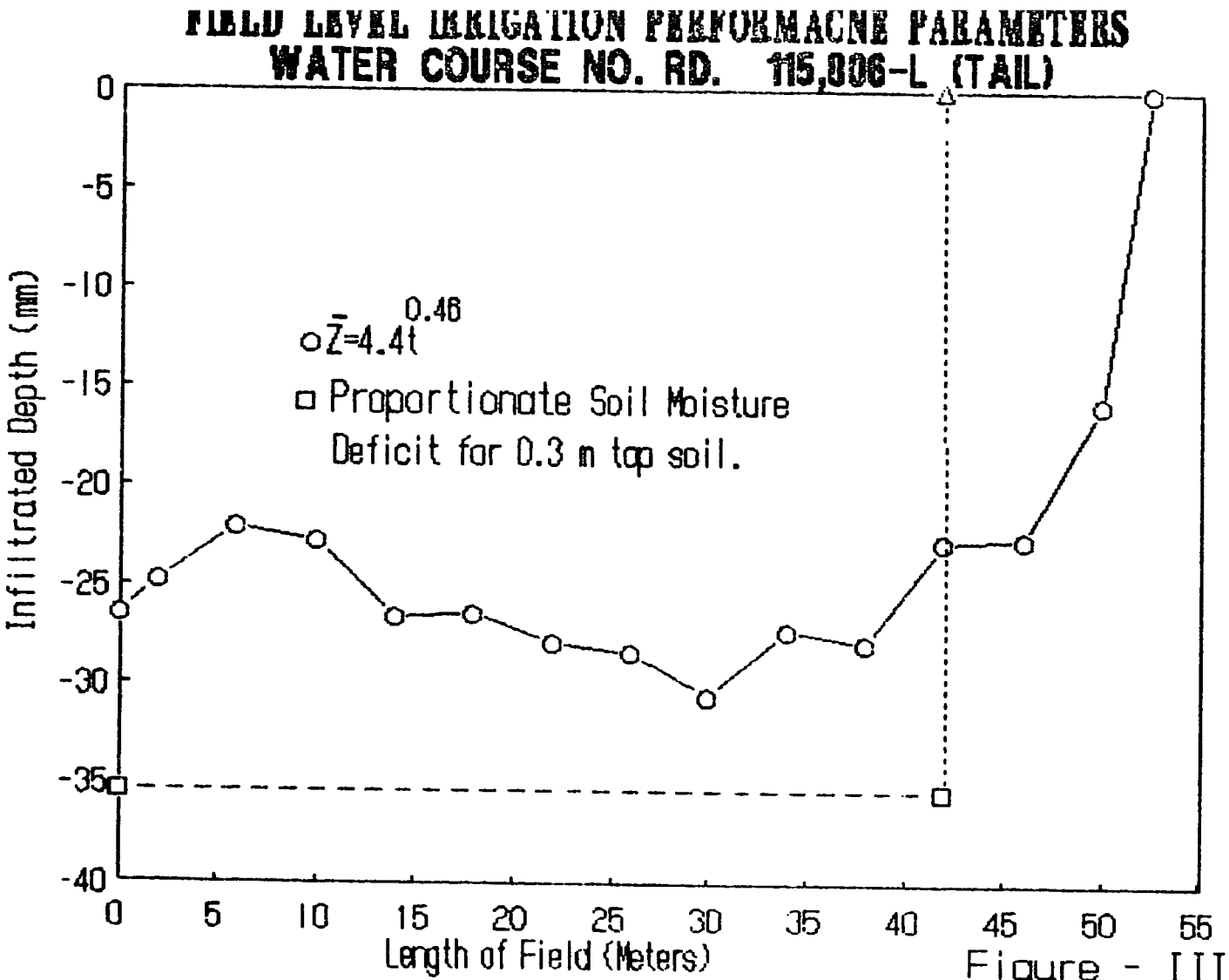


Figure - III.36

BASE LINE SURVEY FOR COMMAND WATER MANAGEMENT

PROJECT - KARSAK LIFT CANAL

PART: IV

SOIL STUDIES

DR. ABDUL RASHID

Institute of Development Studies

NWFP Agri. University, Peshawar

195a

INTRODUCTION

1. Objective and Scope

The report provides information about different kinds of soils under the command of six water courses of Warsak Lift Canal. It describes the nature, properties, extent and distribution of soils encountered and their grouping for agricultural potential. Such information would furnish a scientific basis for improved water management and agriculture development in the areas.

2. General Nature of Areas

The study areas lie at scatter, down the canal in west to south of Peshawar city and consist of 2632 acres. The natural vegetation has been cleared for cultivation and the land is intensively used for crop husbandry with a few orchards.

a Climate

The climate for the area is semiarid subtropical continental. The mean annual rainfall is about 300-350mm. Comparatively more rainfall is received in winter than in summer. The summers are usually hot with mean temperature of 31.6°C (maximum 40 to 50°C) and winter frosty and cold with mean 13.6°C (minimum mean 4.0°C). Annual

evapotranspiration exceeds precipitation which necessitates the application of canal water for sustained agriculture. Winter rainfal followed prolonged spring are the favourable conditions for fruit orchards.

b- Parent Materials and Landforms

Areas has nearly level to undulating relief with level to gently sloping single slopes. Bara River and Zindai 'Khwar' and flooc torrents drain the areas ultimately to Kabul river. The soil series met occur in piedmont alluvium and redeposited loess. The piedmont alluvium in the south and south-west of Vale occurs at the foot of the western ranges of mainly Murree Shales. Piedmont is mostly of Pleistocene age; which later on due to erosion cycles and sedimentati has formed the surfaces into old dissected and gently sloping (Pleistocene), Subrecent deposits of old channels and basins and Recent torrent deposits. Pleistocene loess deposit was eroded and mixed in piedmont alluvium during Subrecent which had formed the redeposited loess, parent material in the areas.

c- Soil Genesis and Classification

The combination of various soil forming factors (parent material climate, vegetation, surface relief and time) have resulted in the formation of six major soil series. Main soil forming process is homogenization i.e. mixing of organic mater and soil material through earth worms etc. with illuviation (deposition of colloids on ped surface) and movement of lime.

The soil series could be classified to subgroup level according to USDA Soil Taxonomy (Soil Survey Staff, 1975) as follow:

Soil Series	Subgroup
Mansooka	Typic Camborthids
Peshawar	Typic Camborthids
Tarnab	Typic Camborthids
Chamkani	Typic Torriorthents
Pirsabak	Typic Camborthids
Shahab	Typic Torrifluents

METHODOLOGY

Soil study of areas of six water courses includes the semi-detailed survey, analysis of soil samples for physicochemical properties, salinity/sodicity and soil fertility and finally land capability classification of lands.

1. Semi-detailed Soil Survey

Soil survey of areas was carried out in October-November, 1987 and May - July, 1988. Before the start of soil survey field work, preliminary examination regarding landforms and parent materials, drainage pattern, layout of water courses and soils was made by walking throughout all the areas. In the absence of aerial photos, "Patwari" maps prepared by NWFP Revenue Department in 1926-27 of scale 1 inch to 220 ft. were used as base maps. But the orientation was poor due to changes in physical land features. Subsequently linear traverses were designed across the layout of the land

and drainage pattern and examination of soil was carried out along the traverses. The soils were identified and described in especially prepared pits, mini pits and by auguring. After the identification of soil series at phase level, the boundaries were checked occasionally.

Soil examination includes the study of soil profile upto 100 to 150 cm depth. The description involved the systematic study of succession of different horizons or layers exposed in each pit for physico-chemical characteristics and biological properties. Soil characteristics-color, mottle, texture, structure, consistence, porosity, roots, pH, calcareousnes and boundary of each horizon were described as given in Soil Survey Manual USDA, Hand book 18 (Soil Survey Staff, 1962) and Guidelines for Soil Description (FAO) On the basis of profile description, the soils similar in the above characteristics were grouped together at series and phase level. The soil series were given the names A,B,C,D,E and F. Later on with the consultation of Soil Survey Staff of Pakistan, Lahore and the Reconnaissance Soil Survey of Peshawar Vale Report (Nizami and Rafiq, 1973), the series were identified and given the respective names.

2. Soil Sampling and Analytical Work

During the first phase of soil survey, the area of each watercourse was divided into soil sampling units keeping in view, land relief, drainage ways, texture, color and surface gravels. Area of each sample ranged from 10 to 25 acres. For each soil sample, 20-30 cores of equal size of 0-30cm depth were mixed together and a composite sample was sent to laboratory.

Number of samples are as follows:

Watercourse	No. of Samples
RD. 22,000 (Regi Lalam)	13
RD. 45,800 (Achini Bala)	8
RD. 53,700 (Sufaid Dehri)	19
RD. 70,800 (Suleman Khel)	20
RD.115,806 (Maryum Zai)	18
RD.132,000 (Tela Bund)	12
Total =	90

Moreover, soil samples from each profile of irrigation efficiency test sites were collected depth-wise (0-15, 15-30, 30-60, 60-90, 90-120 and 120-150cm). After the preparation of samples, texture was determined by hydrometer (Moodie et al., 1959) For other determinations, methods outlined by Black (1965) were followed. Organic matter by wet oxidation based upon Walkely and Black method, lime ($CaCO_3$) by titration with HCl, pH of suspension by Beckman pH meter, soluble salts as EC measured by Solubridge, available potassium in N H_4 O A C extract by flame photometer, total soil nitrogen calculated from organic matter and available phosphorus in $NaHCO_3$ extract (Olsen's methods) were determined.

DESCRIPTION OF SOIL SERIES

Description of Soil

Six soil series were identified in the areas under the command of six water courses. Profile description of each soil series found in the different areas is given in Appendix B.1. However, the brief summary of series is given as below:

1. Chamkani Series

The Chamkani series consists of moderately deep, well drained, calcareous, and medium textured soil developed in mixed calcareous alluvi The soils have structural B horizon. It occupies level to nearly level position in the Subrecent piedmont plain. It has dark brown silt loam, massive, calcareous Ap horizon underlain by dark reddish brown, silt loam, calcareous B horizon with weak coarse sub-angular blockly structure

2. Tarnab Series

The Tarnab series is mostly shallowly developed, moderately well drained, moderately fine textured soil, developed in mixed calcareous alluvium of piedment during the Subrecent period. The series has brown/dar brown silt loam, silty clay loam calcareous B horizon with weak coarse sub-angular blocky structure. The substratum is stratified.

3. Peshawar Series

The Peshawar series is very deep, well drained, calcareous, fine textured developed in piedmont material of Middle Pleistocene age. It has a textural Cambric B horizon and occupies nearly level to gently sloping position in the nearly level piedmont plains. The series has a brown/dark brown, silty clay loam, massive breaking into weak medium and fine granula strongly calcareous top soil underlain by a brown/dark brown, silty clay, weak compound segmented prismatic structure breaking into moderate coarse sub-angular blocky, strongly calcareous B horizon to more than 150 cm.

4. Mansooka Series

Mansooka series consists of moderately deep, well drained, calcareous, medium textured soils developed in reddish brown piedmont alluvium deposited in Subrecent epoch. It has a structural (Cambic) B horizon and occupies nearly level to gently sloping position in the dissected piedmont plain. The series has a reddish brown, loam, massive moderately calcareous, Ap horizon, underlain by a dark reddish brown, loam, weak coarse subangular blocky, moderately calcareous B horizon, underlain by C horizon which is underlained by a burried profile.

5. Pirsabak Series

The Pirsabak series consists of deep, well drained, medium textured calcareous soils developed in the loess redeposited during Subrecent period. It has a structural (Cambic) B horizon and occupies level to nearly level parts. The series has a dark greyish brown, loam/silty clay loam, moderately calcareous top soil, underlain by dark yellowish silt loam,weak coarse subangular blocky, moderately calcareous B horizon.

6. Shahab Series

The Shahab series consists of moderately to deep and well drained calcareous medium textured soils developed in piedmont material and deposited probably in Recent period. It has no B horizon. The series occurs in semiarid climate and occupies nearly level and gently sloping position in the piedmont plains. The color changes from pinkish to dark reddish brown, silt loam to silty clay loam, massive, moderately calcareous with clear smooth boundary.

Soil series and the approximate areas occupied by them in the water courses are given in Table IV.1.

Table IV.1

SOIL SERIES IN AREAS OF SIX WATER COURSES

Water Course	Soil Series					
	Peshawar	Tarnab	Chamkani	Mansooka	Shahab	Pirsabak
	Acres					
RD. 22,000	-	166	120	100	25	-
RD. 45,800	-	140	70	-	30	-
RD. 53,700	280	166	-	-	15	-
RD. 70,800	450	55	-	-	-	-
RD.115,806	-	-	-	-	30	275
RD.132,000	-	-	128	80	-	5

<u>Regi Lalam (RD.22,000)</u>

Soils of Regi Lalam have developed in the piedmont alluvium, western and northern boundaries concide with gravelly land of alluvial fans. Some area about 80 acres is gravelly in the western portions. About 100 acres of land have gravels distributed in the profile and are adjacent to gravel land (Mansooka Soil Series). Fine textured soil (Tarnab Series) occupies the northern area while medium textured soil (Chamkani Series) underlain gravels, occurs in the central and eastern parts. In some places, the soil has been removed for construction and that area is flooded with "Khwar" flood torrent, flowing southern boundary of area (Shahab Series).

Achini Bala (RD. 45,800)

Achini Bala area consists of Tarnab, Chamkani and Shahab Soil Series. Major area is occupied by Tarnab soil series in the northern and central parts. Chamkani silt loam occurs in the southern parts. This series is very shallow to shallow over gravels. Like Regi Lalam, along the "Khwar" the soil material is removed for construction, and empty area is flooded for sediment deposition (Shahab soil series).

Sufaid Dehri (RD. 53,700)

Major soil series found in the area are Peshawar and Tarnab. Silty clay soil with cutans (Peshawar series) is found in all the area at high position, nearly level to sloping. Silty clay loam (Tarnab series) is found in depressions, which is nearly level and mainly occurs in south and eastern parts. Minor extent of Shahab series (Recent deposit) occurs in bed of flood torrents.

Suleman Khel (RD. 70,800)

Major area (about 90%) is occupied by Pehsawar soil series in the nearly level to sloping parts of the landscape, about 10% area is covered by Tarnab soil series, which occur in depressions, on the southern, eastern and northern parts.

Maryum Zai (RD. 115,806)

The Maryum Zai area is dominantly occupied by dark yellowish brown siltloam/loam redeposit of loess and piedmont alluvium parent material of Subrecent age (Pirsabak series). Lime is uniformly distributed. Some area (10%) is occupied by Recent piedmont deposit (Shahab series) which extends along "Khwar" on eastern parts.

Tela Bund (RD. 132,000)

Three soil series - Chamkani, Mansooka and Pirsabak recognized in tl area, occupy about 128,80 and 5 acres respectively. Chamkani occurs ii central and northern parts while loam with gravels in profile (Mansook series) occurs in western parts. Pirsabak series only occupies 5 acres ii the southern parts.

Irrigation Efficiency Sites

Sites for testing the irrigation efficiency were selected by thr agriculture engineer, two in each watercourse area except Tela Bund, where test could not be made due to non-availability of water. Each site soil profile was described upto 150cm depth or gravel depth. The soil series corresponds to test sites are as follow:

Water Course	Soil Series	
	Site I	Site II
RD. 22,000	Tarnab deep silty clay loam	Chamkani shallow s loa
RD. 45,800	Tarnab deep silty clay loam	———
RD. 53,700	Peshawar very deep clayey soil	Tarnab deep silty clay loam/silt loa
RD. 70,800	Peshawar very deep clayey soil	Tarnab deep silty clay loam
RD.115,806	Shahab sandy loam/silt loam stratified material	Pirsabak deep silt loam
RD.132,000	———	———

PHYSICO-CHEMICAL PROPERTIES OF SOILS

Ninety soils samples of 0-30 cm depth were collected from the areas of six water courses and analysed for physico chemical characteristics. Range of characteristics is described in Table IV.2 while the detailed analyses are given in Appendix- B.2.

a- General Properties

Texture of the soils ranges from silt loam to clay loam. Areas of water courses (RD.70,800 and RD.115,806) have in majority, medium textured soils (90 and 78% respectively) while in the areas of RD.45,800, RD. 53,700, RD.70,800 and RD. 132,000, the soils are moderately fine textured and cover 62, 75, 84 and 75% areas respectively. Parts of Regi Lalam, Achini Baia and Tela Band areas are either covered with gravels on the surface or have shallow gravels depth.

Salinity problem (salt accumulation) does not exist in the surveyed areas. However, slight salt accumulation can be noted in Regi Lalam, Sufaid Dehri and Sulamankhel areas, which may influence the plant growth of salt sensitive crops like tobacco or soybean. This salinity problem appears to be associated with insufficient water supply and can overcome by heavy irrigation.

Soil reaction (pH) of soils is moderately alkaline (pH 7.9 to 8.4) except four samples have mildly alkaline (pH 7.4 to 7.8). High pH could be due to calcareousness of the soils. Soils are moderately (3-15% lime) to strongly (more than 15% lime) calcareous. All the samples are moderately calcareous of Achini Bala and strongly calcareous of Sulamankhel areas, while in other areas, lime content varies.

b- Soil Fertility

Soil fertility was evaluated in terms of contents of organi matter and major nutrients (nitrogen, phosphorus and potassium). Du to semiarid climate of the areas, the soils have low to mediu organic matter contents except 8% samples contain high organi matter in the surrounding of urban areas. Maryumzai and Tela Bur areas contain the least amount of organic matter, because of lo cropping intensity and remote from the town, while Sufaid Dehr soils contain sufficient organic matter due to vicinity of town Generally soils with high clay contents have more organic matte than coarse textured soils.

Soil nitrogen was found low to medium in all the areas, whic necessitates the nitrogenous fertilizer application. In addition to universal deficiency of soil nitrogen, available phosphorus (P contents vary from low to high levels. Soils of Regi Lalam are deficient in phosphorus, while the Maryumzai and Tela Band areas contain sufficient P, because these soils have not so far put under intensive cultivation due to insufficient water supplies.

All the soils of the areas contain medium to high available potassium except some sandy/gravelly soils in Regi Lalam and Achini Bala areas, which may response to K fertilization in addition to N and P application.

Table IV.2

CHARACTERISTICS OF SOILS UNDER COMMAND OF SIX WATER COURSES
OF WARSAK LIFT CANAL (SAMPLES NUMBER WITH PERCENTAGES)

Character	Range	Water Courses					
		Regi Lalam RD.22,000	Achini Bala RD. 45,800	Sufaid Dehri RD. 53,700	Suleman Khel RD.70,800	Maryumzai RD.115806	Tela Bund RD.132,000
Texture	Sandy-sands, loamy sand	-	-	-	-	-	-
	Loamy-Moderately coarse (sandyloam)	-	-	-	-	-	-
	Medium(loam,siltloam,silt)	5 (38)	2(25)	3(16)	13(90)	14(78)	3(25)
	Moderately fine(calyloam sandy clayclay loam, siltyclayloam)	8 (62)	2(75)	16(84)	2(10)	4(22)	9(75)
	Clayeysandyclay,siltyclay, clay	-	-	-	-	-	-
Soluble Salts	Low less than 0.1%	11(85)	8(100)	15(79)	14(74)	18(100)	12(100)
	Medium 0.1 - 0.2%	2(15)	-	4(21)	6(26)	-	-
	High above 0.2%	-	-	-	-	-	-
Reaction (pH)	Mildly alkaline 7.4 to 7.8	1(8)	-	1(5)	-	2(11)	-
	Moderately alkaline 7.9 - 8.4	12(92)	8(100)	18(95)	20(100)	16(89)	12(100)
Lime $CaCO_3$	Moderately calcareous 3-15%	8(62)	8(100)	4(21)	-	7(39)	6(50)
	Strongly calcareous above 15%	5(38)	-	15(79)	20(100)	11(61)	6(50)

(Contd.....

Table IV.2

CHARACTERISTICS OF SOILS UNDER COMMAND OF SIX WATER COURSES
OF WARSAK LIFT CANAL (SAMPLES NUMBER WITH PERCENTAGES)

(Continued)

Character	Range	Water Courses					
		Regi Lalam RD.22,000	Achini Bala RD. 45,800	Sufaid Dehri RD. 53,700	Suleman Khel RD.70,800	Maryumzai RD.115806	Tela Bun RD.132,0
Organic Matter	Low less than 0.8%	5(38)	4(50)	-	7(35)	15(83)	10(83)
	Medium 0.8 to 1.3%	7(54)	4(50)	14(74)	13(65)	2(11)	2(17)
	High above 1.3%	1(8)	-	5(26)	-	1(6)	-
Total nitrogen	Low less than 0.05%	11(85)	7(88)	4(21)	18(90)	17(94)	12(100)
	Medium 0.05 to 0.10%	2(15)	1(12)	15(79)	2(10)	1(6)	-
Available phosphorus	Low less than 6ppm	12(92)	-	3(16)	-	-	-
	Medium 6 - 15 ppm	1(8)	4(50)	6(32)	6(30)	1(6)	-
	High 15 - 25 ppm	-	4(50)	10(52)	14(70)	17(94)	12(100)
Available Potassium	Low less than 70 ppm	-	-	-	-	-	-
	Medium 70 - 120 ppm	6(46)	2(25)	-	-	-	-
	High above 120 ppm	7(54)	6(75)	19(100)	20(100)	18(100)	12(100)

(Concluded)

LAND CAPABILITY CLASSIFICATION

Land capability classification is a grouping of soils of an area according to potentials and limitations for the sustained production of common crops, grazing or forestry. The soils of water courses commanded areas have been grouped into eight classes (I to VIII) which is similar to the U.S. Soil Conservation Service Classification (U.S.D.A.1961). In this system of classification, the soils are grouped at three levels viz; land capability class, land capability subclass and the land capability unit. The assumption of irrigation /or its absence is indicated by the letter 'ir'or'd' respectively preceding the class numerals. Soils with similar broad limitations are grouped in each class. Class I soils have few permanent limitations for cultivated agriculture. Class II, III and IV soil have progressively more limitations for sustained crops growth.

At the land capability subclass level, soils having the same kind or kinds of limitations for agricultural use are grouped together. Subclass is designated where applicable, by small letter following the class numeral. The following subclasses are recognized.

e- Soil restricted in use due to erosion hazard or effect of past erosion.

r- Soil occurring in areas with local irregular relief hindering irrigation or tillage.

w- Soil restricted in use by excess water because of poor drainage due to high water table or surface accumulating of water.

a- Soil restricted in use due to salinity/or sodicity.

s- Soil restricted in use due to limitations inherent in the soil profile, such as shallow soil depth, slowly permeable layers, low water holding capacity or rapid permeability.

At the third level of classification i.e. the land capability unit, the soils having more or less the same potential and requiring similar management are grouped together. They are subdivision of the subclasses and are designated by Arabic numerals placed after the subclass symbol and separated by hyphen.

On the basis of above mentioned system, the soils in six water courses have been grouped into different land capability classes based on field investigation.

Agricultural Potential

Crop production (yield/unit area) depends on soil characters and management in addition to other factors of production. However, under equal levels of management, the production varies by the potential of land. Land potential is a measure of economically attainable maximal production from a specified use of a given piece of land. It also indicates the soil productivity, unaffected by management. Agricultural potential of land throws light about the application of limited inputs so as to maximize returns.

Table IV.3

DESCRIPTION OF LAND CAPABILITY UNITS AND THEIR AGRICULTURAL POTENTIAL

Land Capability Unit	Main Characteristics of Soils	Main Limitations	Agricultural Potential
Very Good Irrigated Land			
irI-1	Deep, nearly level, moderately permeable homogenized loamy and fine silty soils	None	Very high
irI-2	Deep, nearly level to gentle sloping moderately permeable homogenized clayey soils and loamy soils underlain by clay at 75cm generally with fine silty surface	None, clayey substratum	Very high
Good Irrigated Land			
irIIs-1	Deep, nearly level, slowly permeable, homogenized clayey soils	Difficult in seed bed preparation	High
irIIs-2	Deep, nearly level, moderately permeable laminated loamy soils	Hinderance for root and water penetration, low organic matter	High
irIIs-3	Moderately deep, gently sloping, somewhat excessively permeable, homogenized/laminated loamy soils underlain by sand/gravels at 75cm	Rapid permeability in the subsoil, moderate depth sand/gravel	High

(Contd....)

Table IV.3

DESCRIPTION OF LAND CAPABILITY UNITS AND THEIR AGRICUTURAL POTENTIAL

(Continued)

Land Capability Unit	Main Characteristics of Soils	Main Limitations	Agricultural Potential
ırIIr-1	Deep, gently sloping moderately permeable homogenized, loamy and fine silty soils, occuring on high terraces	Irrigular relief, difficulty in irrigation and mechnical cultivation, water erosion	High
Moderate Irrigated Land			
ırIIIs-1 d III S-1	Shallow, gently sloping, slightly higher, rapidly permeable homogenized/laminated loamy soil underlain by sand at 40cm and sandy soils and gravels	Shallow depth to sand, rapid permeability, low fertility	Moderate
Poor/Marginal Irrigated Land			
ırIVs-1/ dIVs-1	Very shallow soil, spread over gravels in torrent bed/alluvial fan of piedmont	Very shallow soil, very rapid permeability	Poor
Unproductive Land			
VIII	Gravelly land	—	—

(Concluded)

Table IV.6

LAND CAPABILITY CLASSIFICATION OF SOILS UNDER
COMMAND OF SIX WATER COURSES OF WARSAK LIFT CANAL

Land Capability Units	Water Courses					
	Regi Jalam RD.22,000	Achini Jalal RD. 45,800	Sufaid Dehri RD. 52,700	Suleman Khel RD.70,800	Maryumzai RD.115806	Tela Bund RD.132,000
	Area in acres (percentage)					
Very Good Land						
irI-1	140(30)	129(46)	142(30)	400(80)	275(90)	99(39)
irI-2	60(12)	-	231(70)	80(17)	-	-
Good Irrigated Land						
irIIr-1	-	-	-	15(3)	-	-
irIIs-1	-	-	-	-	-	-
irIIs-2	55(11)	100(36)	-	-	30(10)	63(25)
irIIs-3	-	-	-	-	-	-
Moderate Irrigated Land						
irIIIs-1/ dIIIs-1	85(17)	-	-	-	-	51(20)
Poor/Marginal Land						
irIVs-1	60(12)	10(4)	-	-	-	-
Unproductive Land						
VIII Gravelly	88(18)	40(14)	-	-	-	40(16)
Total	488	279	473	505	305	253

SUMMARY

Soil study of area of six water courses includes the semi-detailed soil survey, analysis of soil samples for physico-chemical properties and land capability classification. The total area is 2635 acres, lies west-east of Peshawar city and has semi-arid subtropical continental climate with mean annual precipitation of 300-350mm. The soil surface is level, and nearly level to undulating and land is intensively used for cropping. The soils were identified and described upto series/phase levels in especially prepared pits, mini pits and by auguring and boundaries checked occasionally. Four soil series-Peshawar, Tarnab, Mansooka and Pirsabak could be classified to Typic Camborthids subgroup, while Chamkani and Shabab series to Typic Torriorthids and Typic Torrifluents respectively.

Peshawar series is fine textured, well drained, calcareous, deeply developed in piedmont material of middle Pleistocene age. The Tarnab series is moderately fine textured, moderately well drained, shallowly developed in mixed calcareous alluvium of piedmont during the Subrecent period, occurs in depressions. Mansooka series consists of moderately deep well drained, calcareous, medium textured soils developed in reddish brown dissected piedmont alluvium of Subrecent epoch. The Chamkani series consists of moderately deep, well drained, calcareous and medium textured soils with structural B horizon, developed in the Subrecent piedmont plain. The Pirsabak series consists of deep, well drained, medium texture

soils developed in the loess redeposited during Subrecent period. The Shahab series has developed in piedmont material probably deposited in Recent

period, stratified with no B horizon; Peshawar, Tarnab, Chamkani, Pirsabak, Mansooka and Shahab series occupy 34, 25,15,13,8 and 5% of total surveyed area respectively. Major soil series in RD 25000 are Tarnab, Chamkani and Mansooka; in RD 45800 Tarnab and Chamkani; in RD 53700 Peshawar and Tarnab; in RD 70800 Peshawar; in RD 11[illegible] Pirsabak and in RD 132000 Chamkani and Mansooka series.

Soil samples (0-30cm depth) analysis indicates that majority of soils are medium to moderately fine textured, nonsaline, moderately alkaline (pH 7.9 to 8.4), moderately to strongly calcareous, low to medium in organic matter, deficient in total nitrogen and having medium to high available phosphorus and potassium contents.

On the basis of limitations in land use and agricultural potential, the soils were grouped into land capability classification. Class I (very good irrigated land of very high potential) with minor limitations, occupies 71% area, class II (good irrigated land of high potential) with gentle slope and laminated loamy soils, occupies 9% area, class III (moderate irrigated land of moderate potential) with shallow depth, rapid permeability and low fertility, occupies 6% area and Class IV (poor/marginal irrigated land of poor potential) with very shallow depth and very rapid permeability, occupies 3% area, while 7% area is gravelly and unproductive Class VIII.

REFERENCE CITED

Black,C.A.(Ed) 1965. Methods of Soil Analysis. Amer. Soc. Agron. Inc. Madison, Wisconsin,USA.

F.A.O. Undated. Guidelines for Soil Description. Soil Survey and Fertility Branch, FAO, Rome, ITALY.

Moodie,C.D.,H.W.Smith and R.A.McCeery.1955. Laboratory Manual for Soil Fertility.Washington State College Mimeograph, 31-39 p.

Niazmi,M.M.I. and C.M.Rafiq,1973. Reconnaissance Soil Survey of Peshawar Vale. Soil Survey of Pakistan,Lahore.

Soil Survey Staff.1962. Soil Survey Manual. Agri. Handbook 18 U.S.Department of Agriculture,Washington D.C.

Soil Survey Staff;1975. Soil Taxonomy. Agriculture Handbook No.436. Soil Conservation Service,U.S. Department of Agriculture, Washington D.C.

U.S.D.A. 1961. Land Capability Classification. Agri. Handbook No.210. U.S. Department of Agriculture, Washington D.C.

APPENDIX-B.1

REGI LALAM RD. 22000

Mansooka Soil Series

0 - 15 cm
AP — Dark Yellowish brown (10 YR 4/4) moist; sandy clay loam almost 20% gravels; weak granular to massive; sticky, plastic, friable moist; strongly calcareous; few fine tubular pores; few fine, common very fine roots; pH 8.0; clear smooth boundary

15 - 30 cm
B — Dark yellowish brown (10 YR 4/4) moist; sandy loam; weak massive; 10% gravels; slightly sticky, slightly plastic, friable moist; few fine tubular pores; strongly calcareous; common very fine, few fine roots; pH 8.0; diffuse smooth boundary

30 - 45 cm
C — Dark yellowish brown (10 YR 4/4) moist; sandy loam approaching loamy sand with 10 % gravels; massive to single grained; few fine tubular pores; slightly sticky, slightly plastic; soft dry; strongly calcareous; few fine roots; pH 8.2

45 + cm — About 80 % gravels and stones with about 20 % sand

Tarnab Soil Series

0 - 15 cm
AP — Brown (7.5 YR 4/4) moist; silty clay loam; massive breaking to clods; sticky, plastic, friable moist, slightly hard dry; common fine tubular pores; strongly calcareous; few fine, few medium roots; clear smooth boundary; pH 8.0

15 - 37 cm B1	Brown (7.5 YR 4/4) moist; silty clay loam; weak coarse subangular blocky; sticky, plastic, friable moist, hard dry; few fine tubular pores; strongly calcareous; few fine roots; diffuse smooth boundary; pH 8.0
37 - 60 cm B21	Brown to reddish brown (7.5 YR 4/4 to 5 YR 3/4) moist; silty clay loam; weak coarse subangular blocky; sticky, plastic, firm moist, hard dry; thin flood cutans on ped surface and root channels; common fine and few coarse tubular pores; strongly calcareous; common very fine and fine roots; pH 8.1
60 - 83 cm B21	Brown (7.5 YR 4/4) moist; silty clay loam; moderate fine to coarse subangular blocky; flood cutans on ped surface and root channels; sticky, plastic, friable moist, hard dry; few fine, common very fine tubular pores; strongly calcareous; common very fine, few fine roots; pH 8.0
83 - 196 cm	Dark brown (7.5 YR 4/4) moist; silt loam to silty clay loam with a few rock fragments; thin flood cutans in root channels; slightly, sticky, slightly plastic, friable; moist; strongly calcareous; few fine roots; clear smooth boundary; pH 8.0

Chamkani Soil Series

0 - 15 cm AP	Dark yellowish brown (10 YR 4/4) moist; silty clay loam; weak massive; sticky, plastic, friable moist; common fine tubular pores; moderately calcareous; few very fine pores; clear smooth boundary; pH 8.2
15 - 45 cm B	Dark yellowish brown (10 YR 4/4) moist; silt loam weak medium subangular blocky; slightly sticky, slightly plastic, friable moist; common fine tubular pores; moderately calcareous; diffuse smooth boundary; pH 8.2
45 - 100 C1	Dark yellowish brown (10 YR 4/4) moist; silt loam; massive slightly sticky, slightly plastic, friable moist; few fine tubular pores; strongly calcareous; few fine roots; pH 8.3
100 + C2	Gravels and sand

ACHINI BALA MARIA RD 45800

Tarnab Soil Series

0 - 12 cm
AP

Reddish brown (5 YR 4/4) moist; silty clay loam; massive; sticky, plastic, friable moist, slightly hard dry; common very fine and fine tubular pores; strongly calcareous; few very fine and common fine roots; clear smooth boundary; pH 8.2

12 - 49 cm
B2

Reddish brown (5 YR 4/4) moist; silty clay loam; weak coarse subangular blocky; sticky, plastic, friable moist; flood cutans; common very fine and fine tubular pores; strongly calcareous; few fine, few coarse roots; clear smooth boundary; pH 8.2

49 - 68 cm
C1

Brown (7.5 YR 5/4) moist; loam; massive; slightly sticky, slightly plastic, friable moist; few very fine and fine pores; strongly calcareous; few fine and few coarse roots; clear smooth boundary; pH 8.1

68 - 95 cm
Bb

Reddish brown (5 YR 4/4) moist; silt loam; two krotonia ness, weak medium subangular blocky; slightly sticky, slightly plastic, friable moist; many very fine, few fine tubular pores; strongly calcareous; few very fine roots; clear smooth boundary; pH 8.2

95 - 150 cm CII Reddish brown (5 YR 4/4) moist; loam; a few gravels; one krotovinas; massive; slightly sticky, slightly plastic, friable moist; very few fine tubular pores; strongly calcareous; very few fine roots; clear smooth boundary; pH 8.2

SUFAID DEHRI RD 53700

Peshawar Soil Series

0 - 16 cm AP	Brown (5 YR 4/4) moist; silty clay loam; weak granular and massive; sticky, plastic, friable moist, hard dry; few very fine vesicular pores; strongly calcareous; few very fine, few medium roots; clear smooth boundary; pH 8.2
16 - 33 cm B1	Brown (7.5 YR 4/4) moist; silty clay; weak coarse subangular blocky; sticky, plastic, friable moist; common fine and very fine tubular pores; few rock fragments; strongly calcareous; few fine, few coarse roots; clear smooth boundary; pH 8.4
33 - 64 cm B21	Brown (7.5 YR 4/4) moist; silty clay; weak to moderate fine subangular blocky; sticky, plastic firm moist; thin patchy cutans on ped surfaces; many fine, few coarse tubular pores; a few pottery pieces; strongly calcareous; few very fine roots; pH 8.3
64 - 87 cm B22	Same as above except weak to coarse subangular blocky structure and more cutans on ped surfaces and root channels
87 - 117 cm B31	Brown (7.5 YR 4/4) moist; silty clay loam; sticky, plastic, firm moist; weak coarse subangular blocky; discontinuous cutans on ped surfaces; few pottery and coal pieces; few fine, few coarse tubular pores; strongly calcareous; few very fine roots; diffuse smooth boundary; pH 8.4

117 cm + B32 Brown (7.5 YR 4/4) moist; silty clay loam; weak coarse subangular blocky; sticky, plastic, firm moist; no cutans a few rock fragments; few fine and coarse pores; strongly calcareous; few fine roots; pH 8.4

Tarnab Soil Series

0 - 14 cm AP Brown to dark brown (7.5 YR 4/4) moist; silty clay loam; very weak fine granular; slightly sticky, slightly plastic, friable moist, firm dry; few very fine, common fine interstitial pores; strongly calcareous; common fine, few medium roots; clear smooth boundary; pH 8.1

14 - 37 cm B1 Brown (7.5 YR 4/4) moist; silty clay loam; weak coarse subangular blocky; sticky, plastic, friable moist; common very fine, few medium, few coarse tubular pores; strongly calcareous; fibrous and few medium roots; diffused smooth boundary; pH 8.2

37 - 62 cm B2 Brown to dark brown (7.5 YR 4/3 to 7.5 YR 4/4) moist; silt loam; flood cutans in root channels; slightly stickly, slightly plastic, friable; weak to moderate coarse subangular blocky; common very fine, few coarse tubular pores; strongly calcareous few fine and very fine, few medium roots; clear smooth boundary; pH 8.2

62 - 73 cm B3 Brown (7.5 YR 4/4) moist; silty clay loam; with few rock fragments; weak coarse subangular blocky; patchy flood cutans; sticky, plastic, friable moist; strongly calcareou common fine, few coarse pores; few fine roots; clear smooth boundary; pH 8.2

73 - 150 cm C Brown to dark brown (7.5 YR 4/3 , 4/3) moist; silt loam; stratified material, weakly homogenized; massive to weak coarse subangular blocky; slightly sticky and plastic, friable moist; common fine, few coarse tubular pores; strongly calcareous; few fine roots, diffused smooth boundary; pH 8.2

Chamkani Soil Series

0 - 12 cm AP Brown to dark brown (7.5 YR 4/3, 4/4) silty clay loam; weak fine granular ; sticky, plastic, hard dry; few fine and very fine vesicular pores; strongly calcareous; few very fine roots; diffused smooth boundary; pH 8.2

12 - 38 cm B Brown (7.5 YR 4/4) moist; silt loam; weak coarse subangular blocky; slightly sticky, slightly plastic, friable moist; common very fine, few fine, few coarse pores; strongly calcareous; common very fine and few fine roots; clear smooth boundary; pH 8.2

38 - 87 cm C Dark brown (7.5 YR 4/4) and yellowish brown (10 YR 5/4) moist; mixed two materials, stratified very fine sandy loam; few fine pores; slight plastic, slightly sticky, smooth moist; strongly calcareous; few fine roots; pH 8.2

SULEMAN KHEL RD 70800

Peshawar Soil Series

0 - 15 cm AP	Brown (7.5 YR 4/4) moist, light brown (7.5 YR 6/4) dry; silty clay loam; granular to massive; sticky, plastic, friable moist; common fine vesicular pores; strongly calcareous; many very fine and common fine roots; clear smooth boundary; pH 8.2
15 - 45 cm B1	Dark brown (7.5 YR 4/4,4/2) moist; silty clay; moderate coarse subangular blocky; sticky; plastic, firm moist; discontinuous cutans on ped surface; many fine tubular pores; few pottery pieces; strongly calcareous; many fine and fibrous roots; clear smooth boundary; pH 8.3
45 - 145 cm B_2 +B_3	Brown (7.5 YR 4/4) moist; silty clay; moderate coarse subangular blocky structure; very sticky, very plastic and very firm moist; thin continuous cutans on ped surfaces; many tubular pores; strongly calcareous; few very fine and few fine roots; diffuse smooth boundary; pH 8.2
145 - 190 cm C	Two parent materials brown (7.5 YR 4/4) and yellowish brown (10 YR 6/4) moist; silt loam; slightly sticky, sligh plastic, very friable; weak to massive; patchy cutans; few very fine, common fine tubular pores; strongly calcareous; few fine roots, stratified material; pH 8.2

Tarnab Soil Series

0 - 15 cm
AP

Brown (7.5 YR 4/4) moist; silty clay loam; weak fine granular to massive; sticky, plastic, friable moist, hard dry; common fine, medium tubular pores; strongly calcareous; few fine and very fine roots; clear smooth boundary; pH 8.0

15 - 50 cm
B

Brown (7.5 YR 4/4) moist; silty clay loam; discontinuous soil cutans; weak medium subangular blocky; slightly sticky, slightly plastic, soft moist; many medium tubular pores; strongly calcareous; few fine, few medium roots; clear smooth boundary; pH 8.2

50 - 87 cm
CI

Stratified materials brown (7.5 YR 4/4) dark yellow brown (10 YR 4/4) moist; massive silt loam; slightly sticky, slightly plastic, friable moist; common medium pores; strongly calcareous; few very fine roots; few kartovinas; clear smooth boundary; pH 8.2

87 - 120 cm
Bb

Brown (7.5 YR 4/4) moist; silty clay; strong medium blocky; patchy cutans; very sticky, very plastic, very firm moist; strongly calcareious; few medium few fine tubular pores; few fine roots; clear smooth boundary; pH 8.0

120 - 150 cm
CII

Stratified material, brown (7.5 YR 4/4) and dark yellow brown (10 YR 4/4) moist; silty clay; massive; very sticky, very plastic, very firm moist; few fine, few medium pores; strongly calcareous; few fine roots; pH 8.4

MARYUMZAI RD.115,006

Pirsabak Soil Series

0 - 16 cm
AP

Dark yellowish brown (10 YR 4/4) moist, light yellowi brown (10 YR 6/4) dry; silt loam: slightly sticky, sli plastic friable moist, slightly hard dry; massive to granular; common very fine, few fine interstitial pore strongly calcareous; fibrous fine roots; pH 8.2; diffu smooth boundary

16 - 32 cm
B1

Dark yellowish brown (10 YR 4/4) moist; silt loam; we coarse subangular blocky; slightly sticky, slightly pl friable moist; strongly calcareous, lime specks; comm very fine and fine tubular pores; few fine, few very fi roots; diffuse smooth boundary; pH 8.2

32 - 74 cm
B2

Dark yellowish brown (10 YR 4/4) moist, silt loam to lo weak medium to fine subangular blocky; slightly sticky slightly plastic, friable moist; few very fine, fe coarse tubular pores; strongly calcareous, lime specks few very fine roots diffuse smooth boundary; pH 8.2

74 - 112 cm
B3

Dark yellowish brown (10 YR 4/4) moist; loam; weak mode to coarse subangular blocky; slightly sticky, slightl plastic, friable moist; few fine tubular pores; strongl calcareous; few fine roots; diffuse smooth boundary; pl 8.0

112 + cm C Dark brown, dark yellowish brown (10 YR 4/3) moist; loam; massive to weak; slightly sticky, slightly plastic, friable moist; few fine, coarse tubular pores; strongly calcareous; pH 8.1

Shahab Soil Series

0 - 15 cm AP Dark yellowish brown (10 YR 4/4) moist; silt loam; massive slightly sticky, slightly plastic, hard dry; few fine intestitial pores; moderately calcareous; few fine roots; clear smooth boundary; pH 8.0

15 - 56 cm IC Dark yellowish brown (10 YR 4/4) and dark brown (10 YR 4/3) moist; silt loam to loam; massive, weak and laminated; slightly sticky, slightly plastic, friable moist; few fine tubular pores; moderately calcareous; few fine roots; clear smooth boundary; pH 8.0

56 - 90+ cm IIC Dark yellowish brown (10 YR 4/4) moist; silt loam to very fine sandy loam; massive to weak coarse; slightly sticky, slightly plastic, friable moist; few fine tubular pores; moderately calcareous; few fine roots; pH 8.0

TELABUND RD. 132000

Mansooka Soil Series

0 - 15 cm Dark reddish brown (5 YR 3/4) moist; loam; massive breaki into fine granular, slightly sticky, slightly plastic, friable moist, slightly hard dry; few very fine interstit pores; a few rock fragments; strongly calcareious; few fine roots; pH 8.0; diffuse smooth boundary

15 - 33 cm B Dark brown (7.5 YR 4/4) moist; loam; weak coarse subangul blocky; slightly sticky, highly plastic, moist friable; many fine and few medium tubular pores; moderately calcareous; many rock fragments; few fine roots; pH 8.0; pseudo lime mycellia; clear smooth boundary

33 - 42 cm CI Reddish brown (5 YR 4/4) moist; loamy sand; massive; nonsticky non plastic, soft moist; common rock fragments; moderately calcareous; few fine pores; few fine roots; pH 7.8; clear smooth boundary

42 - 101 cm Bb Reddish brown (5 YR 4/4) moist; loam; moderate fine subangular blocky; slightly sticky, slightly plastic, fria moist; few fine tubular pores; few rock fragments; moderat calcareous; few very fine roots; pH 8.0; clear smooth boundary

101 - 110 cm CII Dark reddish brown (5 YR 3/4) moist; sandy loam; massive; 80% rock fragments

110 - 180+ cm CIII Reddish brown (5 YR 4/4) moist; sandy loam; massive; few rock fragments

Chamkani Soil Series.

0-11 cm AP Dark yellowish brown (10YR 3/4) moist; loam; fine granular; sticky steady, slightly plastic, soft moist; many very fine tubular pores; strongly calcareous; few fine, few very fine roots; pH 8.2; diffuse smooth boundary

11-26 cm B1 Dark brown (7.5 YR 4/4) moist; loam; weak medium subangular blocky; slightly sticky; slightly plastic, soft moist; few very fine, few fine tubular pores; strangely calcareous; few very fine roots; clear smooth boundary; pH 8.0

26-69 cm B2 Dark reddish brown (5 YR 3/4) moist; loam; moderate fine subangular blocky; slightly study, sticky plastics, friable moist; thin patchy cutans on ped faces and root channels; strongly calcareous, lime mycelia present; few very fine, few fine tubular pores; few very fine roots; clear smooth boundary; pH 8.0

69-87 cm B3	Dark reddish brown (5 YR 3/4) moist ; Loam; weak to massive structure; slightly study,slightly plastic, fri moist; few very fine, few fine tubular pores; strongly calcareous with few fine and medium lime concretion; few fine roots; clear smooth boundary; pH 8.2
87 cm C	Two materials - yellowish brown (10YR 5/6) and dark brown (7.5 YR 4/4) moist. unhomogenized; massive to brea into fine granules; few very fine pores; strongly calcar few fine roots; pH 8.2

APPENDIX-B.2

PHYSICO-CHEMICAL PROPERTIES OF SOILS UNDER COMMAND OF SIX WATER COURSES OF WARSAK LIFT CANAL

Sr. No.	Clay %	Silt %	Sand %	Textural Class	pH -	Total Soluble Salts %	Total Nitrogn %	Available Phosphorus ppm	Available Potassium ppm	Organic Matter %	Lime ($CaCO_3$) %
1	2	3	4	5	6	7	8	9	10	11	12
Regi Lalam RD. 22000											
1	18.4	46.0	35.6	loam	7.8	0.064	0.032	5.7	184	0.65	13.0
2.	31.4	57.0	11.6	silty clay loam	8.0	0.058	0.030	3.6	138	0.61	17.0
3.	33.0	55.0	12.0	" " "	7.9	0.067	0.051	5.9	184	1.02	13.5
4.	28.0	62.0	10.0	" " "	7.9	0.054	0.052	4.6	165	1.05	15.8
5.	32.0	28.0	40.0	clay loam	7.9	0.128	0.013	2.1	92	0.27	13.3
6.	20.0	70.0	10.0	silt loam	7.8	0.096	0.042	4.3	101	0.85	15.3
7.	24.0	68.0	8.0	" "	8.0	0.089	0.046	6.7	147	0.92	9.8
8.	38.0	52.0	10.0	silty clay loam	8.0	0.080	0.046	5.6	165	0.92	12.3
9.	34.0	40.0	26.0	clay laom	8.10	0.122	0.012	4.4	92	0.24	19.5
10.	19.0	43.0	38.0	loam	8.3	0.096	0.017	4.8	101	0.34	14.0
11.	18.0	64.0	18.0	silt loam	8.2	0.067	0.041	5.2	128	2.96	8.8
12.	36.0	58.0	6.0	silty clay loam	8.0	0.080	0.041	4.2	119	0.82	14.8
13.	28.0	62.0	10.0	" " "	8.2	0.076	0.047	3.9	110	0.95	15.3

(Contd....)

Sr. No.	Clay %	Silt %	Sand %	Textural Class -	pH -	Total Soluble Salts %	Total Nitrogn %	Available Phosporus ppm	Available Potassium ppm	Organic Matter %	Lime ($CaCO_3$) %
1	2	3	4	5	6	7	8	9	10	11	12
Achini Bala RD. 45800											
1.	24.6	57.0	18.4	silt loam	8.1	0.067	0.049	28.9	147	0.98	12.8
2.	32.6	59.0	8.4	silty clay loam	8.2	0.067	0.039	18.4	119	0.78	9.8
3.	25.6	62.0	12.4	silt loam	8.3	0.070	0.037	12.4	101	0.75	9.5
4.	34.6	61.0	4.4	silty clay loam	8.2	0.080	0.044	24.6	138	0.88	9.5
5.	35.6	58.0	6.4	" " "	8.2	0.074	0.047	14.3	138	0.95	11.0
6.	36.6	57.0	6.4	" " "	8.0	0.077	0.035	16.6	147	0.71	9.0
7.	33.6	56.0	10.4	" " "	8.1	0.064	0.051	14.0	156	1.02	8.5
8.	33.6	60.0	6.4	" " "	8.2	0.064	0.037	13.3	156	0.75	8.5

(Contd.....)

Sr. No.	Clay %	Silt %	Sand %	Textural Class -	pH -	Total Soluble Salts %	Total Nitrogn %	Available Phosporus ppm	Available Potassium ppm	Organic Matter %	Lime ($CaCO_3$) %
1	2	3	4	5	6	7	8	9	10	11	12
Sufaid Dehri RD. 53700											
1.	31.2	56.0	12.8	silty clayloam	8.2	0.080	0.049	12.2	193	0.98	18.3
2.	29.2	54.0	16.8	" " "	8.5	0.074	0.059	1.0	165	1.19	17.8
3.	29.2	58.0	16.8	" " "	8.2	0.077	0.054	23.3	266	1.09	15.5
4.	27.2	62.0	10.8	" " "	8.2	0.102	0.064	21.6	248	1.28	17.0
5.	29.2	56.0	14.8	" " "	8.3	0.083	0.059	14.6	220	1.19	17.5
6.	29.2	62.0	8.8	" " "	8.2	0.080	0.061	15.4	184	1.22	18.0
7.	33.2	52.0	14.8	" " "	8.4	0.112	0.059	16.7	202	1.19	17.8
8.	31.2	50.0	18.8	" " "	8.3	0.083	0.051	23.6	128	1.02	16.0
9.	33.2	52.0	14.8	" " "	8.4	0.091	0.049	18.7	184	0.98	17.8
10.	35.2	52.0	12.8	" " "	7.8	0.058	0.071	24.9	220	1.43	17.5
11.	35.2	42.0	22.8	clay loam	7.9	0.080	0.061	8.7	220	1.22	17.8
12.	37.2	40.0	22.8	" "	7.9	0.080	0.056	4.6	174	1.12	17.8
13.	31.2	56.0	12.8	silty clay loam	7.9	0.090	0.044	3.9	147	0.88	18.0
14.	31.2	64.0	4.8	" " "	7.0	0.070	0.069	10.5	266	1.36	16.8
15.	33.2	58.0	8.8	" " "	7.9	0.102	0.058	32.9	386	1.16	18.8
16.	25.2	66.0	8.8	silty, loam	8.0	0.112	0.076	14.2	349	1.53	17.5
17.	29.2	60.0	10.8	silty clay loam	7.9	0.141	0.056	10.5	294	1.12	16.3
18.	17.2	40.0	42.8	loam	8.0	0.080	0.075	16.0	432	1.50	17.8
19.	17.2	38.0	45.8	"	8.2	0.091	0.069	8.0	395	1.39	17.5

(Contd....)

Sr. No.	Clay %	Silt %	Sand %	Class -	pH -	Total Soluble Salts %	Total Nitrogn %	Available Phosp-orus ppm	Available Potas-sium ppm	Organic Matter %	Lime ($CaCO_3$) %
1	2	3	4	5	6	7	8	9	10	11	12
Suleman Khel RD. 70800											
1.	17.2	46.0	36.8	loam	8.1	0.090	0.046	17.1	294	0.92	19.3
2.	17.2	46.0	36.8	"	8.0	0.096	0.061	15.5	266	1.22	18.8
3.	17.2	54.0	28.8	silt loam	8.1	0.064	0.039	15.1	211	0.78	19.8
4.	17.2	70.0	12.8	" "	8.1	0.067	0.032	30.6	248	0.65	19.5
5.	17.2	72.0	10.8	" "	8.0	0.074	0.047	11.6	239	0.95	20.0
6.	17.2	70.0	12.8	" "	8.1	0.090	0.039	15.5	295	0.78	19.5
7.	25.8	50.0	24.2	" "	8.1	0.080	0.046	15.9	220	0.92	19.33
8.	27.8	58.0	14.2	" "	8.0	0.157	0.056	13.7	423	1.12	21.8
9.	19.8	50.0	30.2	" "	8.1	0.074	0.047	15.4	248	0.95	19.5
10.	25.8	50.0	24.2	" "	8.2	0.067	0.047	15.6	257	0.75	21.8
11.	25.8	50.0	24.2	" "	8.2	0.070	0.042	15.0	230	0.92	19.3
12.	27.8	48.0	24.2	clay loam	8.2	0.090	9.042	17.9	276	0.85	18.3
13.	29.8	52.0	18.2	silty clay loam	8.1	0.080	0.047	26.6	248	0.95	21.5
14.	25.8	50.0	24.2	silt loam	8.0	0.288	0 049	15.0	331	0.98	21.8
15.	21.8	60.0	18.2	" "	8.1	1.160	[illegible]	30.0	331	0.92	19.8
16.	23.8	54.0	22.2	" "	8.1	1.160	0.034	42.0	266	0.68	22.3
17.	15.8	70.0	14.2	" "	8.1	0.160	0.027	42.9	184	0.54	20.5
18.	15.8	70.0	14.2	" "	8.2	0.067	0.039	39.1	285	0.78	20.0
19.	19.8	56.0	24.2	" "	8.1	0.154	0.047	35.7	368	0.95	20.8
20.	21.8	60.0	18.2	" "	8.2	0.074	0.040	33.3	349	0.98	19.3

(Contd.....)

Sr. No.	Clay %	Silt %	Sand %	Textural Class -	pH	Total Soluble Salts %	Total Nitrogn %	Available Phosporus ppm	Available Potassium ppm	Organic Matter %	Lime ($CaCO_3$) %
1	2	3	4	5	6	7	8	9	10	11	12
Maryum Zai RD.115806											
1.	29.8	36.0	34.2	loam	8.2	0.064	0.034	18.5	230	0.68	14.5
2.	21.8	64.0	14.2	silty loam	8.0	0.064	0.032	12.9	239	0.65	17.0
3.	19.8	62.0	18.2	" "	8.0	0.048	0.041	22.0	331	0.82	18.0
4.	21.8	64.0	14.2	" "	8.0	0.064	0.032	19.1	340	0.65	16.0
5.	32.9	62.0	14.2	" "	7.8	0.067	0.037	21.4	404	0.75	17.3
6.	21.8	60.0	18.2	" "	8.0	0.048	0.037	19.0	386	0.75	14.0
7.	21.8	64.0	14.2	" "	8.0	0.067	0.035	22.2	358	0.71	16.0
8.	19.8	56.0	24.2	" "	8.1	0.064	0.030	26.7	312	0.61	16.3
9.	15.8	80.0	4.2	" "	8.5	0.064	0.032	17.3	377	0.65	16.3
10.	25.8	50.0	24.2	" "	7.6	0.058	0.029	20.2	414	0.58	14.8
11.	29.8	66.0	4.2	siltyclay loam	8.2	0.064	0.034	17.9	395	0.75	12.3
12.	27.8	58.0	14.2	" " "	8.3	0.058	0.034	18.7	441	0.68	14.8
13.	25.8	50.0	24.2	silt loam	8.4	0.08	0.042	22.7	395	0.85	14.0
14.	19.8	58.0	22.0	" "	8.0	0.064	0.024	24.0	312	0.48	16.3
15.	19.8	66.0	14.2	" "	8.5	0.048	0.032	40.2	276	0.65	15.8
16.	27.8	42.0	30.2	clay loam	8.1	0.048	0.024	43.2	257	0.48	15.5
17.	27.8	42.0	30.2	" "	8.4	0.048	0.068	22.5	239	1.36	14.5
18.	19.8	58.0	30.0	silt loam	8.0	0.048	0.030	25.2	230	0.61	16.3

(Contd....)

Sr. No.	Clay %	Silt %	Sand %	Class -	pH -	Soluble Salts %	Nitrogn %	Phosp-orus ppm	Potas-sium ppm	Mati - %	Lime ($CaCO_3$) %
1	2	3	4	5	6	7	8	9	10	11	12
Tela Bund RD.132000											
1.	30.4	46.0	23.6	clay loam	8.3	0.067	0.027	31.7	128	0.54	14.8
2.	30.4	46.0	23.6	" "	8.3	0.058	0.030	32.1	147	0.61	13.5
3.	32.4	54.0	13.6	silty clay loam	8.3	0.048	0.029	31.9	138	0.58	15.3
4.	30.4	52.0	17.6	" " "	8.3	0.032	0.029	23.9	174	0.37	16.8
5.	28.4	52.0	19.6	" " "	8.4	0.058	0.032	39.1	165	0.65	14.5
6.	22.4	54.0	23.6	silty loam	8.4	0.032	0.022	33.8	174	0.44	17.3
7.	22.4	58.0	19.6	" "	8.3	0.032	0.029	32.0	165	0.58	15.8
8.	26.4	50.0	23.6	loam	8.2	0.032	0.046	23.2	174	0.92	14.0
9.	32.4	44.0	32.6	clay loam	8.2	0.032	0.035	35.2	193	0.85	12.0
10.	34.4	42.0	23.6	" "	8.3	0.064	0.035	36.2	211	0.71	15.0
11.	30.4	56.0	13.6	silty clay loam	8.3	0.032	0.025	28.6	156	0.51	19.5
12.	30.4	56.0	13.6	" " "	8.3	0.048	0.030	26.6	174	0.61	19.0

(Concluded)

M.KHAN/**

BASE LINE SURVEY FOR COMMAND WATER MANAGEMENT

PROJECT - WARSAK LIFT CANAL

PART: V

MAIN FINDINGS

DR.NURUL-ISLAM MIAN

Institute of Development Studies

N.W.F.P Agri. University, Peshawar

239a

SOCIO-ECONOMIC PROFILE OF WATER USERS

HOUSEHOLD SIZE

The average household size is 12.86 in the Project Area taken as a whole this is substantialy larger than the corresponding figure of 8.93 (estimated) for rural - Peshawar district. The joint family system is still holding strong in the Project Area.

LITERACY

Almost 29 percent of the sample household heads are literate. The corresponding figure for household members taken as a whole is 37.86 percent (including students).

DEPENDENCY LOAD

There are 6.77 dependents per earner. Out of the 263 in the 159 sample households under study, earners only four are females. Participation of women even in family farm work is negligible.

OCCUPATION

Farming is the major occupation of 39.16 percent earners Another 12.17 percent earners are absentee landlords living only or mainly on land. A large proportion of earners has two sources of income. To the total income of the sample households, agriculture's contribution is only 37.51 percent.

LAND:

The sample households, taken in general, own and operate below subsistence holdings-3.12 hectares and 2.24 hectares respectively, in an outside the command area of the Warsak Lift Canal. If only the command area were considered then the figures would be 2.08 hectares and 1.55 he respectively. No household owns more than 20 hectares.

Renting out of land is widespread. Almost 34 percent of the land owned by the sample households has been rented out. As many as 32 (out o the total of 159) households have rented out all of their land. Both managemental and economic factors account for this situation

WATER

Water is drawn by the farmers under the customary system of warabar In two of the six sample water courses warabandi has been fixed by water users themselves, and in the other four by the Irrigation Department. Tl private warabandi is not liked by the water users. They have expressed preference for fixation of water turns by the goverr. ent to ensure equi distribution of water.

Shortage of water is a common complaint. The Tail Section of the Canal is the worst hit in this respect. During April - December 1988, almost 60 percent sample farmers in the six sample watercourses taken a a whole lost more than five water turns each mainly because of non-avai ability of water in the channel; see Table II.15. The Tail end water course didnot receive any water in 1988,while the one at the Head of th Tail received so little of it that all the sample farmers there lost mo than five water turns.

De-siltation of watercourses is done by the water users themselves. The overwhelming majority of them is satisfied with the existing system. But the relatively more enlightened water users are not. Although most of the water users have spoken positively of the de-siltation arrangements it may be stated all the sample water courses and many others seen by the field staff during the survey were found in bad shape and not properly de-silted.

CROPPING PATTERN

Wheat, Maize and Fodder crops account for bulk of the cropped area in the sample water courses taken as whole. Of the total cropped area in 1987-88, the share of wheat was 46.22 percent, Maize followed with 20.46 percent, while Sorghum and Berseem accounted for 11.57 percent and 8.66 percent respectively. The other important crops were Barley (5.40%) and Sugarcane (4.16 %). Spinach, Peas, and Pigeon Peas accounted for the rest of the area.

Cropping pattern in the Head Section as well as the Tail Section of the Canal is somewhat subsistence oriented. On the other hand, that in the Middle Section has a commercial touch as indicated by its percentage area under fodder crops which is much higher than in the other two sections. This is explained chiefly by the presence of a vast fodder market quite close to the Middle Section watercourses. Farmers elsewhere, too, have also been noted trying to give commercial orientation to their cropping pattern. But those in the Middle Section are presently more prominent in this respect.

CROPPING INTENSITY

Comparative position of the six watercourses under study in respe of cropping intensity is in line with that in the matter of water avai bility. The Head Section tops with the figure of 112 followed by the Middle Section with 105, Tail Section's corresponding figures is only 48.

The cropping intensity range is 43 to 152. The lowest is reported from the Tail end watercourse and the highest from that at the Head of Head Section of the canal. These two figures speak of the cruciality o water factor in determining the cropping intensity and, thus, of the n to improve the situation on the water front.

USE OF SELECTED FARM INPUTS AND MACHINES

Fertilizers. Use of chemical fertilizers is widespread. Almost all farmers use some kind of these. But the quantity used for most of the crops falls considerably short of the recommended one. Crop-wi data for shortfall below the recommended level are given below:

Crop	Fertilizers used as percentage of the recommended dose
- Maize	39.52
- Sorghum	51.59
- Sugarcane	28.11
- Wheat	62.25
- Barley	74.67
- Spinach	69.57

Plant Protection: Only five out of the total of 159 sample farmers used insecticides/pesticides etc.

Improved Seed: Awareness of improved seed is very limited. Most of the farmers use their own seed, and are unable to identify its variety.

Tractor is used by 95.60 percent sample farmers. Only seven farmers (out of the total sample of 159) own tractors; one each. Rest of the farmers use rented in tractors.

Threshers are used by 99.37 percent sample farmers. Four of them have their own threshers, while the rest of them use rented in ones.

INPUT SUPPLY PROBLEMS

The commonest problem is that fertilisers, insecticides, improved seed, and tractors/threshers on rent are not available in a sufficient supply within the farmers' villages. Consequently they have to go to other places, mostly to Peshawar City, which is time consuming, inconvenient, and expensive. Besides, they face considerable problem in transporting the inputs to their villages.

AGRICULTURAL INFORMATION

No farmer reported having taken agricultural information directly from agricultural extension officials. However, a fair number of them (25.79%) secured this from Radio and Television (9.43%). These percentages should infact be credited to the account of the extension agencies as the Radio/T.V. programmes concerned are produced by them. But on the whole the role of agricultural extension services has not been very impressive in the field concerned.

CREDIT

Only five sample farmers have borrowed from banks. And all of them are big land owners by the Project Area's standards. The question on credit was taken back to the respondents to know why such a small perce of them resorted to borrowing. The commonest reply was that their inves needs were limited owing to small land holdings. These could be met fro their own sources and/or borrowing from friends/family members for shor periods. There is, however, an additional factor, too. It is that of th stringent requirements and exhausting procedures of institutional credi which the small farmers can neither satisfy nor withstand.

CROP YIELDS

Crop yields in the Project Area are low by the Provincial standard for the irrigated areas. Within the Project Area, the Middle Section of the Canal has generally speaking higher yields than the rest of the are. The water factor has played important role in shaping the yield picture as reproduced below from Table II.45.

CROP YIELDS PER HECTARE ON SAMPLE FARMS

Sr. No.	Crops	Unit	Head section	Middle section	Tail section	All sections
0.	1	2	3	4	5	6
1.	Maize Grain	Maunds	12.06	16.00	1.57	12.77
2.	Maize Fodder	Bundles	529.00	671.00	99.00	465.00
3.	Sorghum	Rupees	1731.00	4706.00	146.00	3831.00
4.	Sugarcane	Maunds	323.00	494.00	246.00	390.20
5.	Pigeon Peas	Bundles	-	264.00	-	264.00
6.	Wheat	Maunds	29.84	29.80	13.39	26.03
7.	Barley Grain	Maunds	13.00	14.36	11.83	11.32
8.	Barley Fodder	Rupees	3769.00	4063.00	1855.00	3012.00
9.	Berseem	Rupees	5688.00	6771.00	1901.00	6196.00
10.	Peas	Maunds	-	33.56	-	33.56
11.	Spinach (seed)	Maunds	-	9.60	-	9.66

Note: Yeilds for crops at 3,8 and 9 are given in terms of money received (rupees) from their sale. They were sold in field, un-harvested.

Water is, no doubt, the most crucial determinant of yield. Taking this factor as given, the role of inputs, cultivation practices etc in this respect is no small either. It is this factor i.e; input-mix, which chiefly explains why a number of farms in the tail reaches of some watercourses had higher yields than those in the upper reaches. Table II.46 and II.50 on yield of Maize and Wheat respectively may be cited in evidence.

Yield differentials are large in different sections of the Canal. these are not so sharp as between different reaches of individual water courses or those of the Canal as a whole. This is chiefly attributable the fact that the distribution of water within the given watercourses i less uneven than that between different sections of the Canal. There ar a number of cases of watercourses drawing more water at the expense of others. These watercourses irrigate the lands of the influential land owners. A more fair distribution of water among the water courses could help reduce yield differentials without substantially affecting the yie in those areas which are now getting more water than their due share.

FARMING COST

Farming cost per composite cropped hectare (i.e; average of all crops) was Rs. 4376 in the Project Area taken as a whole. The correspon figure per farm is Rs. 7362. These figures are computed by economic accounting principles i.e; all inputs are costed irrespective of the fa whether they were self-supplied or paid for. Self-supplied inputs accou for 65.14 percent of the total cost of farming (see Table II.57).

CROP - WISE PROFIT/LOSS

The sample farmers incurred losses on cultivation of Maize, Barley and Pea. The losses were so heavy that despite surplus enjoyed on other crops the farmers suffered loss of Rs. 277 per hectare of cropped land (average of all crops); see Table II.63. This was the average situation in the Project taken as a whole. Only the Middle Section sample farmers enjoyed profit of Rs. 17 per hectare. In the Head Section the farmers r into red to the extent of Rs. 211 per hectare. The corresponding figure for the Tail Section is as high as Rs.975.

CROP-WISE PROFIT/LOSS IN DIFFERENT SECTIONS OF THE CANAL (1987-88)

(Rupees/hectare)

Sr. No.	Crop	Profit/Loss		
		Head Section	Middle Section	Tail Section
0		2	3	4
1.	Maize	- 1953	- 2379	3252
2.	Sorghum	- 1613	979	3206
3.	Sugarcane	789	4077	3911
4.	Pigeon Pea	-	351	
5.	Wheat	838	73	677
6.	Barley	- 1564	451	132
7.	Berseem	- 544	1854	2466
8.	Pea	-	1020	
9.	Spinach	-		2937
10.	All Crops (average)	- 241	17	975

OVERALL PROFIT/LOSS ON FARMING

Profit/loss position per farm is summed up below with and without accounting for home supplied inputs; see also Table 11.64.

Locality	Profit/Loss if: All inputs costed (Rs)	Only purchased inputs considered (Rs)
1. Head Section	- 429	5883
2. Middle Section	70	5175
3. Tail Section	- 1101	1397
4. All Sections	- 466	4040

DISPOSABLE INCOME FROM ALL SOURCES

Disposable income per capita average Rs. 2159 for all sections of the Canal taken as a whole. In the Head Section it is Rs. 235' and in th Middle Section Rs. 2823. The Tail Section is also at the tail in this respect with a meagre sum of Rs 1118.

INCOME COMPOSITION

Agriculture accounts for only 37.51 percent of the total disposable income. Paid employment - all off farm, has the corresponding figure of 49.33 percent. Rest of the income - 13.16% of the total, is drawn from industry (2%), trade (6.76%), rent of property (2.23%), and other sources (2.17 %). The latter comprise transport, remittances etc.

The sample populations' income composition turned out to be contrary to the expected pattern. Since the study was addressed to land owners it was expected that agriculture would be found to be their main stay. The low percentage share of the agricultural section in the disposable income is, however, explained sufficiently by the smallness of owned/operated holdings of the sample households under study, largeness of household siz nearness of a big urban centre (the Peshawar City) etc. These factors impact, and also make possible, a diversification in the sources of income and employment.

II. ENGINEERING ASPECTS

Engineering study concerning the canal, the water courses, waterflow etc; reveal, on the whole, unsatisfactory state of affairs with respect to efficiency of the main system, distribution of water etc. The main findings are as follows:

The main system is unreliable as well as inequitable. The canal remained dry for about 85 days besides the seasonal closure during January. Considerable flow rate fluctuations were noted which reveal that besides being unreliable the main system is inequitable, too. For example, the main system performance during the first fortnight of November was about 63% at the inflow, about 94% at off-take of Regi Minor, about 149% at off-take of Mashugaggar Minor, about 66% at off-take of Badaber Minor and 0% at off-take of surizai Minor. A similar picture emerged from the comparisons for the next three fortnights of the study period. Thus, on the whole system is unreliable and inequitable.

WATERCOURSES

The average mean conveyance efficiencies for watercourses range between 72.88% and 83.58%.

DISTRIBUTION UNIFORMITY

The water distribution system is quite inequitable. The actual water allowances on RD-22,00 L, RD-45,800 L, RD-53,700 L, RD-70,800 L and

RD-115,800 L, are 0.0074, 0.0042, 0.0082, 0.004, and 0.0026 against the authorized water allowance of 0.004. The authorized discharge of watercut No. RD-22,000 L is not known.

FIELD LEVEL IRRIGATION PERFORMANCE PARAMETERS

The application efficiencies range between 75% and 95% and the requirement efficiencies between 62% and 100%. The application efficiencies are satisfactory and could be improved further with precision land levell

GROUND WATER

The minimum depth of water table is 30 feet. Further exploration through trial bores is needed in order to enable assessment of the ground water potential in the project area.

III. S O I L S

The soil surface is level, and nearly level to undulating. The land is intensively used for cropping. The soils were identified and described upto series/phase levels in especially prepared pits, mini pits and by auguring and boundaries checked occasionally. Four soil series-Peshawar, Tarnab, Mansooka and Pirsabak could be classified to Typic Camborthids subgroup, while Chamkani and Shahab series to Typic Torriorthids and Typic Torrifluents respectively.

Peshawar series is fine textured, well drained, calcareous, deeply developed in piedmont material of middle Pleistocene age. The Tarnab series is moderately fine textured, moderately well drained, shallowly developed in mixed calcareous alluvium of piedmont during the Subrecent period, occurs in depressions. Mansooka series consists of moderately deep, well drained, calcareous, medium textured soils developed in reddish brown dissected piedmont alluvium of Subrecent epoch. The Chamkani series consists of moderately deep, well drained, calcareous and medium textured soils with structural B horizon, developed in the Subrecent piedmont plain. The Pirsabak series consists of deep, well drained, medium textured soils developed in the loess redeposited during Subrecent period. The Shahab series has developed in piedmont material probably deposited in recent period, stratified with no B horizon; Peshawar, Tarnab, Chamkani, Pirsabak, Mansooka and Shahab series occupy 34, 25,15,13,8 and 5% of total surveyed

area respectively. Major soil series in RD 22000 are Tarnab, Chamkani a Mansooka; in RD 45800 Tarnab and Chamkani; in RD 53700 Peshawar and Tarnab; in RD 70800 Peshawar; in RD 115806 Pirsabak and in RD 132000 Chamkani and Mansooka series.

Soil samples (0-30cm depth) analysis indicates that majority of soils are medium to moderately fine textured, nonsaline, moderately alkaline (pH 7.9 to 8.4), moderately to strongly calcareous, low to medium in organic matter, deficient in total nitrogen and having medium to high available phosphorus and potassium contents.

On the basis of limitations in land use and agricultural potential, the soils were grouped into land capability classification. Class I (ver good irrigated land of very high potential) with minor limitations occup 71% area, class II (good irrigated land of high potential) with gentle slope and laminated loamy soils, occupies 9% area, class III (moderate irrigated land of moderate potential) with shallow depth, rapid permeabil and low fertility, occupies 6% area and Class IV (poor/marginal irrigated land of poor potential) with very shallow depth and very rapid permeabili occupies 3% area, while 7% area is gravelly and unproductive Class VIII.

BASE LINE SURVEY FOR COMMAND WATER MANAGEMENT

PROJECT - WARSAK LIFT CANA

Institute of Development Studies

PART: VI

CONCLUSIONS AND RECOMMENDATIONS

DR.NURUL-ISLAM MIAN

N.W.F.P Agri. University, Peshawar

253a

CONCLUSIONS AND RECOMMENDATIONS

This study was primarily meant for establishing base line data to be used for evaluation of performance of the Command Water Management Project after its completion. Its use is, however, not limited to this single purpose. It has brought out some useful information for incorporation in action plans for relevant developments in the project area. The relevant conclusions and recommendations are presented in this part of the report. A quick and brief recapitulation of important findings seems in point to provide a proper perspective to these conclusions and recommendations. The latter are by no means all embracing as it is expected that experts would further subject the findings to a threadbare examination and develop appropriate policies/plans.

The target population in the Project Area is poor even by the country's standard. Its per capita income is only 31 percent of the national average for the year 1987-88). A host of factors account for this low income. These include, large household size, small land holdings, lack of on and off-farm jobs, illiteracy etc. But the most important factor, which is of direct interest and relevance to the CWMP, is that the farming sector is characterised by i.low cropping intensity; and ii.low yields. Average yields in the Project Area are far less than the Provincial averages for irrigated areas. Crop failures are frequent. Low yields are attributable to a number of factors of which the most important ones , as brought out by the study, are as follows:

i. Overall water shortage.

The canal suffers from an overall shortage of water.

ii. Inequitable inter-watercourse distribution of water.

The water quota fixed by the Irrigation Department is equitable the sense that it doesnot discriminate between different land owners. the problem is created by water users. It is not infrequent that latter enlarge the water inlet to secure more water from the canal. of the six sample water courses were found drawing twice as much water was their sanctioned quota. This problem is found especially in watercourses where land is owned by influential persons.

iii. Inequitable intra-watercourse distribution of water.

This problem is less acute than the aforementioned one. It is caus chiefly by shortage of water. The tail reach farmers are worst affect by it.

In one of the watercourses, however, a number of respondents repor that the influential landlords got more water than was their fair shar This watercourse has private Warabandi system. Due to land sales/transf too, dispute on water share have arisen in a number of other places to Many landowners think that Warabandi should be done anew to set right tl disputes.

iv. Agricultural inputs

Proper agricultural inputs are not being used in right quantum/volu Lack of financial resources/ proper distribution system/ know how etc;ar responsible for this situation.

v. Most of the farmers donot use the improved cultural practices to the required extent.

vi. Agricultural information system's coverage of the farms is inadequate.

vii. Credit facilities are limited.

From the foregoing it is concluded that in order to enhance cropping intensity and crop yields attention need be focused on:

i. increasing the water supply;

ii. ensuring equitable distribution of canal water;

iii. improving the situation with respect to input supply, credit, agricultural information, marketing etc; and

iv. all such other aspects of farming, including horticulture and livestock, as may be necessary in order to achieve best results from the given resources.

These imperatives are taken care of by the CWMP scheme outlined in Part I. The present study supports the CWMP approach.

Removal/minimisation of water constraints would assuredly result in visible improvement in cropping intensity, yields, cropping pattern etc; and so in farm profits. Institutional improvements envisaged by the CWMP would further strengthen the farm sector.

Small size of holdings places a definite limit to income expansion through crop improvements. The CWMP should therefore, look also for income diversification. To this end, the horticulture and livestock sectors need and can be developed.

The CWMP administrators should take a special note of the fact that the farm sector is not the main stay of the target population taken in general. Therefore, to get them interested in the proper use of water, proper maintenance of water courses, use of improved inputs, adoption of scientific farm management system etc; it would be necessary to adopt very persuasive and attractive measures. What should be the approach? is a subject fit for a separate study. However, a broad policy suggestion is this, that the target population should be associated with the uplift work as much as possible. The project should be implemented speedily. The old perfunctory approach should be discarded in favour of serious, concerte and visibly productive work. There are many watercourses with unique problems, suggesting that the CWMP should be programmed to attend to such unique cases too.

The project inputs i.e; the work envisaged under CWMP, which are stated in Part I, cover all the recommendable things that need to be done to achieve the CWMP objectives. The action envisaged by the CWMP is in line with the expressed needs of the target population, and the imperatives highlighted by this study. The target population has, however, expressed dis-satisfaction with the speed of project implementation work. A closer and continuous association of technical experts from donor agencies with the project implementation work is strongly recommended as this would greatly help speed up its implementation. The utility of this recommendatic was clearly observable while the present study was in progress. It is also recommended that in-depth studies be conducted on the following subjec

i. Water course Management:

The focus to be on relevant aspects of formation of Water User's Association.

ii. Warabandi:

The focus to be on the extent of inequitable Warabandi. Should the Irrigation Department step in where this is done by land owners themselves? should all Warabandies be re-examined elsewhere?

iii.Rationalisation of Abiana rates and collection method.

The crop based Abiana is not a rational base in the view of this study. The present system of Abiana collection doesnot seem to be fool proof and fair to payers. The Abiana rates arouse questions. These and other relevant aspects deserve a scientific probe in the particular context of the Project Area.

iv. Input supply problems.

How to overcome these? Is the introduction of coops a feasible proposition to this end? Or should the Waterusers Associations be used for this purpose? This is a series problem. A detailed study is needed to bring out its nature, extent and remedies. It may be emphasised here that a single model of coops may not solve the problem. Different watercourses have different social and economic characteristics and would respond differently to a given coops model. Therefore, the study should be conducted in a sufficiently large number of watercourses.

Earlier in this report the need for PID-Wateruser's close cooperat and contact was stressed as one of the essentials for the success of Ch Although the water users were found critical of the slow speed of can improvement work, it was noted that they looked upon the Irrigati Department as an acceptable agency to settle water management problem The small land owners see in the P.I.D; as the only hope to get th equitable share of water. Formation of Water Users Associations (WU should, therefore, be pursued as a high priority objective. The WUAs, w help the PID combat relevant problems more effectively than now, as P would then have public support to enforce its rules. The WUAs, can b deployed also to deal with input supply/marketing problems etc. This sub however, need be studied in detail to work out a workable scheme.

APPENDICES OF PART-II

No	TITLE	PAGE
A.1	LAND OWNED, RENTED IN, RENTED OUT AND OPERATED IN SAMPLE WATER COURSES	262
A.2	CROPPING PATTERN ON SAMPLE FARMS IN 1987-88	263
A.3	USE OF CHEMICAL FERTILIZERS, INSECTICIDES, PESTICIDES AND THEIR SOURCES OF SUPPLY	264
A.4	CROPWISE FERTILIZER CONSUMPTION PER HECTARE USED AND AS RECOMMENDED	265
A.5	USE OF IMPROVED SEED AND SOURCE OF SUPPLY	267
A.6	WATER COURSE WISE FARM MACHINERY AND IMPLEMENTS OWNED BY SAMPLE FARMERS	269
A.7	NUMBER OF LIVESTOCK OWNERS	271
A.8	NUMBER OF LIVESTOCK OWNED BY SAMPLE HOUSEHOLDS	272
A.9	MILK PRODUCTION AND DISPOSAL	273
A.10	FRUIT TREES OF SAMPLE HOUSEHOLDS	274
A.11	INCOME FROM SALE OF FRUIT	275
A.12	CROP-WISE DISPOSAL OF OUTPUT OF SAMPLE FARMS	276
A.13	COMPOSITION OF FARMING COST, (ALL CROPS)	280
A.14	CROP-WISE FARMING COST BY MAJOR COMPONENTS OF COST IN SAMPLE WATER COURSE RD.22000	282
A.15	CROP-WISE FARMING COST BY MAJOR COMPONENTS OF COST IN SAMPLE WATERCOURSE RD.45800	285
A.16	CROP-WISE FARMING COST BY MAJOR COMPONENTS OF COST IN SAMPLE WATERCOURSE RD.53700	288
A.17	CROP-WISE FARMING COST BY MAJOR COMPONENTS OF COST IN SAMPLE WATER COURSE RD.70000	291
A.18	CROP-WISE FARMING COST BY MAJOR COMPONENTS OF COST IN SAMPLE WATERCOURSE RD.115806	294
A.19	CROP-WISE FARMING COST BY MAJOR COMPONENTS OF COST IN SAMPLE WATERCOURSE RD.132000	297

No	TITLE	P
A.20	VALUE OF CROPS RAISED ON SAMPLE FARMS	2
A.20.1	SUMMARY STATISTICS ON COST AND RETURN FROM CROPS RAISED ON SAMPLE FARMS IN 1987-88	3
A.21	PROFIT AND LOSS ACCOUNT OF MAIZE CROP	3
A.22	PROFIT AND LOSS ACCOUNT OF SORGHUM CROP	3
A.23	PROFIT AND LOSS ACCOUNT OF SUGARCANE CROP	3
A.24	PROFIT AND LOSS ACCOUNT OF PIGEON PEA CROP	2
A.25	PROFIT AND LOSS ACCOUNT OF WHEAT CROP	3
A.26	PROFIT AND LOSS ACCOUNT OF BARLEY CROP	3
A.27	PROFIT AND LOSS ACCOUNT OF BERSEEM CROP	30
A.28	PROFIT AND LOSS ACCOUNT OF PEA CROP	30
A.29	PROFIT AND LOSS ACCOUNT OF SPINACH CROP	31
A.30	SAMPLE HOUSEHOLDS DISPOSABLE INCOME DURING 1987-88	31
A.31	MONTHLY INCOME OF WORKING MEMBERS OF SAMPLE HOUSEHOLDS FROM PAID EMPLOYMENT	31
A.32	MANUAL LABOUR, ANIMAL LABOUR AND MACHINE DAY/HOURS SPENT PER CROP	31
A.33	MANUAL LABOUR, ANIMAL LABOUR AND MACHINE DAY/HOURS SPENT PER CROP PER HECTARE	31
A.34	IRRIGATION TIME ALLOWED PER TURN	31
A.35	NUMBER OF WATER TURNS LOST DURING APRIL - DECEMBER 1988	32
A.36	USE OF TRACTOR BY SAMPLE FARMERS	321
A.37	USE OF THRESHERS BY SAMPLE FARMERS	32
A.38	MAIZE CROPS AREA USED AS FODDER AND FOR GRAIN PRODUCTION ON SAMPLE FARMS	32

Appendix Table A.1

LAND OWNED, RENTED IN, RENTED OUT AND OPERATED IN SAMPLE WATER COURSE

Sr. NO.	Land	Location of land	Head of Canal RD 22000	Head of Canal RD 45600	Head of Canal Total	Middle of Canal RD 53700	Middle of Canal RD 73800	Middle of Canal Total	Tail of Canal RD 115906	Tail of Canal RD 132000	Tail of Canal Total	All places
1.	Owned	a.	37.23	53.01	9[illegible].24	55.74	53.72	109.46	51.50	79.12	130.62	330.32
		b.	5.06	41.78	46.84	27.92	33.63	61.55	27.62	28.94	56.56	164.94
		c.	42.29	94.79	137.08	82.66	87.35	171.01	79.12	108.06	187.18	495.[illegible]
2.	Rented in	a.	2.83	7.48	10.31	5.26	8.05	13.31	2.83	-	2.83	26.45
		b.	-	-	-	-	1.42	1.42	-	-	-	1.42
		c.	2.83	7.48	10.31	5.26	9.47	14.73	2.83	-	2.83	27.87
3.	Rented out	a.	17.04	17.10	34.14	42.59	12.75	55.34	8.80	11.94	20.74	110.22
		b.	1.42	25.50	26.92	22.46	4.45	26.91	1.62	1.21	2.83	56.66
		c.	18.46	42.60	61.06	65.05	17.20	82.25	10.42	13.15	23.57	166.88
4.	Operated	a.	23.02	43.39	66.41	18.41	49.02	67.43	45.53	67.18	112.71	246.55
		b.	3.64	16.26	19.92	5.46	30.60	36.06	26.00	27.73	53.73	109.71
		c.	26.66	59.67	86.33	23.87	79.62	103.49	71.53	94.91	166.44	356.26

a. In this part of watercourse
b. In other places

Appendix Table A.2

CROPPING PATTERN ON SAMPLE FARMS IN 1987-88

Area	Head Section						Middle Section						Tail Section							
	RD 22,000		RD 45,800		Total		RD 53,700		RD 70,800		Total		RD 115,806		RD 132,000		Total		All place	
Season/Crops	Hectare	%	Hectare	%	Hectare	%	Hectare	%	Hectare	%	Hectare	%	Hectare	%	Hectare	%	Hectare	%	Hectare	%
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	2
I. Kharif 1987																				
i. Maize	16.19	46.35	8.55	16.01	24.73	28.00	15.24	25.84	6.73	14.17	21.97	20.64	4.19	8.14	3.84	5.86	8.03	6.86	54.73	17.
ii. Sorghum	1.92	5.50	5.56	10.41	7.48	8.47	18.17	30.81	4.24	8.93	22.41	21.05	0.55	1.07	0.51	0.78	1.06	0.91	30.95	9.
iii. Sugarcane	-	-	4.96	9.29	4.96	5.62	3.14	5.32	0.35	0.74	3.49	3.29	2.68	5.20	-	-	2.68	2.29	11.13	3.
iv. Pigeon Pea	-	-	-	-	-	-	-	-	1.06	2.23	1.06	1.00	-	-	-	-	-	-	1.06	0.
v. Fallow	16.81	48.15	34.34	64.29	51.15	57.92	22.42	38.02	35.10	73.93	57.52	54.03	44.07	85.59	61.21	93.36	105.28	89.94	213.95	68.
v. All Crops	34.91	100.00	53.41	100.00	88.32	100.00	58.97	100.00	47.48	100.00	106.45	100.00	51.49	100.00	65.56	100.00	117.05	100.00	311.82	100.
II. Rabi 1987-88																				
i. Wheat	31.31	89.69	20.33	38.06	51.64	58.47	24.29	41.19	18.16	38.25	42.45	39.88	17.60	34.18	11.93	18.20	29.53	25.23	123.62	39.
ii. Barley	1.47	4.21	1.53	2.86	3.00	3.40	0.76	1.29	1.01	2.13	1.77	1.66	2.57	4.99	7.08	10.80	9.65	8.24	14.42	4.
iii. Berseem	2.13	6.10	5.31	9.94	7.44	8.42	10.92	18.52	3.84	8.08	14.76	13.87	0.96	1.86	-	-	0.96	0.82	23.16	7.
iv. Pea	-	-	-	-	-	-	-	-	3.73	7.86	3.73	3.50	-	-	-	-	-	-	3.73	1
v. Spinach	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.66	7.11	4.66	3.98	4.66	1
vi. Fallow	-	-	26.24	49.13	26.24	29.71	23.00	39.00	20.74	43.68	43.74	41.27	30.36	58.96	41.89	63.89	72.25	61.73	142.23	45
vi. All crops	34.91	100.00	53.41	100.00	88.32	100.00	58.97	100.00	47.48	100.00	106.45	100.0	51.49	100.00	65.56	100.00	117.05	100.00	311.82	100
III. Cropping Intensity	151.85		86.57		112.37		122.98		82.39		104.70		55.45		42.75		48.33		85.77	

Appendix Table A.3

USE OF CHEMICAL FERTILIZERS, INSECTICIDES, PESTICIDES AND THEIR SOURCES OF SUPPLY

Sr. No.	Name of Input	Canal Section	Farmers who use it		Sources of Supply: Villages		Outside		Both		Total Farmers
			No.	%	No	% of Col.3	No	% of Col. 3	No	% of Col.3	No(=100)
0	1	2	3	4	5	6	7	8	9	10	11
1. Urea		Head	44	89.80	9	20.45	35	79.55	-	-	49
		Middle	56	93.33	6	10.71	49	87.50	1	1.79	60
		Tail	45	90.00	8	17.78	37	82.22	-	-	50
		All Places	145	91.19	23	15.86	121	83.45	1	0.69	159
2. DAP		Head	28	57.14	4	14.29	24	85.71	-	-	49
		Middle	31	51.67	5	16.13	26	83.87	-	-	60
		Tail	33	66.00	3	9.09	30	90.91	-	-	50
		All Places	92	57.86	12	13.04	80	86.96	-	-	159
3. NPK		Head	10	20.41	2	20.00	8	80.00	-	-	49
		Middle	9	15.00	1	11.11	8	88.89	-	-	60
		Tail	3	6.00	1	33.33	2	66.67	-	-	50
		All Places	22	13.84	4	18.18	18	81.82	-	-	159
4. NP		Head	-	-	-	-	-	-	-	-	49
		Middle	6	10.00	-	-	6	100	-	-	60
		Tail	3	6.00	-	-	3	100	-	-	50
		All Places	9	5.66	-	-	9	100.00	-	-	159
5. Ammonium Sulphate		Head	1	2.04	-	-	1	100.00	-	-	49
		Middle	2	3.33	-	-	2	100.00	-	-	60
		Tail	3	6.00	1	33.33	2	66.67	-	-	50
		All Places	6	3.77	1	16.67	5	83.33	-	-	159
6. Ammonium Nitrate		Head	2	4.08	-	-	2	100.00	-	-	49
		Middle	3	5.00	-	-	3	100.00	-	-	60
		Tail	3	6.00	1	33.33	2	66.67	-	-	50
		All Places	8	5.03	1	12.50	7	87.50	-	-	159
7. Insecticides/ Pesticides		Head	1	2.04	-	-	1	100.00	-	-	49
		Middle	5	8.33	-	-	5	100.00	-	-	60
		Tail	2	4.00	1	50.00	1	50.00	-	-	50
		All Places	8	5.03	1	12.50	7	87.50	-	-	159
8. Weedicides		Head	1	2.04	-	-	1	100.00	-	-	49
		Middle	5	8.33	-	-	5	100.00	-	-	60
		Tail	2	4.00	1	50.00	1	50.00	-	-	50
		All Places	8	5.03	1	12.50	7	87.50	-	-	159

Appendix Table A.4

CROPWISE FERTILIZER CONSUMPTION PER HECTARE USED AND AS RECOMMENDED

(Plant Nutricuts in Kg.)

Sr. No.	Name of crop	Head Section									Middle Section					
		RD 22000		RD 45800			Average				RD 53700		RD 70800		Average	
		Nitrogen	Phosphorous	Nitrogen	Phosphorous	Potacium	Nitrogen	Phosphorous	Potacium	Nitrogen	Phosphorous	Nitrogen	Phosphorous	Nitrogen	Phosphorous	
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	1	
1.	Maize	44.39	2.84	23.78	3.86	1.52	37.26	3.19	0.53	48.64	3.22	60.92	8.74	52.40	5.9	
2.	Sorghum	11.96	-	42.63	7.11	1.17	34.76	5.28	0.87	54.40	-	55.84	11.04	52.78	11.0	
3.	Sugarcane	-	-	66.66	9.20	-	66.66	9.20	-	109.94	-	131.56	-	112.11	-	
4.	Pigeon Pea	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5.	Wheat	48.85	-	55.04	0.57	-	51.29	0.22	-	58.16	0.95	52.85	17.73	55.13	9.34	
6.	Barley	11.85	-	82.68	-	-	47.97	-	-	95.93	-	11.39	-	47.69	-	
7.	Berseem	43.19	-	73.64	-	-	64.92	-	-	32.43	-	26.30	5.99	30.84	5.99	
8.	Pea	-	-	-	-	-	-	-	-	-	-	40.95	6.16	40.95	6.16	
9.	Spinach	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

(Contd.....)

Appendix Table A.4

CROPWISE FERTILIZER CONSUMPTION PER HECTARE USED AND AS RECOMMENDED

Sr. No.	Name of crop	Tall Section: RD 115806 Nitrogen	RD 115806 Phosphorous	RD 132000 Nitrogen	RD 132000 Phosphorous	Average Nitrogen	Average Phosphorous	All Places (Average) Nitrogen	All Places (Average) Phosphorous	All Places (Average) Potassium	Recommended Doses per Ha. Nitrogen	Recommended Doses per Ha. Phosphorous	Recommended Doses per Ha. Potassium
0		16	17	18	19	20	21	22	23	24	25	26	27
1.	Maize	54.47	16.47	47.86	5.98	51.02	11.45	45.34	5.02	0.24	75.00	37.50	-
2.	Sorghum	11.45	29.27	67.65	-	38.49	15.19	55.18	3.31	0.21	114.00	58.00	-
3.	Sugarcane	73.97	30.04	-	-	73.97	30.04	92.67	11.33	-	115.0	70.00	-
4.	Pigeon Pea	-	-	-	-	-	-	-	-	-	-	-	-
5.	Wheat	51.81	7.19	21.82	13.50	43.73	9.74	51.34	5.05	-	135.00	67.00	-
6.	Barley	29.09	-	11.37	6.50	16.09	4.77	26.60	2.91	-	105.00	50.00	-
7.	Bersees	89.84	12.50	-	-	89.84	12.50	44.23	1.51	-	22.00	120.00	-
8.	P e a	-	-	-	-	-	-	40.95	6.16	-	27.00	67.00	-
9.	Spinach	-	-	22.21	-	22.21	-	22.21	-	-	73.00	114.00	-

(Concluded)

Appendix Table A.5

USE OF IMPROVED SEED AND SOURCE OF SUPPLY

Sr. No.	Seed	Location	Farmers who: Know about this		Use this		If used; where purchased: In the village		Own		Other places		Total Farmers
			No.	% of Col.13	No.	% of Col.13	No.	% of Col.5	No.	% of Col.5	No.	% of Col.5	No.
0	1	2	3	4	5	6	7	8	9	10	11	12	13
I. WHEAT													
i- Pak-81		Head	25	51.02	24	48.98	4	16.67	17	70.82	3	12.50	49
		Middle	15	25.00	13	21.67	-	-	8	61.54	5	38.46	60
		Tail	23	46.00	20	40.00	3	15.00	-	[illegible]	10	50.00	50
		All Places	63	39.62	57	35.85	7	12.28	32	[illegible]	18	31.58	159
ii- L-73		Head	1	2.04	-	-	-		-	-	-	-	49
		Middle	4	6.67	3	5.00	-	-		-	3	100	60
		Tail	-	-	-	-	-	-	-	-	-		50
		All Places	5	3.14	3	1.89	-	-	-	-	3	100	159
iii-Sarhad-82		Head	3	6.12	3	6.12	1	33.33	2	66.67	-	-	49
		Middle	2	3.33	1	1.67	-	-	-		1	100.00	60
		Tail	1	2.00	-	-	-	-	-	-	-	-	50
		All Places	6	3.77	4	2.52	1	25.00	2	50.00	1	25.00	159
iv- Khyber-79		Head	1	2.04	1	2.04	-	-	-		1	100	49
		Middle	-	-	-	-	-	-	-	-	-	-	60
		Tail	-	-	-	-	-	-	-	-	-	-	50
		All Places	1	0.63	1	0.63	-	-	-	-	1	100	159
v-Pirsabaq-85		Head	2	4.08	2	4.08	-	-	-	-	2	100.00	49
		Middle	3	5.00	1	1.67	-	-	-	-	-	-	60
		Tail	-	-	-	-	-	-	-	-	-	-	50
		All Places	5	3.14	3	1.89	-	-	-	-	2	66.67	159
vi-Nazipak		Head	11	22.45	11	22.45	2	18.18	9	81.82	-	-	49
		Middle	29	48.33	29	48.33	4	13.79	20	68.97	5	17.24	60
		Tail	20	40.00	19	38.00	9	47.37	10	52.63	-	-	50
		All Places	60	37.74	59	37.11	15	25.42	39	66.10	5	8.47	159
vii-Khushal		Head	2	4.08	2	4.08	1	50.00	1	50.00	-	-	49
		Middle	1	1.67	1	1.67	-		1	100	-	-	60
		Tail	-	-	-	-	-	-	-	-	-	-	50
		All Places	3	1.89	3	1.89	1	33.33	2	66.67	-	-	159
viii-Chenab		Head	1	2.04	1	2.04	-	-	1	100	-	-	49
		Middle	2	3.33	2	3.33	-	-	2	100	-	-	60
		Tail	-	-	-	-	-	-	-	-	-	-	50
		All Places	3	1.89	3	1.89	-	-	3	100	-	-	159

(Contd.....)

Appendix Table 4.5

USE OF IMPROVED SEED AND SOURCE OF SUPPLY

Sr. No.	Seed	Location	Farmers who: Know about this No.	% of Col.13	Use this No.	% of Col.13	If used; where purchased: In the village No.	% of Col.5	Own No.	% of Col.5	Other places No.	% of Col.5	Total Farmers No.(=100)
0	1	2	3	4	5	6	7	8	9	10	11	12	13
2.	SUGARCANE												
		Head	-	-	-	-	-	-	-	-	-	-	49
	i- IM-61	Middle	-	-	-	-	-	-	-	-	-	-	60
		Tail	-	-	-	-	-	-	-	-	-	-	50
		All Places	-	-	-	-	-	-	-	-	-	-	159
	ii- CP-48	Head	-	-	-	-	-	-	-	-	-	-	49
		Middle	-	-	-	-	-	-	-	-	-	-	60
		Tail	2	4.00	-	-	-	-	-	-	-	-	50
		All Places	2	1.26	-	-	-	-	-	-	-	-	159
	iii.NCO-310	Head	12	24.49	12	24.49	2	16.67	10	83.33	-	-	49
		Middle	9	15.00	9	15.00	-	-	9	100	-	-	60
		Tail	21	42.00	18	36.00	7	38.89	4	22.22	7	33.89	50
		All Places	42	26.42	39	24.53	9	23.08	23	59.00	7	17.95	159
3.	MAIZE												
		Head	29	59.18	29	59.18	3	10.34	25	86.21	1	3.45	49
	i- Sarhad White	Middle	32	53.33	32	53.33	3	9.38	25	78.12	4	12.50	60
		Tail	25	50.00	23	46.00	4	17.39	17	73.91	2	8.70	50
		All Places	86	54.09	84	52.83	10	11.90	67	79.76	7	8.33	159
	ii-Changaz	Head	-	-	-	-	-	-	-	-	-	-	49
		Middle	-	-	-	-	-	-	-	-	-	-	60
		Tail	-	-	-	-	-	-	-	-	-	-	50
		All Places	-	-	-	-	-	-	-	-	-	-	159
	iii- Zia	Head	-	-	-	-	-	-	-	-	-	-	49
		Middle	-	-	-	-	-	-	-	-	-	-	60
		Tail	-	-	-	-	-	-	-	-	-	-	50
		All Places	-	-	-	-	-	-	-	-	-	-	159
	iv-Shaheen	Head	3	6.12	3	6.12	-	-	1	33.33	2	66.67	49
		Middle	-	-	-	-	-	-	-	-	-	-	60
		Tail	4	8.00	4	8.00	4	100.00	-	-	-	-	50
		All Places	7	4.40	7	4.40	4	57.14	1	14.29	2	28.57	159
	v-Hameshah	Head	5	10.20	5	10.20	0	0.00	4	80	1	20.00	49
		Middle	9	15.00	9	15.00	1	11.11	8	88.89	-	-	60
		Tail	2	4.00	2	4.00	1	50.00	1	50.00	-	-	50
		All Places	16	10.06	16	10.06	2	12.50	13	81.25	1	6.25	159

(Concluded)

Appendix Table A.6

WATERCOURSE-WISE FARM MACHINERY AND IMPLEMENTS OWNED BY SAMPLE FARMERS

(Cost in Rupe

Sr. No.	Capital Assets Canal Section	Desi Plough No.	Desi Plough Cost	Modern Plough No.	Modern Plough Cost	Mala No.	Mala Cost	Ghakhaaar No.	Ghakhaaar Cost	Belcha No.	Belcha Cost	Chari No.	Chari Cost	Punjghakhi No.	Punjghakhi Cost	Rambe No.	Rambe Cost	Loo No.	Loo Co
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	1
1.	Head Section																		
	a. RD-22000	9	1015	-	-	7	360	6	440	44	1345	-	-	9	285	34	370	73	1
	b. RD-45800	9	1410	-	-	7	460	9	600	64	2013	1	35	12	515	23	177	106	1
	c. Total	18	2425	-	-	14	820	15	1040	108	3358	1	35	21	800	57	547	179	2
	d.Per Sample Farm	0.37	49	-	-	0.29	17	0.31	21	2	69	0.02	0.71	0.43	16	1	11	4	
2.	Middle Section																		
	a. RD-53,700	9	1680	-	-	8	575	6	576	65	2337	1	30	8	272	25	413	68	
	b. RD-70,800	13	2380	-	-	8	590	10	580	54	2582	1	25	11	777	74	880	97	1
	c. Total	22	4060	-	-	16	1165	16	1176	129	4919	2	45	19	1049	99	1293	165	2
	d.Per Sample Farm	0.37	60	-	-	0.27	19	0.27	20	2	82	0.03	0.75	0.32	17	2	22	3	
3.	Tail Section																		
	a. RD-115806	23	2360	-	-	16	915	17	1319	66	2179	3	65	15	420	64	932	131	23
	b. RD-132000	20	2550	-	-	11	545	9	770	36	1400	1	30	8	794	36	318	59	9
	c. Total	43	4910	-	-	27	1460	26	2089	102	3579	4	95	23	1214	100	1250	190	33
	d.Per Sample Farm	0.96	98	-	-	0.54	29	0.52	42	2	72	0.08	2	0.46	24	2	25	4	
4.	All Places	38	11395			57	3445	57	4305	339	11056	7	175	63	3063	256	3090	534	48
5.	Per Sample Farm	0.52	72			0.36	22	0.36	27	2	75	0.04	1	0.40	19	2	19	3	

(Contd....)

Appendix Table A.6

WATERCOURSE-WISE FARM MACHINERY AND IMPLEMENTS OWNED BY SAMPLE FARMERS

(Cost in Rupees)

Sr. No.	Capital Assets / Canal Section	Tractor No.	Tractor Cost	Trolly No.	Trolly Cost	Thresher No.	Thresher Cost	Tubewell/Openwell No.	Tubewell/Openwell Cost	Bullock Cart No.	Bullock Cart Cost	Tobacco Barn No.	Tobacco Barn Cost	Cattle shed No.	Cattle shed Cost
0		20	21	22	23	24	25	26	27	28	29	30	31	32	33
1.	Head Section														
	a. RD-22000	-	-	-	-	-	-	-	-	-	-	-	-	16	33000
	b. RD-45200	1	150000	1	26000	1	25000	-	-	1	1600	-	-	12	67400
	c. Total	1	150000	1	26000	1	25000			1	1600	-	-	28	100400
	d. Per Sample Farm	0.02	3061	0.02	531	0.02	32							0.57	2049
2.	Middle Section														
	a. RD-53700	1	110000	1	22000	-	-	2.00	15000	-	-	-	-	24	91400
	b. RD-70800	1	87000	-	-	-	-	-	-	-	-	-	-	15	53100
	c. Total	2	197000	1	32000	-	-	2.00	15000	-	-	-	-	39	144500
	d. Per Sample FArm	0.03	3283	0.02	533	-	-	0.03	250	-	-	-	-	0.65	2408
3.	Tail Section														
	a. RD-115800	-	-	-	-	-	-	1.00	45000	-	-	-	-	14	44500
	b. RD-132000	-	-	-	-	-	-	-	-	-	-	-	-	16	35400
	c. Total	-	-	-	-	-	-	1.00	45000	-	-	-	-	30	79900
	d. Per Sample Farm	-	-	-	-	-	-	0.02	900					0.60	1598
4.	All Places	3	347000	2.00	58000	1.00	25000	3.00	60000	1	1600			97	329800
5.	Per Sample Farms	0.02	2182	0.01	365	0.01	157	0.02	377	0.01	10			0.61	2074

(Concluded)

Appendix Table A.7

NUMBER OF LIVESTOCK OWNERS

Sr. No.	Owners (Livestock owned)	Head section: PO (22000)	Head section: RO (145.00)	Head section: Total No.	Head section: Total % of total H.H	Middle Section: PO	Middle Section: RO (190000)	Middle Section: TOTAL No.	Middle Section: TOTAL % of total H.H	Tail Section: RO (1115806)	Tail Section: PO (132000)	Tail Section: Total No.	Tail Section: Total % of total H.H	All Places: Total No.	All Places: Total % of total H.H
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1.	Buffalo	9	13	22	44.90	17	18	35	50.33	8	11	19	33.00	76	47.00
2.	Cow	9	19	28	57.14	3	7	10	14.67	18	8	26	52.00	64	40.25
3.	Goat	6	5	11	22.45	7	6	13	21.67	8	5	13	26.00	37	23.27
4.	Sheep	3	3	6	12.24	3	8	11	18.33	-	4	4	8.00	21	13.21
5.	Bull	3	5	8	16.33	1	4	5	8.33	5	3	8	16.00	21	13.21
6.	Ox-Buffalo	2	1	3	6.12	2	2	4	6.67	-	2	2	4.00	9	5.66
7.	Horse/Mule	--	1	1	2.04	-	-	-	-	-	-	-	-	1	.63
8.	Donkey	6	4	10	20.41	2	15	17	28.33	24	11	35	70.00	62	38.99
9.	Camel	-	-	-		-	-			-	-	-			
10.	Poultry	17	27	44	89.79	27	27	54	90.00	23	14	37	74.00	135	84.91

* Household

Appendix Table A.8

NUMBER OF LIVESTOCK OWNED BY SAMPLE HOUSEHOLDS

(Numbers)

Sr. No.	Kind of Livestock	Head Section RD 122000	Head Section RD 145800	Head Section Total	Middle Section RD 153700	Middle Section RD 170800	Middle Section Total	Tail Section RD 115806	Tail Section RD 132000	Tail Section Total	All places
0	1	2	3	4	5	6	7	8	7	8	9
1.	Buffalo	17	36	53	42	46	88	14	32	46	187
2.	Cow	26	71	97	6	11	17	32	17	49	163
3.	Goat	28	14	42	24	20	44	63	25	88	174
4.	Sheep	6	6	12	7	24	31	0	39	39	82
5.	Bullocks	6	9	15	2	8	10	10	8	18	43
6.	He-Buffalo	4	1	5	2	3	5	0	3	3	13
7.	Horse/Mule	-	1	1	-	-	-	-	-	-	1
8.	Donkey	4	6	10	2	15	17	31	16	47	74
9.	Camel	-	-	-	-	-	-	-	-	-	-
10.	Total	93	142	235	85	127	212	150	140	290	737
11.	Poultry	193	502	695	323	247	570	182	192	274	1539

Appendix Table A.3

MILK PRODUCTION AND DISPOSAL

S-. No.	Loc.	Milk production in 1987-88 (Litre) Buffalo	[illegible]	Goat	Sheep	Total	Milk sold Litre	% of Col. 8	Milk available for home consumption Total Litre	Estimated receipt from milk (Rs.) Total	Per sample Household
0	E	3	4	5	6	7	8	9	10	11	12
I.	Head of Canal										
	a. RD 23000	[illegible]	5400	340	-	16209	-	-	16209	-	-
	b. RD 45000	[illegible]	9900	540	180	35325	12506	35.40	22819	71909	2397
	c. Total	34974	15300	1090	150	51534	12506	24.27	39028	71909	1467
II.	Middle of Canal										
	a. RD 70700	27728	500	157	[illegible]	[illegible]	6117	19.46	31468	24704	823
	b. RD 70200	60390	2400	[illegible]	[illegible]	[illegible]	-	-	62880	-	-
	c. Total	88118	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	87348	24704	[illegible]
III.	Tail of Canal										
	a. RD 115300	6587	7260	[illegible]	-	[illegible]	-	-	[illegible]	-	-
	b. RD 120000	16775	2796	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-
	c. Total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
IV.	All places	[illegible]	28356	[illegible]	741	[illegible]	[illegible]	-	162312	100913	635

Appendix Table A.10

FRUIT TREES OF SAMPLE HOUSEHOLDS

Sr. No.	Kind of Fruit	Where grown a. In sample watercourse b. Outside c. Total	Number of Fruit Trees: Head Section Total	Head Section Per sample H.H	Middle Section Total	Middle Section Per sample H.H	Tail Section Total	Tail Section Per sample H.H	All Sections Total	All Sections Per sample H.H
0	1	3	4	5	6	7	9	10	11	12
1.	Appricot	a.	-	-	-	-	70	1.40	70	0.44
		b.	-	-	62	1.03	391	7.82	453	2.85
		c.	-	-	62	1.03	461	9.22	523	3.29
2.	Plum	a.	-	-	-	-	380	7.60	380	2.39
		b.	-	-	18	0.30	-	-	18	0.11
		c.	-	-	18	0.30	380	7.60	398	2.50
3.	Lemon	a.	-	-	-	-	-	-	-	-
		b.	-	-	104	1.73	-	-	104	0.65
		c.	-	-	104	1.73	-	-	104	0.65
4.	Loquat	a.	-	-	-	-	-	-	-	-
		b.	-	-	54	0.90	-	-	54	0.34
		c.	-	-	54	0.90	-	-	54	0.34
5.	All Fruit	a.	-	-	-	-	450	9.00	450	2.83
		b.	-	-	238	3.97	391	7.82	629	3.96
		c.	-	-	238	3.97	841	16.82	1079	6.79

Appendix Table A.11

INCOME FROM SALE OF FRUIT

(Rupees)

Sr. No.	Fruit	Where grown	Income from sale: Head Section Total	Head Section Per sample H.H	Middle Section Total	Middle Section Per sample H.H	Tail Section Total	Tail Section Per sample H.H	All Section Total	All Section Per sample H.H
0	1	2	3	4	5	6	7	8	9	10
1.	Appricot	a. In sample watercourse	-	-	-	-	3000	60	3000	19
		b. Outside	-	-	120	2.0	15000	300	15120	95
		c. Total	-	-	120	2.0	18000	360	18120	114
2.	Plum	a.	-	-	-	-	1000	20	1000	6
		b.	-	-	500	2.28	-		1500	9
		c.	-	-	500	2.28	1000	20	1500	9
3.	Lemon	a.	-	-	-	-	-	-	-	-
		b.	-	-	30	-	-	-	30	-
		c.	-	-	30	-	-	-	30	-
4.	Loquat	a.	-	-	-	-	-	-	-	
		b.	-	-	1000	-	-	-	1000	6
		c.	-	-	1000	-	-	-	1000	6
5.	All Fruit	a.	-	-	-	-	4000	80	4000	25
		b.	-	-	1650	7.53	15000	300	16650	105
		c.	-	-	1650	7.53	19000	380	20650	130

Appendix Table A.12

CROP-WISE DISPOSAL OF OUTPUT OF SAMPLE FARMS

Sr. No.	Crop	Unit	RD 22000 Total output (=100)	Home Used	Sold	Other uses	Total output (=100)	RD 45800 Home use	Sold	Other uses	Total output (=100)	Head Section Home use Qty.	%	Sold Qty.	%	Other uses Qty.	%
01	1	2	3	4	5	6	7	9	9	10	11	12	13	14	15	16	17
1.	Maize																
	i. MP	Md	247.00	139.00	48	56	103	37	51	20	385	176	45.71	123	31.95	86	22.34
	ii. BP	Bndls	5475	1880	1893	1705	1578	1683	270	225	7053	2943	41.73	2180	30.91	1930	27.36
2.	Sorghum	Rs.	7250	3900	525	2925	8800	8840	5060	900	16050	6640	41.37	5585	34.80	3825	23.83
3.	Sugarcane																
	i. Gur	-	-	-	-	-	156.50	46	69	41.50	156.50	46	29.39	69	44.09	41.5	26.52
	ii. C.tops	-	-	-	-	-	320	248	-	72	320	248	77.50	-	-	72	22.50
	iii. Baggasse	-	-	-	-	-	212	164	-	48	212	164	77.36	-	-	48	22.64
4.	Pigeon Pea	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Wheat																
	i. M.P	Md	1027.88	596.06	110	321.82	1039	670.52	5	363.48	2066.88	1266.58	61.28	115	5.56	685	33.16
	ii. B.P	Md	2015	1178	501	336	2101.53	2101.53	-	-	4116.53	3279.53	79.67	501	12.17	336	8.16
6.	Barley (grain)																
	i. M.P	Md	3.90	0.90	3	-	-	-	-	-	3.90	0.90	23.28	3	76.92	-	-
	ii. B.P	Md	10	10	-	-	-	-	-	-	10	10	100.0	-	-	-	-
7.	Barley (fooder)	Rs	1600	800	-	800	7100	2950	1200	2950	8700	3750	43.11	1200	13.79	3750	43.10
8.	Bersees	Rs	11600	7600	600	3400	44220	21970	13500	8750	55820	29570	52.97	14100	25.26	2150	21.17
9.	P e a		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.	Spinach		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

MP = Main Product BP = By-Product

Contd.....

Appendix Table A.12

CROP-WISE DISPOSAL OF OUTPUT OF SAMPLE FARMS

Sr. No.	Crop	Unit	RD 53700 Total output (=100)	Home used	Sold	Other uses	RD 70500 Total output (=1)	Home use	Sold	Other uses	Total output (=100)	Middle Section: Home use %	Home use Qty.	Sold %	Sold Qty.	Other uses %	Other uses Qty.
0			18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
1.	Maize																
	i. MP	Mds	159.50	88.50	88	42	194.75	79	95	50.75	354.25	167.5	47.28	113	31.90	73.75	20.82
	ii. BP	Bndls	6520	1490	419	450	2[illegible]	1037	717	217	9541	2977	31.86	4897	51.34	667	7.81
2.	Sorghus	Rs.	103500	50	65175	32275	16215	4340	11365	500	119705	10390	8.68	76540	38.94	32775	27.38
3.	Sugarcane																
	i. Gur	Mds	125	33.50	91.50	-	7	7	-	-	132	40.50	30.68	91.50	69.32	-	
	ii. Cane tops	Mds	295	295	-	-	22	22	-	-	317	317	100	-		-	
	iii. Baggasse	Mds	192	192	-	-	14	14	-	-	206	206	10036	-	-	-	
4.	Pigeon Pea	Bndls	-	-	-	-	22	275	-	23	280	257	91.79	-	-	23	8.21
5.	Wheat																
	i. M.P	Mds	1127	440.70	145	541.30	421.25	207.55	2.25	126.05	1526.85	748.25	17.86	147.25	9.42	667.35	42.71
	ii. B.P	Mds	2326	1955.50	370	800.50	899	739	-	157.00	3222	1891.50	58.80	370	11.48	957.50	29.72
6.	Barley (grain)																
	i. M.P	Md	-	-	-	-	14.50	4.00	5.50	4.5	14.50	4.50	31.03	5.5	37.94	4.50	31.03
	ii. B.P	Md	-	-	-	-	29.00	29.00	-	-	29.00	29.00	100.0	-		-	
7.	Barley (fooder)	-	3900	2900	-	1000	-	-	-	-	39.00	29.00	74.36	-	13.79	2000	25.64
8.	Bersee	Rs	99650	33575	42025	24050	28450	23050	400	-	128100	61625	48.10	42425	33.12	24050	18.78
9.	Pea	-	-	-	-	-	268.50	-	254	14.50	268.50	-		254	94.60	14.50	5.40
10.	Spinach	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

MP = Main Product BP = By-Product

(Contd...)

Appendix Table A.12

CROP-WISE DISPOSAL OF OUTPUT OF SAMPLE FARMS

Sr. No.	Crop	Unit	RS-115 Total output (=100)	RS-115 Home used	RS-115 Sold	RS-115 Other uses	RS-135 Total output (=100)	RS-135 Home use	RS-135 Sold	RS-135 Other uses	Tail Section Total output (=100)	Tail Section Home use Qty.	Tail Section Home use %	Tail Section Sold Qty.	Tail Section Sold %	Tail Section Other uses Qty.	Tail Section Other uses %
0			33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
1.	Maize																
	i. MP	Mds	11	10.70	-	0.30	[illegible]	37.80	-	-	48	47.7	99.37	-		0.30	0.63
	ii. BP	Bundle	880	880	-	-	670.00	540.00	120	-	1640	1520	92.63	120	7.32	-	7.81
2.	Sorghum	Fs.	830	830	-	-	475	475	-	-	1305	1305	100.0	-		0.50	1.35
3.	Sugarcane																
	i. Gur	Mds	37	18.5	19	0.5	-	-	-	-	37	18.5	50.00	18	48.65	0.50	
	ii. Cane tops	Mds	59	59	-	-	-	-	-	-	59	59	100.0	-		-	
	iii. Baggasse	Mds	94	94	-	-	-	-	-	-	94	94	100.0	-	-	-	
4.	Pigeon Pea	Budls	-	-	-	-	-	-	-	-	-	-		-	-	-	
5.	Wheat																
	i. M.P	Mds	435.5	290.87	103.5	61.13	221	26.20	139.50	55.30	656.5	297.07	45.25	243	37.01	116.43	17.74
	ii. B.P	Mds	867	726	45	36	486	160	279	47	1353	946	69.92	324	23.95	83	6.13
6.	Barley (grain)																
	i. M.P	Md	9.5	9.5	-	-	89	66.50	10	12.50	98.50	76	77.16	10	10.15	12.50	12.69
	ii. B.P	Md	18.5	18.5	-	-	160	160	-	-	178.50	178.50	100.0	-		-	-
7.	Barley (fodder)	Fs	4025	3575	-	450	3200	-	3200	-	72.25	35.75	49.48	3650	50.52	-	-
8.	Berseem	Fs	2050	2050	-	-	5600	5600	-	-	76.50	76.50	100.0	-			
9.	Pea	-	-	-	-	-	-	-	-	-	-	-		-		-	
10.	Spinach	Mds	-	-	-	-	45	-	45	-	45	-	-	45	100	-	

MP = Main Product BP = By-Product

(Contd....)

BASE LINE SURVEY FOR COMMAND WATER MANAGEMENT

PROJECT - WARSAK LIFT CANAL

Institute of Development Studies

PART: I

INTRODUCTION

DR.NURUL-ISLAM MIAN

NWFP Agri. University, Peshawar

2780

Appendix Table A.12

CROP-WISE DISPOSAL OF OUTPUT OF SAMPLE FARMS

Sr. No.	Crop	Unit	Total output (=100)	All Places: Home use Quantity	Home use %	Sold Quantity	Sold %	Other uses Quantity	Other uses %
0			48	49		50	51	52	53
1.	Maize								
	i. M.P	Mds	787.25	391.30	49.69	235	29.98	160.05	20.33
	ii. B.P	Bundls	13054	7640	58.91	3017	23.11	2597	19.89
2.	Sorghum	Rs.	137060	18335	13.38	82125	59.92	36600	26.30
3.	Sugarcane								
	i. Gur	Mds	325.50	105	32.26	178.5	54.84	42	12.90
	ii. Can Tops	Mds	696	624	89.65	-	-	72	10.35
	iii. Bagasse	Mds	512	464	90.62	-		48	9.38
4.	Pigeon Pea	Bundls	280	275	98.21	-		5	1.78
5.	Wheat								
	i. M.P	Mds	4286.23	2311.90	53.94	505.25	11.79	1469.08	34.27
	ii. B.P	Mds	8691.53	6120.03	70.41	1195	13.75	1376.50	15.84
6.	Barley (Grain)								
	i. M.P	Mds	116.90	80.90	69.20	18.50	15.83	17.50	14.97
	ii. B.P	Mds	217.50	217.50	100.00	-		-	-
7.	Barley (Fodder)	Rs.	19825	10225	51.58	4850	24.46	4750	23.96
8.	Berseem	Rs.	191570	98845	51.60	56525	29.50	36200	18.90
9.	Pea	-	268.50	-		254	94.60	14.50	5.40
10.	Spinach	Mds	45	-		45	100.00	-	

MP = Main Product BP = By-Product (Concluded

Appendix Table A.13

COMPOSITION OF FARMING COST. (ALL CROPS)

Sr. No	ITEM OF COST	Head Section (area 95.25 ha.)								Middle Section (area 111.65 ha.)							
		All Farm				Per Farm (Per cropped ha.)				All Farm				Per Farm (Per cropped ha.)			
		Total Cost		Paid Cost		Total Cost	Paid Cost	Total Cost	Paid Cost	Total Cost		Paid Cost		Total Cost	Paid Cost	Total Cost	Paid Cost
		Rs.	%	Rs.	%	Rs.	Rs.	Rs.	Rs.	Rs.	%	Rs.	%	Rs.	Rs.	Rs.	Rs.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1.	Rent of Land	164741	36.73	27979	16.81	3357	571	1657	282	197992	37.35	39600	19.68	3300	660	1773	355
2.	Manual Labour	111574	24.88	22613	13.59	2283	461	1197	228	122353	23.08	9655	4.83	2039	161	1096	86
3.	Animal Labour	49649	11.08	6403	3.85	1013	131	509	65	44730	8.44	8960	4.45	746	149	401	80
4.	Machine (Tractor Thresher etc.)	51334	11.46	51334	30.84	1048	1048	517	517	57615	10.87	57615	28.64	960	960	516	516
5.	S e e d	25054	5.59	20614	12.38	511	421	252	208	48698	9.19	39334	19.55	812	656	436	352
6.	Farm Yard Manure	4199	0.94	50	0.03	86	1	42	1	11604	2.19	1869	0.93	193	31	104	17
7.	Chemical Fertilizer	27698	6.18	27698	16.64	565	565	279	279	38097	7.19	38097	18.94	635	635	341	341
8.	Water rate/Abiana	3052	0.68	3052	1.83	62	62	31	31	-	-	-	-	-	-	-	-
9.	Dues of Artisans	5394	1.20	5394	3.24	110	110	54	54	5382	1.02	5382	2.68	90	90	48	48
10.	Fuel Charges	3800	0.84	480	0.29	78	10	38	5	3020	0.57	-	-	50	-	27	-
11.	Rent of Cane Crushing Machine	1231	0.27	844	0.51	25	17	12	9	659	0.12	659	0.33	11	11	6	6
12.	T o t a l :	448017	100	166461	100	9138	3397	4514	1679	530150	100	201171	100	8836	3353	4748	1801

(Contd.....)

Contd.. Tab.3-4.13

COMPOSITION OF FARMING COST. (ALL CROPS)

Sr. No	ITEM OF COST	Tail Sector (area [illegible] ha.) All Farms Total Cost Rs.	%	Paid Cost Rs.	%	Per Farm Total Cost Rs.	Paid Cost Rs.	Per cropped ha Total Cost Rs.	Paid Cost Rs.	All Places (area 267.45 ha.) All Farms Total Cost Rs.	%	Paid Cost Rs.	%	Per Farm Total Cost Rs.	Paid Cost Rs.	Per cropped ha Total Cost Rs.	Paid Cost Rs.
1		18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
1.	Rent of Land	44616	23.48	950	1.40	932	19	894	18	[illegible]	34.55	40263	10.02	2573	257	1532	153
2.	Manual Labour	44692	23.45	1125	1.65	893	22	790	20	278677	23.83	35343	8.19	1754	210	1043	125
3.	Animal Labour	25583	13.23	2274	3.35	511	45	449	40	119758	10.23	17637	4.38	753	111	448	66
4.	Machine (Tractor Thresher etc.)	25024	13.14	25080	36.92	501	501	442	442	133979	11.45	133979	32.84	943	943	501	501
5.	Seeds	17831	9.39	16042	23.61	358	321	316	284	91638	7.83	75990	18.63	576	478	343	284
6.	Farm Yard Manure	8005	4.20	-	-	160	-	142	-	23902	2.03	1919	0.47	150	12	89	7
7.	Chemical Fertilizer	14280	7.50	14286	21.02	286	286	253	253	80083	6.84	80083	19.63	504	504	299	299
8.	Water rate/Abiana	3975	2.09	3975	5.85	80	80	70	70	7027	0.60	7027	1.72	44	44	26	26
9.	Dues of Artisans	3692	1.94	3691	5.43	74	74	65	65	14467	1.24	14467	3.55	91	91	54	54
10.	Fuel Charges	2340	1.23	-	-	47	-	41	-	9160	0.78	480	0.12	57	3	34	2
11.	Rent of Cane Crushing Machine	602	0.32	602	0.89	12	12	11	11	2492	0.21	2105	0.52	16	13	9	8
12.	Total :	190483	100	67977	100	3848	1359	3401	1201	1170379	100	407943	100	7361	2566	4376	1525

(Concluded)

Appendix Table A.14

CROP-WISE FARMING COST BY MAJOR COMPONENTS OF COST IN SAMPLE
WATERCOUSE NO. RD.22090

Sr. No.	Cost/Item	Maize (Area:16.18) Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %	Sorghum (Area: 1.92) Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %	Sugarcane (Area:) Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %
0	1	2	3	4	5	6	7	8	9	10	11	12	13
1.	RENT OF LAND	2344	21602	23946	43.63	278	2564	2842	40.52	-	-	-	-
2.	LABOUR												
	i. Manual	-	11576	11576	21.09	-	1290	1290	18.39	-	-	-	-
	ii. Animal	-	5010	5010	9.12	-	1773	1773	25.28	-	-	-	-
	iii. Machine	5253	-	5253	9.57	-	-	-	-	-	-	-	-
	iv. Total	5253	16586	21839	39.78	-	3063	3063	43.67	-	-	-	-
3.	OTHER ITEMS												
	i. Seed	2248	-	2248	4.09	885	-	885	12.62	-	-	-	-
	ii. Farm Yard Manure	-	760	760	1.35	-	-	-	-	-	-	-	-
	iii. Fertilizer	4385	-	4385	7.99	140	-	140	1.99	-	-	-	-
	iv. Insecticides/ Pesticides.	-	-	-	-	-	-	-	-	-	-	-	-
	v. Water/Abiana/ Charges.	961	-	961	1.75	84	-	84	1.20	-	-	-	-
	vi. Dues of Artisan	744	-	744	1.35	-	-	-	-	-	-	-	-
	vii. Fuel Charges	-	-	-	-	-	-	-	-	-	-	-	-
	viii. Rent of Creshing Machine.	-	-	-	-	-	-	-	-	-	-	-	-
	T o t a l	8338	760	9098	16.56	1109	-	1109	15.81	-	-	-	-
4.	G.Total of all Items	15935	38948	54883	100.00	1387	5627	7014	100.00	-	-	-	-
5.	Cost Per Hectare	985	2407	3392	-	722	2931	3653	-	-	-	-	-

conted....

Appendix Table A.14

CROP-WISE FARMING COST BY MAJOR COMPONENTS OF COST IN SAMPLE WATERCOUSE NO. RD.22000

Sr. No.	Cost/Item	Pigeon Pea (Area:)				Wheat (Area :1.31)				Barley (Area: 1.07)			
		Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %	Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %	Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %
0	1	14	15	16	17	18	19	20	21	22	23	24	25
1. RENT OF LAND		-	-	-	-	4536	41803	46337	36.27	213	1963	2176	54.33
2. LABOUR													
i. Manual		-	-	-	-	1524	27007	28531	22.33	-	742	742	18.53
ii. Animal		-	-	-	-	338	11930	12268	9.60	140	47	187	4.69
iii. Machine		-	-	-	-	20235	-	20235	15.84	545	-	545	13.60
iv. Total		-	-	-	-	22097	38937	61034	44.77	685	789	1474	36.80
3. OTHER ITEMS													
i. Seed		-	-	-	-	6988	300	7288	5.70	232	-	232	5.79
ii. F. Yard Manure		-	-	-	-	-	140	140	0.11	-	-	-	-
iii. Fertilizer		-	-	-	-	8803	-	8803	6.89	65	-	65	1.62
iv. Insect./Pesticides		-	-	-	-	-	-	-	-	-	-	-	-
v. W./Abiana Charges		-	-	-	-	1857	-	857	1.45	58	-	58	1.45
vi. Dues of Artisan		-	-	-	-	2300	-	2300	1.80	-	-	-	-
vii. Fuel Charges		-	-	-	-	-	-	-	-	-	-	-	-
viii. Rent of Cresh.Mach.		-	-	-	-	-	-	-	-	-	-	-	-
Total		-	-	-	-	19946	440	20386	15.90	355	-	355	8.86
4. G.Total of all Items		-	-	-	-	46581	81180	127761	100.00	1253	2752	4005	100.00
5. Cost Per Hectare		-	-	-	-	1488	2593	4091	-	352	1972	2724	

conted.....

Appendix Table A.14

CROP-WISE FARMING COST BY MAJOR COMPONENTS OF COST IN SAMPLE
WATERCOUSE NO. RD.22000

Sr. No.	Cost/Item	Berseem (Area:2.13)				Pea (Area:)				Spinach (Area:)				All Crops (Area: 53.01)			
		Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %	Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %	Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %	Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %
0	1	26	27	28	29	30	31	32	33	34	35	36	37	38	39		41
1.	RENT OF LAND	309	2843	3152	30.55	-	-	-	-	-	-	-	-	7680	[illegible]	78455	38.46
2.	LABOUR																
	i. Manual	60	2906	2966	28.74	-	-	-	-	-	-	-	-	1584	43521	45105	22.11
	ii. Animal	80	1234	1314	12.74	-	-	-	-	-	-	-	-	558	19994	20552	10.07
	iii. Machine	1060	-	1060	10.27	-	-	-	-	-	-	-	-	27093	-	27093	13.28
	iv. Total	1200	4141	5341	51.75	-	-	-	-	-	-	-	-	[illegible]	[illegible]	92759	45.46
3.	OTHER ITEMS																
	i. Seed	970	-	970	9.40	-	-	-	-	-	-	-	-	[illegible]	[illegible]	[illegible]	5.69
	ii. F.Yard Manure	-	240	240	2.32	-	-	-	-	-	-	-	-		[illegible]	[illegible]	0.55
	iii. Fertilizer	522	-	522	5.05	-	-	-	-	-	-	-	-	13915	-	13915	6.82
	iv. Insect./Pesticides	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	v. W./Abiana Charges	92	-	92	0.89	-	-	-	-	-	-	-	-	3052		3052	1.49
	vi. Dues of Artisan	-	-	-	-	-	-	-	-	-	-	-	-	3044	-	3044	1.49
	vii. Fuel Charges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	viii. Rent of Cresh.Mach.	-	-	-	-	-	-	-	-	-	-	-	-	-			
	T o t a l	1584	240	1824	17.68	-	-	-	-	-	-	-	-	31334	1440	32774	16.04
).	G.Total of all Items	3090	7224	10317	100.00	-	-	-	-	-	-	-	-	68249	135739	203979	100.00
i.	Cost Per Hectare	1452	3392	4844		-	-	-	-	-	-	-	-	1287	2561	3848	-

concluded.

Appendix Table A.15

CROP-WISE FARMING COST BY MAJOR COMPONENTS OF COST IN SAMPLE WATERCOURSE NO. RD.45800

Sr. No.	Cost/Item	Maize (Area: 8.55) Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %	Sorghum (Area: 5.56) Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %	Sugarcane (Area:4.96) Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %
0	1	2	3	4	5	6	7	8	9	10	11	12	13
1.	RENT OF LAND	3390	10974	14364	45.45	6[illegible]	[illegible]	[illegible]	51.27	3533	12[illegible]3	1[illegible]66	[illegible]
2.	LABOUR												
	i. Manual	-	5593	5593	17.69	-	2016	2016	11.28	7720	10017	17737	30.1[illegible]
	ii. Animal	-	3871	3871	12.24	-	1175	1175	6.53	1780	7314	9094	15.44
	iii. Machine	4190	-	4190	13.25	2130	-	2130	11.92	660	-	660	1.12
	iv. Total	4190	9464	13654	43.18	2130	3191	5321	29.76	10160	17331	27491	46.66
3.	OTHER ITEMS												
	i. Seed	433	463	896	2.83	1834	-	1834	10.02	4560	2175	6735	11.43
	ii. Far.Yard Manure	50	726	776	2.45	-	40	40	0.22	-	960	960	1.63
	iii. Fertilizer	1519	-	1519	4.80	1496	-	1496	8.21	2030	-	2030	3.45
	iv. Insec:/Pesticides	-	-	-	-	-	-	-	-	-	-	-	-
	v. W/Abiana Charges	-	-	-	-	-	-	-	-	-	-	-	-
	vi. Dues of Artisan	410	-	410	1.30	-		-	-	-	-	-	-
	vii. Fuel Charges	-	-	-	-	-	-	-	-	480	3320	3800	6.45
	viii. Rent of Crush.Mch.	-	-	-	-	-	-	-	-	844	387	1231	2.09
	T o t a l	2412	1189	3601	11.39	3300	40	3340	18.55	7914	6842	14756	25.05
4.6.	Total of all F.Items	9992	21627	31619	100.00	7634	10368	18002	100.00	22007	36906	58913	100.00
5.	Cost Per Hectare	1169	2529	3698	-	1373	1865	3238	-	4437	7441	11878	

Contd.....

Appendix Table A.15

CROP-WISE FARMING COST BY MAJOR COMPONENTS OF COST IN SAMPLE
WATERCOUSE NO. PC.45800

Sr. No.	Cost/Item	Pigeon Pea (Area:)				Wheat (Area 20.35)				Barley (Area: 1.53)			
		Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %	Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %	Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %
0	1	14	15	16	17	18	19	20	21	22	23	24	25
1. RENT OF LAND		-	-	-	-	8060	26094	34154	37.92	607	1963	2570	28.17
2. LABOUR													
i. Manual		-	-	-	-	2224	19355	21579	23.9[illegible]	-	2414	464	37.97
ii. Animal		-	-	-	-	113	9103	9216	10.23	-	1019	1019	11.17
iii. Machine		-	-	-	-	14351	-	14351	15.93	961	-	961	1.55
iv. Total		-	-	-	-	16688	27458	44646	49.57	960	4433	5443	53.56
3. OTHER ITEMS													
i. Seed		-	-	-	-	781	1137	1918	2.13	155	35	220	2.41
ii. F. Yard Manure		-	-	-	-	-	645	645	0.71	-	150	150	1.64
iii. Fertilizer		-	-	-	-	6754	-	6754	[illegible]	140	-	[illegible]	[illegible]
iv. Inset./Pesticides		-	-	-	-	-	-		-	-			-
v. W/Abiana Charges		-	-	-	-	-	-	-	-	-	-	-	-
vi. Dues of Artisan		-	-	-	-	1940	-	1940	2.15	-	-		-
vii. Fuel Charges		-	-	-	-	-	-	-	-	-	-	-	-
viii. Rent of Crush.Mach.		-	-	-	-	-	-	-	-	-	-	-	-
Total		-	-	-	-	9475	1782	11257	12.50	965	185	1110	12.16
4. G.Total of All F. Items		-	-	-	-	34223	55834	90057	100.00	2472	6651	9123	100.00
5. Cost Per Hectare		-	-	-	-	1683	2746	4429		1629	4334	5963	

(Contd...)

Appendix Table A.15

CROP-WISE FARMING COST BY MAJOR COMPONENTS OF COST IN SAMPLE WATERCOUSE NO. RD.45800

Sr. No.	Cost/Item	Barseem (Area:5.31) Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %	Pea (Area:) Paid (Rs)	Un-paid (Rs)	Total Rs.	Total %	Spinach (Area:) Paid (Rs)	Un-paid (Rs)	Total Rs.	Total %	All Crops (Area: 45.24) Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %
0	1	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	4
1.	RENT OF LAND	2105	6816	8921	24.74	-	-	-	-	-	-	-	-	20299	65717	86016	35.
2.	LABOUR																
	i. Manual	11085	5795	16880	46.82	-	-	-	-	-	-	-	-	21029	45740	66769	27.
	ii. Animal	3952	761	4713	13.07	-	-	-	-	-	-	-	-	5945	23243	29088	1
	iii. Machine	1950	-	1950	5.41	-	-	-	-	-	-	-	-	2241	-	24241	9.
	iv. Total	16987	6556	23543	65.30	-	-	-	-	-	-	-	-	51115	68983	120098	49.
3.	OTHER ITEMS																
	i. Seed	1528	330	1858	5.15	-	-	-	-	-	-	-	-	2991	4140	13431	5.
	ii. F. Yard Manure	-	488	488	1.35	-	-	-	-	-	-	-	-	50	3009	3059	1.
	iii. Fertilizer	1244	-	1244	3.45	-	-	-	-	-	-	-	-	13783	-	13783	5.
	iv. Inset./Pesticides	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	v. W./Abiana Charges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	vi. Dues of Artisan	-	-	-	-	-	-	-	-	-	-	-	-	2350	-	2350	0.
	vii. Fuel Charges	-	-	-	-	-	-	-	-	-	-	-	-	480	3320	3800	1.
	viii. Rent of Crush.Mach	-	-	-	-	-	-	-	-	-	-	-	-	844	387	1231	0.
	T o t a l	2772	818	3590	9.95	-	-	-	-	-	-	-	-	26793	10856	37654	15.
4.	G.Total of All F.Items	21864	14190	36054	100.00	-	-	-	-	-	-	-	-	98212	145556	243768	100.
5.	Cost Per Hectare	4118	2672	6790		-	-	-	-	-	-	-	-	2124	3148	5272	

Concluded

Appendix Table A.16

CROP-WISE FARMING COST BY MAJOR COMPONENTS OF COST IN SAMPLE
WATERCOUSE NO. RD.53700

Sr. No.	Cost/Item	Maize (Area: 15.24)				Sorghum (Area: 18.17)				Sugarcane (Area 3.14)			
		Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %	Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %	Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %
0	1	2	3	4	5	6	7	8	9	10	11	12	13
1. RENT OF LAND		3152	26871	30023	47.00	3758	32037	35795	34.94	1299	11073	12372	27.66
2. LABOUR													
i. Manual		-	14845	14845	23.24	-	7018	7018	6.85	6570	8229	14799	33.09
ii. Animal		588	3551	4139	6.47	-	4098	4098	1.07	1120	4593	5713	12.77
iii. Machine		6815	-	6815	10.66	6170	-	6170	6.02	630	-	630	1.41
iv. Total		7403	18396	25799	40.38	6170	11116	17286	16.87	8320	12822	21142	47.27
3. OTHER ITEMS													
i. Seed		2144	432	2576	4.03	6872	105	6977	6.81	4140	1400	5520	12.42
ii. F. Yard Manure		-	400	400	0.62	-	1160	1160	1.13		-	-	-
iii. Fertilizer		4356	-	4356	6.81	6648	-	6648	6.49	1756	-	1756	3.93
iv. Insect./Pesticides		-	-	-	-	-	-	-	-	-	-	-	-
v. W/Abiana Charges		-	-	-	-	-		-	-	-	-	-	-
vi. Dues of Artisan		722	-	722	1.13	-	-	-	-	-	-	-	-
vii. Fuel Charges		-	-	-	-	-	-	-	-	-	3020	3020	6.75
viii. Rent of Crush.Mach.		-	-	-	-	-	-	-	-	659	-	659	1.47
Total		7222	832	8054	12.60	13520	1265	14785	49.18	6751	4460	11211	25.07
4.6.Total of All F.Items		17777	46099	63876	100.00	23448	44418	67866	100.00	16370	28355	44725	100.00
5. Cost Per Hectare		1166	3025	4191		1290	2445	3735		5213	9030	14243	

Conted....

Appendix Table A.16

CROP-WISE FARMING COST BY MAJOR COMPONENTS OF COST IN SAMPLE WATERCOUSE NO. RD.53700

Sr. No.	Cost/Item	Pegeon Pea (Area:)				Wheat (Area: 24.29)				Barley (Area: 0.76)			
		Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %	Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %	Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %
0	1	14	15	16	17	18	19	20	21	22	23	24	25
1. RENT OF LAND		-	-	-	-	5024	47851	47851	33.95	157	1340	1497	38.60
2. LABOUR													
i. Manual		-	-	-	-	1495	31236	32731	23.22	-	1125	1125	29.00
ii. Animal		-	-	-	-	6707	11029	17736	12.58	-	568	568	14.65
iii. Machine		-	-	-	-	21503	-	21503	15.26	105	-	105	2.71
iv. Total		-	-	-	-	29705	42265	71970	51.06	105	1693	1798	46.36
3. OTHER ITEMS													
i. Seed		-	-	-	-	4312	1388	5700	4.04	-	157	157	4.05
ii. F.Yard Manure		-	-	-	-	-	4305	4305	3.05	-	-	-	-
iii. Fertilizers		-	-	-	-	8456	-	8456	6.00	426	-	426	10.99
iv. Insect./Pesticides		-	-	-	-	-	-	-	-	-	-	-	-
v. W./Abiana Charges		-	-	-	-	-	-	-	-	-	-	-	-
vi. Dues of Artisan		-	-	-	-	2660	-	2660	1.89	-	-	-	-
vii. Fuel Charges		-	-	-	-	-	-	-	-	-	-	-	-
viii. Rent of Crush.Mach.		-	-	-	-	-	-	-	-	-	-	-	-
Total		-	-	-	-	15428	5693	21121	14.99	426	157	583	15.03
4. G.Total of All F. Items		-	-	-	-	50157	90785	140942	100.00	688	3190	3878	100.00
5. Cost Per Hectare		-	-	-	-	2065	3737	5802		905	4197	5102	

(Contd....)

Appendix Table A.16

CROP-WISE FARMING COST BY MAJOR COMPONENTS OF COST IN SAMPLE WATERCOUSE NO. RD.53700

Sr. No.	Cost/Item	Berseem (Area:10.92)				Pea (Area:)				Spinach (Area:)				All Crops (Area: 72.58)			
		Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %	Paid (Rs)	Un-paid (Rs)	Total Rs.	Total %	Paid (Rs)	Un-paid (Rs)	Total Rs.	Total %	Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %
0	1	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
1. RENT OF LAND		2259	19253	[illegible]	[illegible]	-	-	-	-	-	-	-	-	15650	149050	[illegible]	[illegible]
2. LABOUR																	
i. Manual		-	13187	13187	25.96	-	-	-	-	-	-	-	-	3065	75640	[illegible]	[illegible]
ii. Animal		-	3702	3702	7.29	-	-	-	-	-	-	-	-	8415	27541	[illegible]	[illegible]
iii. Machine		440	-	440	0.87	-	-	-	-	-	-	-	-	35563	-	[illegible]	[illegible]
iv. Total		440	16889	17329	34.11	-	-	-	-	-	-	-	-	52143	[illegible]	[illegible]	[illegible]
3. OTHER ITEMS																	
i. Seed		7687	-	7687	15.13	-	-	-	-	-	-	-	-	25155	[illegible]	[illegible]	[illegible]
ii. F. Yard Manure		-	2390	2390	4.70	-	-	-	-	-	-	-	-	-	[illegible]	[illegible]	[illegible]
iii. Fertilizer		1882	-	1882	3.70	-	-	-	-	-	-	-	-	[illegible]		[illegible]	[illegible]
iv. Insect./Pesticides		-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
v. W./Abiana Charges		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
vi. Dues of Artisan		-	-	-	-	-	-	-	-	-	-	-	-	3386		[illegible]	[illegible]
vii. Fuel Charges		-	-	-	-	-	-	-	-	-	-	-		-	[illegible]	[illegible]	[illegible]
viii. Rent of Crush.Mach.		-	-	-	-	-	-	-	-	-	-	-	-	459	-	[illegible]	[illegible]
Total		9569	2390	11959	23.54	-	-	-	-	-	-	-	-	52916	14797	67713	13.20
4. G.Total of All F.Items		12268	38532	50800	100.00	-	-	-	-	-	-	-	-	120709	251173	[illegible]	[illegible]
5. Cost Per Hectare		1123	3529	4652		-	-	-	-	-	-	-	-	1664	3466	5130	

Contd...

Appendix Table A.17

CROP-WISE FARMING COST BY MAJOR COMPONENTS OF COST IN SAMPLE WATERCOUSE NO. RD.70800

Sr. No.	Cost/Item	Maize (Area: 6.73)				Sorghum (Area: 4.24)				Sugarcane (Area: 0.35)			
		Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %	Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %	Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %
0	1	2	3	4	5	6	7	8	9	10	11	12	13
1.	RENT OF LAND	4083	4262	8345	27.74	2572	2686	5258	36.39	425	443	868	21.85
2.	LABOUR												
	i. Manual	-	10591	10591	35.20	-	2607	2607	18.04	60	853	913	22.99
	ii. Animal	-	1432	1432	4.76	-	1797	1797	12.44	125	334	459	11.56
	iii. Machine	3125	-	3125	10.39	1695	-	1695	11.73	-	-	-	-
	iv. Total	3125	12023	15148	50.35	1695	4404	6099	42.21	185	1187	1372	34.53
3.	OTHER ITEMS												
	i. Seed	1047	414	1461	4.86	1566	-	1566	10.84	920	60	980	24.67
	ii. F. Yard Manure	539	-	539	1.79	-	-	-	-	-	200	200	5.04
	iii. Fertilizer	3405	-	3405	11.32	1525	-	1525	10.56	552	-	552	13.90
	iv. Insect./Pesticides	-	-	-	-	-	-	-	-	-	-	-	-
	v. W./Abiana Charges	-	-	-	-	-	-	-	-	-	-	-	-
	vi. Dues of Artisan	1190	-	1190	3.96	-	-	-	-	-	-	-	-
	vii. Fuel Charges	-	-	-	-	-	-	-	-	-	-	-	-
	viii. Rent of Crush.Mach.	-	-	-	-	-	-	-	-	-	-	-	-
	T o t a l	6181	414	6595	21.92	3091	-	3091	21.39	1472	260	1732	43.61
4.	G.Total of All F.Items	13389	16699	30088	100.00	7358	7090	14448	100.00	2082	1890	3972	100.00
5.	Cost Per Hectare	1989	2481	4470		1735	1672	3407		5949	5400	11349	

(Contd...)

Appendix Table A.17

CROP-WISE FARMING COST BY MAJOR COMPONENTS OF COST IN SAMPLE WATERCOUSE NO. RD.70800

Sr. No.	Cost/Item	Pegeon Pea (Area: 1.06) Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %	Wheat (Area: 18.16) Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %	Barley (Area: 1.01) Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %
0	1	14	15	16	17	18	19	20	21	22	23	24	25
1.	RENT OF LAND	643	671	1314	54.12	11017	11501	22518	35.48	613	639	1252	46.27
2.	LABOUR												
	i. Manual	-	343	343	14.13	570	10462	11032	22.42	-	727	727	26.87
	ii. Animal	-	75	75	3.09	355	2625	2980	4.76	-	-	-	-
	iii. Machine	540	-	540	22.24	12680	-	12680	20.26	425	-	425	15.71
	iv. Total	540	418	958	39.46	13605	13087	26692	42.65	425	727	1152	42.57
3.	OTHER ITEMS												
	i. Seed	156	-	156	6.43	1404	3036	4440	7.09	232	-	232	8.57
	ii. F. Yard Manure	-	-	-	-	320	720	1040	1.66	-	-	-	-
	iii. Fertilizer	-	-	-	-	7090	-	7090	11.33	70	-	70	2.59
	iv. Insect./Pesticides	-	-	-	-	-	-	-	-	-	-	-	-
	v. W./Abiana Charges	-	-	-	-	-	-	-	-	-	-	-	-
	vi. Dues of Artisan	-	-	-	-	-	810	810	1.29	-	-	-	-
	vii. Fuel Charges	-	-	-	-	-	-	-	-	-	-	-	-
	viii. Rent of Crush.Mach.	-	-	-	-	-	-	-	-	-	-	-	-
	Total	156	-	156	6.43	8814	4566	13380	21.38	302	-	302	11.16
4.	G.Total of All F.Items	1339	1089	2428	100.00	33436	29154	62590	100.0	1340	1366	2706	100.00
5.	Cost Per Hectare	1263	1027	2290		1841	1605	3446		1327	1352	2679	

(Contd....)

Appendix Table A.17

CROP-WISE FARMING COST BY MAJOR COMPONENTS OF COST IN SAMPLE WATERCOUSE NO. RD.70800

Sr. No.	Cost/Item	Berseem (Area: 3.84)				Pea (Area: 3.73)				Spinach (Area: '				All Crops (Area:39.13)			
		Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %	Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %	Paid (Rs)	Un-paid (Rs)	Total Rs.	Total %	Paid (Rs)	Un-paid (Rs)	Total Rs.	Total %
0	1	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
1.	RENT OF LAND	2329	2433	4762	31.88	2263	2362	4625	17.20	-	-	-	-	23950	24992	48942	30.96
2.	LABOUR																
	i. Manual	360	3912	4272	28.60	600	7563	8163	30.35	-	-	-	-	1590	37058	38648	24.45
	ii. Animal	45	1756	1801	12.06	20	210	230	0.86	-	-	-	-	545	8229	8774	5.55
	iii. Machine	2037	-	2037	13.64	1450	-	1450	5.39	-	-	-	-	21952	-	21952	13.89
	iv. Total	2442	5668	8110	54.59	2070	7773	9843	36.60	-	-	-	-	24087	45287	69374	43.89
3.	OTHER ITEMS																
	i. Seed	1234	132	1366	9.14	7620	2200	9820	36.52	-	-	-	-	14179	5842	20021	12.67
	ii. F. Yard Manure	-	-	-	-	1010	560	1570	5.84	-	-	-	-	1969	1480	3449	2.18
	iii. Fertilizer	700	-	700	4.69	1935	-	1935	5.85	-	-	-	-	14377	-	14377	9.10
	iv. Insect./Pesticides	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	v. W./Abiana Charges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	vi. Dues of Artisan	-	-	-	-	-	-	-	-	-	-	-	-	2000	-	2000	1.27
	vii. Fuel Charges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	viii. Rent of Crush.Mach.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	T o t a l	1934	132	2066	13.83	9665	2760	12425	46.20	-	-	-	-	32425	7322	39747	25.15
4.	G.Total of All F.Items	6705	8233	14938	100.00	13998	12895	26893	100.00	-	-	-	-	80462	77601	158063	100.00
5.	Cost Per Hectare	1746	2144	3890		3753	3457	7210		-	-	-	-	2056	1983	4039	

Concluded.

Appendix Table A.18

CROP-WISE FARMING COST BY MAJOR COMPONENTS OF COST IN SAMPLE WATERCOUSE NO. RD.115806

Sr. No.	Cost/Item	Maize (Area: 4.19)				Sorghum (Area: 0.55)				Sugarcane (Area: 2.68)			
		Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %	Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %	Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %
1	1	2	3	4	5	6	7	8	9	10	11	12	13
1.	RENT OF LAND	127	3979	4106	25.00	17	539	522	24.04	163	5090	5253	10.18
2.	LABOUR												
	i. Manual	120	3185	3305	20.12	-	411	411	18.33	-	5849	5949	22.47
	ii. Animal	576	2412	2988	18.19	113	648	761	33.94	80	5146	5226	20.09
	iii. Machine	830	-	830	5.05	-	-	-	-	150	-	150	10.58
	iv. Total	1526	5598	7194	43.38	113	1059	1172	52.37	230	10995	11225	43.12
3.	OTHER ITEMS												
	i. Seed	688	-	688	4.19	285	-	285	12.71	4275	-	4275	16.42
	ii. F. Yard Manure	-	2530	2530	15.40	-	-	-	-	-	465	465	1.79
	iii. Fertilizer	1575	-	1575	9.59	222	-	222	9.90	1435	-	1435	5.51
	iv. Insect./Pesticides	-	-	-	-	-	-	-	-	-	-	-	-
	v. W./Abiana Charges	249	-	249	1.52	24	-	24	1.07	434	-	434	1.67
	vi. Dues of Artisan	152	-	152	0.93	-	-	-	-	-	-	-	-
	vii. Fuel Charges	-	-	-	-	-	-	-	-	-	2340	2340	8.99
	viii. Rent of Cresh.Mach.	-	-	-	-	-	-	-	-	602	-	[illegible]	[illegible]
	T o t a l	2664	2530	5194	31.62	531	-	531	23.68	[illegible]	2805	[illegible]	[illegible]
	G.Total of F. Items	4317	12107	16424	100.00	661	1581	2242	100.00	7139	18890	26029	100.00
	Cost Per Hectare	1030	2889	3919		1202	2905	4076		2664	7048	9712	

(Contd.....)

Appendi Table 4.15

CROP-WISE FARMING COST BY MAJOR COMPONENTS OF COST IN SAMPLE WATERCOURSE NO. RS.115566

Sr. No.	Cost/Item	Pegeon Pea (Area:) Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %	Wheat (Area: 1.[illegible]) Paid (Rs)	Unpaid (Rs)	Total Rs.	%	[illegible] (Area: 2.57) Paid (Rs)	Unpaid (Rs)	Total Rs.	%
0.	1	14	15	16	17	18	19	20	21	22	23	24	25
1.	RENT OF LAND	-	-	-	-	575	16713	17244	[illegible]	[illegible]	[illegible]	519	[illegible]
2.	LABOUR												
	i. Manual	-	-	-	-	690	[illegible]	12 [illegible]	[illegible]	-	[illegible]	373	[illegible]
	ii. Animal	-	-	-	-	1140	[illegible]	[illegible]	3.07	[illegible]	[illegible]	85[illegible]	13.[illegible]
	iii. Machine	-	-	-	-	11169	-	[illegible]	[illegible]	1335	-	[illegible]	[illegible]
	iv. Total	-	-	-	-	12992	15503	28495	[illegible]	1305	5173	3498	[illegible]
3.	OTHER ITEMS												
	i. Seed	-	-	-	-	3918	24	3942	6.57	525	100	625	9.84
	ii. F. Yard Manure	-	-	-	-	-	2070	2070	3.45	-	-	-	-
	iii. Fertilizer	-	-	-	-	5840	-	5840	9.73	-	-	-	-
	iv. Insect./Pesticides	-	-	-	-	-	-	-	-	-	-	-	-
	v. W./Abiana Charges	-	-	-	-	1044	-	1044	1.74	152	-	152	2.39
	vi. Dues of Artisan	-	-	-	-	1400	-	1400	2.33	-	-	-	-
	vii. Fuel Charges	-	-	-	-	-	-	-	-	-	-	-	-
	viii. Rent of Cresh.Mach.	-	-	-	-	-	-	-		-	-	-	-
	T o t a l	-	-	-	-	12202	2094	14296	23.81	677	100	777	11.49
4.	G.Total of All F.Items	-	-	-	-	25727	34310	60037	100.00	2081	4713	6794	100.00
5.	Cost Per Hectare	-	-	-	-	1462	1949	3411		809	1234	2643	

(Contd....)

Appendix Table A.18

CROP-WISE FARMING COST BY MAJOR COMPONENTS OF COST IN SAMPLE
WATERCOUSE NO. RD.115806

Sr. No.	Cost/Item	Berseem (Area: 0.96)				Pea(Area:)				Spinach (Area:)				All Crops(Area:28.55)			
		Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %	Paid (Rs)	Un-paid (Rs)	Total Rs.	Total %	Paid (Rs)	Un-paid (Rs)	Total Rs.	Total %	Paid (Rs)	Un-paid (Rs)	Total Rs.	Total %
0	1	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
1. RENT OF LAND		29	912	941	22.76	-	-	-	-	-	-	-	-	950	30606	30606	26.46
2. LABOUR																	
i. Manual		-	705	705	17.05	-	-	-	-	-	-	-	-	810	23321	24131	20.86
ii. Animal		155	265	420	10.16	-	-	-	-	-	-	-	-	2154	12975	15130	13.08
iii. Machine		275	-	275	6.65	-	-	-	-	-	-	-	-	13650	-	13650	11.80
iv. Total		430	970	1400	33.86	-	-	-	-	-	-	-	-	16614	36296	52910	45.75
3. OTHER ITEMS																	
i. Seed		680	42	722	17.46	-	-	-	-	-	-	-	-	10371	166	10537	9.11
ii. F. Yard Manure		-	440	440	10.64	-	-	-	-	-	-	-	-	-	5505	5505	4.76
iii. Fertilizer		555	-	555	13.42	-	-	-	-	-	-	-	-	9627	-	9627	8.32
iv. Insect./Pesticides		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
v. W./Abiana Charges		77	-	77	1.86	-	-	-	-	-	-	-	-	1980	-	1980	1.71
vi. Dues of Artisan		-	-	-	-	-	-	-	-	-	-	-	-	1552	-	1552	1.34
vii. Fuel Charges		-	-	-	-	-	-	-	-	-	-	-	-	-	2340	2340	2.02
viii. Rent of Cresh.Mach.		-	-	-	-	-	-	-	-	-	-	-	-	602	0	602	0.52
Total		1312	482	1794	43.39	-	-	-	-	-	-	-	-	24132	8011	32143	27.79
4. G.Total of All F.Items		1771	2344	4135	100.00	-	-	-	-	-	-	-	-	41696	73964	115660	100.00
5. Cost Per Hectare		1845	2462	4307		-	-	-	-	-	-	-	-	1460	2591	4051	

Concluded.

CROP-WISE FARMING COST BY MAJOR COMPONENTS OF COST IN SAMPLE
WATERCOURSE NO. RD.132000.

Sr. No.	Cost/Item	Maize (Area: 3.84)				Sorghum (Area: 0.51)				Sugarcane (Area:)				Pigeon Pea (Area:)				Wheat (Area:11.93)			
		Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %	Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %	Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %	Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %	Paid (Rs)	Unpaid (Rs)	Total Rs.	Total %
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1. RENT OF LAND		-	1920	1920	16.61	-	255	255	19.51	-	-	-	-	-	-	-	-	-	5965	5965	19.25
2. LABOUR																					
i. Manual		-	2154	2154	18.64	-	309	309	23.57	-	-	-	-	-	-	-	-	-	8186	8186	26.46
ii. Animal		-	2375	2375	20.55	-	121	121	9.26	-	-	-	-	-	-	-	-	120	3560	3680	11.89
iii. Machine		1690	-	1690	14.62	200	-	200	15.30	-	-	-	-	-	-	-	-	5335	-	5335	17.25
iv. Total		1690	4529	6219	53.82	200	429	629	48.13	-	-	-	-	-	-	-	-	5455	11746	17201	55.60
3. OTHER ITEMS																					
i. Seed		336	391	727	6.29	150	126	276	21.12	-	-	-	-	-	-	-	-	2495	475	2970	9.60
ii. F. Yard Manure		-	910	910	7.87	-	-	-	-	-	-	-	-	-	-	-	-	-	840	840	2.71
iii. Fertilizer		1130	-	1130	9.78	125	-	125	9.56	-	-	-	-	-	-	-	-	2182	-	2182	7.05
iv. Insect./Pesticides		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
v. W./Abiana Charges		228	-	228	1.97	22	-	22	1.68	-	-	-	-	-	-	-	-	707	-	707	2.28
vi. Dues of Artisan		422	-	422	3.65	-	-	-	-	-	-	-	-	-	-	-	-	1061	-	1061	3.48
vii. Fuel Charges		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
viii. Rent of Cresh.Mach.		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total		2116	1301	3417	29.57	297	126	423	32.36	-	-	-	-	-	-	-	-	6445	1315	7760	25.07
4. G.Total of All F.Items		3806	7750	11556	100.00	497	810	1307	100.00	-	-	-	-	-	-	-	-	11900	19026	30926	100.00
5. Cost Per Hectare		991	2018	3009		975	1588	2563		-	-	-	-	-	-	-	-	997	1595	2592	

(Contd.....)

Appendix . Table A.19

CROP-WISE FARMING COST BY MAJOR COMPONENTS OF COST IN SAMPLE WATERCOURSE NO. RD.132000.

Sr. No.	Cost/Item	Barley (Area:7.09) Paid (Rs)	Unpaid (Rs)	Total Rs.	%	Berseem (Area:) Paid (Rs)	Unpaid (Rs)	Total Rs.	%	Peas (Area:) Paid (Rs)	Unpaid (Rs)	Total Rs.	%	Spinach (Area:4.66) Paid (Rs)	Unpaid (Rs)	Total Rs.	%	All Crops (Area:28.02) Paid (Rs)	Unpaid (Rs)	Total Rs.	%
0	1	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
1. RENT OF LAND		-	3540	3540	20.52	-	-	-	-	-	-	-	-	-	2330	2330	61.91	-	14010	14010	18.72
2. LABOUR																					
i. Manual		75	5308	5383	31.20	-	-	-	-	-	-	-	-	240	4270	4510	32.73	315	20226	20541	27.45
ii. Animal		-	1975	1975	11.45	-	-	-	-	-	-	-	-	-	2102	2102	15.25	120	10133	10253	13.70
iii. Machine		2955	-	2955	17.13	-	-	-	-	-	-	-	-	1200	-	1200	8.71	11380	-	11380	15.21
iv. Total		3030	7283	10313	59.78	-	-	-	-	-	-	-	-	1440	6372	7812	56.69	11815	30359	42174	56.36
3. OTHER ITEMS																					
i. Seed		1335	530	1865	10.81	-	-	-	-	-	-	-	-	1355	150	1505	10.92	5671	1672	7343	9.81
ii. F. Yard Manure		-	-	-	-	-	-	-	-	-	-	-	-	-	750	750	5.44	-	2500	2500	3.34
iii. Fertilizer		459	-	459	2.66	-	-	-	-	-	-	-	-	765	-	765	5.55	4661	-	4661	6.23
iv. Insect./Pesticides		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
v. W./Abiana Charges		420	-	420	2.43	-	-	-	-	-	-	-	-	618	-	618	4.48	1995	-	1995	2.67
vi. Dues of Artisan		456	-	656	30.80	-	-	-	-	-	-	-	-	-	-	-	-	2139	-	2139	2.86
vii. Fuel Charges		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
viii. Rent of Cresh.Mach.		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total		2870	530	3400	19.71	-	-	-	-	-	-	-	-	2738	900	3638	26.40	14466	4172	18638	24.91
4. G.Total of all F.Items		5900	11353	17253	100.00	-	-	-	-	-	-	-	-	4187	9602	13780	100.00	26281	48541	74822	100.00
5. Cost Per Hectare		833	1604	2437		-	-	-	-	-	-	-	-	896	2061	2957		938	1732	2670	

Concluded

Appendix Table 6.20

VALUES OF CROPS RAISED ON SAMPLE FARMS

(Rupees)

Sr. No.	Crops	Head Section: RD 22,000 (Area: 53.01) ha. Main Product	By-Product	Total	RD. 45,800 (Area: 46.24) ha. Main Product	By-Product	Total	Total (Area: 99.25) ha. Main Product	By-Product	Total	Middle Section: RD. 53,700 (Area: 72.52) ha. Main Product	By-Product	Total	RD. 70,800 (Area: 39.13) ha. Main Product	By-Product	Total	Total (Area: 111.65) ha. Main Product	By-Product	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1.	Maize	31028	9410	30438	4792	2976	7768	25821	12386	38206	13946	12420	26366	10975	3912	14887	24921	16332	41253
2.	Sorghum	2750	-	7250	5700	-	5700	12950	-	12950	91700	-	91700	10644	-	10644	102344	-	102344
3.	Sugarcane	-	-	-	58600	4144	62744	58600	4144	62744	55420	5779	60199	2450	278	2728	58870	4057	62927
4.	Pigeon Pea	-	-	-	-	-	-	-	-	-	-	-	-	2800	-	2800	2800	-	2800
5.	Wheat	91787	69106	160890	62280	38952	101232	154067	108055	262122	95000	58680	153680	31480	19342	50827	126485	78022	204507
6.	Barley	651	1880	2531	-	5900	5900	651	7780	8431	3900	-	3900	1160	725	1885	5060	725	5785
7.	Berseem	11600	-	11600	30720	-	30720	42320	-	42320	78450	-	78450	14650	-	14650	93200	-	93100
8.	Pea	-	-	-	-	-	-	-	-	-	-	-	-	19327	-	19327	19327	-	19327
9.	Spinach	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.	All crops/ All farms	132316	80393	212709	162092	51972	214064	294408	132365	426773	339416	74879	414295	93491	24257	117748	432907	99136	532043
11.	All Crops/ per farm	6964	4231	11195	5403	1732	7135	6008	2701	8710	11314	2496	13810	3116	809	3925	7215	1652	8867
12.	All crops/ per composite hectare	2496	1517	4013	3505	1124	4629	2966	1334	4300	4680	1033	5713	2383	620	3009	3877	888	4765

(Contd.....)

Appendix Table A.20

VALUE OF CROPS RAISED ON SAMPLE FARMS

Sr. No.	Crops	Tail Section: RD. 115,806 (Area: 28.55) Main Product	By-Product	Total	RD. 132,000 (Area: 28.02) Main Product	By-Product	Total	Total (Area: 56.57) ha. Main Product	By-Product	Total	All places (Area: 267.45) ha Main Product	By-Product	Total
0		20	21	22	23	24	25	26	27	28	29	30	31
1.	Maize	100	867	967	460	440	900	560	1307	1867	51301	30025	81326
2.	Sorghum	80	-	80	75	-	75	155	-	155	115449	-	115449
3.	Sugarcane	13815	1733	15548	-	-	-	13815	1733	15548	131235	9924	141219
4.	Pigeon Pea	-	-	-	-	-	-	-	-	-	2800	-	2800
5.	Wheat	33200	22610	55810	8713	4657	15170	41913	29067	70980	322465	215144	537600
6.	Barley	903	4488*	5391	8361	4200	12516	9264	8688	17952	14975	[illegible]	[illegible]
7.	Berseem	1825	-	1825	-	-	-	1825	-	1825	137245	-	137245
8.	Pea	-	-	-	-	-	-	-	-	-	19327	-	19327
9.	Spinach	-	-	-	27000	-	27000	27000	-	27000	27000	-	[illegible]
10.	All crops/ All farms	49923	27698	79621	44609	11097	55607	94532	40795	135327	821867	272296	1094143
11.	All Crops/ per farm	1664	990	2654	2230	555	2785	1890	816	2706	5169	1711	6878
12.	All crops/ per composite hectare	1749	1040	2789	1592	396	1988	1671	721	2392	3073	1016	4089

(Concluded)

* In the By-product 0.10 ha. was grown as fodder crops and the value of Rs.2250/- has been included in the by-product of Grain - Barley.

Appendix Table A.20.1

SUMMARY STATISTICS ON COST AND RETURN FROM CROPS RAISED ON SAMPLE FARMS IN 1987-88

(Rupees)

Canal Section	Total sample farmers (No.)	Cropped area (Hectares) Total	Cropped area (Hectares) Per farmer	Farming cost (Rs) Total	Farming cost (Rs) Per hec. of cropped area (Rs) 5/2	Farming cost (Rs) Per farmer (Rs) 5/3	Paid farming cost (Rs) Total	Paid farming cost (Rs) Per hec. of cropped area (Rs) 8/2	Paid farming cost (Rs) Per farmer (Rs) 8/3	Value of output Gross (Rs)	Value of output Per hec. of cropped area (Rs) 11/2	Value of output Per farmer (Rs) 11/3	Net profit/loss -/+ Total 11-5	Net profit/loss -/+ Per hec. of cropped area 14/2	Net profit/loss -/+ Per farmer 14/3	Net profit/loss without accounting for home supply inputs Total 11-8	Net profit/loss without accounting for home supply inputs Per hec. of cropped area 17/3	Net profit/loss without accounting for home supply inputs Per farmer 17/2
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
I- Head																		
i. W.C RD 1	19	53.01	2.79	209[illegible]9	3848	10936	60569	1143	3188	212709	4013	11195	8730	165	459	152140	2870	8007
ii. W.C RD-2	30	46.24	1.54	245[illegible]67	5378	8126	77913	1685	2597	214664	4629	7135	-29703	-642	-990	136151	2944	4538
iii. Total =	49	99.25	2.03	447746	4511	9139	138482	1395	2826	426773	4300	8710	-20973	-211	-426	288291	2905	5882
II- Middle																		
i. W.C RD-3	30	72.52	2.41	372637	5131	12403	105059	1449	1449	414295	5713	13810	42208	585	1407	309236	4264	10308
ii. W.C RD-4	30	39.13	1.30	158063	4039	5269	56512	1444	1444	117748	3009	3925	-40315	-1030	-1344	62046	1586	2068
iii. Total =	60	111.65	1.86	530150	4748	8836	161571	1447	1447	532043	4765	8867	1893	17	32	371282	3325	6185
III-Tail																		
i. W.C RD-5	30	28.55	0.95	115660	4051	3855	40746	1427	1358	79621	2792	2657	-35939	-1259	-1198	36409	1345	1280
ii. W.C RD-6	20	26.02	1.40	74822	2870	3741	26281	938	938	55706	1989	2765	-19116	- 682	- 956	29425	1050	1471
iii. Total =	50	56.57	1.13	190482	3367	3810	67027	1185	1341	135327	2392	2709	-55055	- 973	-1101	67834	1199	1357
IV- All sections	159	267.45	1.68	1168378	4369	7348	367083	1373	2309	1094143	4091	6881	-74135	- 277	- 466	727407	2720	4575

Appendix Table A.21

PROFIT AND LOSS ACCOUNT OF MAIZE CROP

(Rupees)

Sr. No.	Canal Section	Sample farmer No.	Crop area (Kec)	Farming cost: Paid Total	Paid Per hectare	Paid Per farm	Unpaid Total	Unpaid Per hectare	Unpaid Per farm	Gross Total	Gross Per hectare	Gross Per farm	Value of output Total	Value of output Per hectare	Value of output Per farm	Net profit / loss Total	Net profit / loss Per hectare	Net profit / loss Per farm	Carry home income Total	Carry home income Per hectare	Carry home income Per farm
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
I.	Head																				
	i. W.C RD-22000	19	16.18	13591	840	715	41292	2552	2173	54883	3392	2889	30438	1881	1602	-24445	-1511	-1287	16847	1041	887
	ii. W.C RD-45800	30	8.55	6604	772	220	25017	2925	834	31619	3698	1054	7768	908	259	-23851	-2790	- 795	1166	136	39
	III. Total	49	24.73	20193	817	412	66309	2681	1532	86502	3498	1765	38206	1545	780	-48296	-1953	- 986	18013	728	368
II.	Middle																				
	i. W.C RD-53700	30	15.24	14625	960	488	49251	3232	1408	63876	4191	2129	26366	1730	879	-37510	-2461	-1250	11741	770	391
	ii. W.C RD-70800	30	6.73	9306	1383	310	20782	3088	693	30088	4471	149	14887	2212	496	-15201	-2259	- 507	5581	829	186
	iii. Total	60	21.97	23931	1089	399	70033	3188	1167	93964	4277	1566	41253	1878	687	-52711	-2399	- 879	17322	788	289
III.	Tail																				
	i. W.C RD-115806	30	4.19	4190	1000	140	12234	2920	408	16424	3920	547	967	231	32	-15457	-3689	- 515	-3223	-769	-107
	ii. W.C RD-132000	20	3.84	3806	991	190	7750	2018	386	11556	3009	578	900	234	45	-10656	-2775	- 533	-2906	-757	-145
	iii. Total	50	8.03	7996	996	160	19984	2487	400	27980	3484	560	1867	232	37	-26113	-3252	- 522	-6129	-763	-123
IV.	All section	159	54.73	52120	952	328	156326	2856	983	208446	3809	1311	81326	1486	511	-127120	-2323	- 799	29206	534	184

Appendix Table 4.33

Impact of [illegible] on farm [illegible]

Sr. No.	Canal Section	Sesi as Crop (Hectare) area				Area				Yield				Value of Output			Net profit			Cam. Rose income		
																						Rupees
			Hectare	Total	Per Hectare	Per farm		Per Hectare	Per farm		Per Hectare	Per farm		Per Hectare	Per farm		Total	Per Hectare	Per farm	Total	Per Hectare	Per farm
0		2	3	4	5	6		8					13	14	15		16	17	18	19	20	21
I.	Head																					
	i. W.C RD-32000	19	1.92	1109	577	58	5905	3076	311	7014	3652	369	1152	3776	388	336	189	12	6141	3198	323
	ii. W.C RD-45800	30	5.54	5430	97	181	18072	3261	414	15013	3010	54	3746	1025	190	-15313	-2213	- 411	570	49	9
	iii. Total	49	7.46	6539	87	133	18477	2470	377	25716	3344	511	12450	1731	264	-12146	-1613	- 246	6911	857	131
II.	Middle																					
	i. W.C RD-53700	30	18.17	19690	108	656	48175	2651	1606	178862	3725	2262	91700	5047	3057	23834	1312	794	72010	3963	2400	
	ii. W.C RD-70900	30	4.24	4784	112	160	9662	2279	322	14443	3403	482	10844	2510	355	- 3914	- 897	- 127	5359	1263	195	
	iii. Total	60	22.41	24474	1092	408	57838	2581	964	93314	3672	1372	102544	4567	1708	20030	893	334	77868	3475	1298	
III.	Tail																					
	i. W.C RD-115200	30	0.55	644	1171	21	1598	2905	53	2245	4076	75	80	145	3	- 2165	-3931	- 72	- 564	-1025	- 19	
	ii. W.C RD-152000	20	0.51	497	975	25	810	1586	41	1307	2563	65	65	147	4	- 1242	-2436	- 62	- 422	- 827	- 21	
	iii. Total	50	1.06	1141	1076	23	2408	2272	48	3549	3346	71	152	146	3	- 3394	-3202	- 68	- 986	- 930	- 20	
IV.	All section	159	30.95	32156	1039	202	78723	2544	495	110879	3583	697	115449	3730	726	4576	149	29	83293	2691	523	

Appendix Table 4.33

PROFIT AND LOSS ACCOUNT OF SUGARCANE CROP

(Rupees)

Sr. No.	Canal Section	Sample farmer No.	Crop area (Hec)	Farming cost: Paid Total	Paid Per hectare	Paid Per farm	Unpaid Total	Unpaid Per hectare	Unpaid Per farm	Gross Total	Gross Per hectare	Gross Per farm	Value of output Total	Value of output Per hectare	Value of output Per farm	Net profit / loss Total	Net profit / loss Per hectare	Net profit / loss Per farm	Carry home income Total	Carry home income Per hectare	Carry home income Per farm
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
I.	Head																				
	i. W.C RD-22000	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ii. W.C RD-45800	30	4.96	18074	3644	602	40839	8234	1361	58913	11878	1964	62744	12650	2091	3831	772	128	44670	9006	1489
	III. Total	49	4.96	18074	3644	369	40839	8234	833	58913	11878	1202	62744	12650	1280	3831	772	78	44670	9006	912
II.	Middle																				
	i. W.C RD-53700	30	3.14	15071	4800	502	29654	9441	988	44725	14244	1491	60199	19172	2007	15474	4928	516	45128	14372	1504
	ii. W.C RD-70800	30	0.35	1657	4734	55	2315	6614	77	3972	11349	132	2728	7794	91	- 1244	-3554	- 41	1071	3060	36
	iii. Total	60	3.49	16728	4793	279	31969	9160	533	48697	13953	812	62967	18031	1049	14230	4077	237	46199	13238	770
III.	Tail																				
	i. W.C RD-115806	30	2.68	6976	2603	233	19053	7109	635	26029	9712	868	15548	5801	518	-10481	-3911	- 518	8572	3198	286
	ii. W.C RD-132000	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iii. Total	50	2.68	6976	2603	140	19053	7109	381	26029	9712	521	15548	5801	311	-10481	-3911	- 210	8572	3198	171
IV.	All section	159	11.13	41778	3754	263	91861	8253	578	133639	12007	840	141219	12688	888	- 7580	- 681	- 47	99441	8934	625

Appendix Table A.24

PROFIT AND LOSS ACCOUNT OF PIGEON PEA CROP

Sr. No.	Canal Section	Sample farmer No.	Crop area (Her)	Farming cost: Paid Total	Paid Per hectare	Paid Per farm	Unpaid Total	Unpaid Per hectare	Unpaid Per farm	Gross Total	Gross Per hectare	Gross Per farm	Value of output Total	Value of output Per hectare	Value of output Per farm	Net profit / loss Total	Net profit / loss Per hectare	Net profit / loss Per farm	Carry home income Total	Carry home income Per hectare	Carry home income Per farm
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
I.	Head																				
	i. W.C RD-22000	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ii. W.C RD-45300	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III. Total	49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II.	Middle																				
	i. W.C RD-53700	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ii. W.C RD-70800	30	1.06	696	657	23	1732	1634	58	2428	2291	81	2800	2642	93	372	351	12	2104	1985	70
	iii. Total	60	1.06	696	657	12	1732	1634	29	2428	2291	40	2800	2642	47	372	351	6	2104	1985	35
III.	Tail																				
	i. W.C RD-115806	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ii. W.C RD-132000	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iii. Total	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IV.	All section	159	1.06	696	657	4	1732	1634	11	2428	2291	15	2800	2642	18	372	351	2	2104	1985	13

Appendix Table A.[illegible]

PROFIT AND LOSS ACCOUNT OF [illegible] CROP

Sr. No.	Canal Section	Sampled Farmers	Crop area	Working Cost Total	Per Hectare	Per farm	Per Hectare	Per farm	Per Hectare	Per farm	Value of output Total	Per Hectare	Per farm	Net profit Total	Per Hectare	Per farm	Gross income Total	Per Hectare	Per farm
																	Rupees		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
I.	Head																			
	i. W.C RD-22000	19	[illegible]	42045	1343	2213	[illegible]	2235	4531	[illegible]	4081	[illegible]	160891	[illegible]	6465	33129	1 58	[illegible]	118345	3396	6255
	ii. W.C RD-45000	30	[illegible]	2[illegible]63	1227	872	[illegible]	3143	2131	[illegible]	4431	[illegible]	101232	4279	3371	[illegible]	557	371	75069	3493	2502
	III. Total	49	[illegible]	68205	1321	1392	[illegible]	2657	[illegible]	[illegible]	4818	[illegible]	262122	[illegible]	5349	44304	858	434	193414	3755	3957
II.	Middle																			
	i. W.C RD-53700	30	[illegible]	45133	1658	1504	958.9	3944	3194	142942	5602	4658	153680	6327	5123	12739	524	425	108547	4463	3618
	ii. W.C RD-70800	30	18.16	22419	1235	747	40171	2212	1335	62593	3447	2086	50927	2799	1694	-11763	-648	-392	28408	1564	947
	iii. Total	60	42.45	67552	1591	1126	135960	3203	2266	203535	4795	3392	204507	4818	3409	975	23	16	136955	3226	2283
III.	Tail																			
	i. W.C RD-115800	30	17.60	25192	1431	840	34845	1980	1161	60027	3411	2001	55810	3171	1860	- 4227	- 240	- 141	30618	1740	1021
	ii. W.C RD-132000	20	11.93	11900	997	595	19026	1595	951	30926	2592	1549	15170	1272	759	-15756	-1321	- 788	3270	274	164
	iii. Total	50	29.53	37092	1256	742	53871	1824	1077	90963	3080	1819	70980	2404	1420	-19983	- 677	- 400	33888	1148	678
IV.	All section	159	123.62	172252	1398	1087	339451	2746	2135	512313	4144	3222	537609	4349	3381	25296	205	159	364757	2951	2294

Appendix Table A.26

PROFIT AND LOSS ACCOUNT OF BARLEY CROP

(Rupees)

Sr. No.	Canal Section	Sample farmer No.	Crop area (Hec)	Farming cost: Paid Total	Paid Per hectare	Paid Per farm	Unpaid Total	Unpaid Per hectare	Unpaid Per farm	Gross Total	Gross Per hectare	Gross Per farm	Value of output Total	Value of output Per hectare	Value of output Per farm	Net profit / loss Total	Net profit / loss Per hectare	Net profit / loss Per farm	Carry home income Total	Carry home income Per hectare	Carry home income Per farm
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
I.	Head																				
i.	W.C RD-22000	19	1.47	1040	707	55	2365	2017	156	4305	2724	211	2531	1722	133	-1474	-1003	- 78	1491	1014	78
ii.	W.C RD-45900	30	1.53	1385	1232	63	7338	4731	241	9123	5963	304	5900	3856	197	-3223	-2107	-107	4015	2624	134
III.	Total	49	3.00	2925	975	60	10103	3401	208	13128	4576	268	8431	2810	172	-4697	-1566	- 96	5526	1835	112
II.	Middle																				
i.	W.C RD-53700	30	0.76	531	697	18	2347	4404	112	3378	5103	129	3900	5132	130	22	29	1	3369	4433	112
ii.	W.C RD-70800	30	1.01	727	720	24	1979	1959	66	2706	2679	90	1385	1366	63	- 321	-813	- 27	1158	1147	39
iii.	Total	60	1.77	1258	711	21	5326	3009	89	6584	3720	110	5785	3268	96	- 799	-451	- 13	4527	2559	75
III.	Tail																				
i.	W.C RD-115300	30	2.57	2002	779	67	4724	1865	160	6796	2644	227	5391	2098	180	-1405	-547	47	3389	1319	113
ii.	W.C RD-132000	20	7.08	5900	833	295	11653	1604	568	17253	2437	863	12561	1774	628	-4692	-663	-235	6661	941	333
iii.	Total	50	9.65	7902	819	158	16147	1673	324	24049	2492	481	17952	1860	359	-6097	-632	-122	10050	1041	201
IV.	All section	159	14.42	12085	838	76	31676	2197	199	43761	3035	275	32168	2231	202	-11593	-804	- 73	20083	1393	126

Appendix Table A.27

PROFIT AND LOSS ACCOUNT OF SUGARCANE CROP

Rupees)

Sr. No.	Canal Section	Sample farmers No.	Crop area (Hect)	Total	Remaining costs 1 to 3 Per hectare	Per farm	Total	Remaining costs 4 to 8 Per hectare	Per farm	Total	Remaining costs 9 to 13 Per hectare	Per farm	Total	Per hectare	Per farm	Total output	Per hectare	Per farm	Net profit / loss Total	Per hectare	Per farm	Net income Total	Per hectare	Per farm
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
I. Head																								
i. W.C RD-22000	19	2.13	2784	1307	147	7533	3537	396	10317	4844	543	11610	5446	611	1293	612	69	8816	4139	464
ii. W.C RD-45800	30	5.31	19759	3721	659	16695	3144	562	36654	6905	1222	30072	5665	1004	-6582	-1239	-219	19961	3760	665
III. Total	49	7.44	22543	3030	460	23928	3209	486	46971	6299	945	42232	5666	849	-4051	- 544	- 83	19777	2655	404
II. Middle																								
i. W.C RD-53700	30	10.92	10009	917	334	40791	3735	1361	50800	4652	1693	78450	7184	2615	27650	2532	922	63441	6267	2281
ii. W.C RD-70800	30	3.84	4376	1140	146	10562	2751	352	14938	3890	498	14650	3815	488	- 288	-75	- 10	10274	2676	342
iii. Total	60	14.76	14385	975	240	51353	3479	856	65738	4454	1096	93100	6308	1552	27362	-1854	456	78715	5333	1312
III. Tail																								
i. W.C RD-115806	30	0.96	1742	1815	58	2393	2493	80	4135	4307	138	1825	1901	61	- 2310	-2406	- 77	83	86	3
ii. W.C RD-132000	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
iii. Total	50	0.96	1742	1815	58	2393	2493	48	4135	4307	82	1825	1901	37	-2310	-2406	- 46	83	86	2
IV. All section	159	23.16	38670	1670	243	77574	3349	490	116244	5019	731	137245	5926	863	21001	907	132	98575	4256	620

Apperdix Table A.28

PROFIT AND LOSS ACCOUNT OF PEA CROP

(Rupees)

Sr. No.	Canal Section	Sample farmers No.	Crop area (Hec)	Farming cost: Paid Total	Paid Per hectare	Paid Per farm	Unpaid Total	Unpaid Per hectare	Unpaid Per farm	Gross Total	Gross Per hectare	Gross Per farm	Value of output Total	Value of output Per hectare	Value of output Per farm	Net profit / loss Total	Net profit / loss Per hectare	Net profit / loss Per farm	Carry home income Total	Carry home income Per hectare	Carry home income Per farm
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
I.	Head																				
	i. W.C RD-22000	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ii. W.C RD-45800	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III. Total	49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II.	Middle																				
	i. W.C RD-53700	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ii. W.C RD-70890	30	3.73	11735	3146	391	15153	4064	505	26893	7210	896	19327	5182	644	-7566	-2023	-252	7592	2035	253
	iii. Total	60	3.73	11735	3146	196	15153	4064	253	26893	7210	448	19327	5182	322	-7566	-2028	-126	7592	2035	127
III.	Tail																				
	i. W.C RD-115806	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ii. W.C RD-132000	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iii. Total	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IV.	All section	159	3.73	11735	3146	74	15158	4064	95	26893	7210	169	19327	5182	122	-7566	-2023	- 48	7592	2035	48

Appendix Table 4.5[illegible]

[illegible] ACCOUNT FOR [illegible] 1988

(Figures)

S. No.	Canal Section	Sample farmers No.	Crop area (Hect)	Total	Per farm	Per farm	Farming cost Total	Per Hectare	Per farm	[illegible]	[illegible]	Per Hectare	[illegible]	Value Total	[illegible]	Output Per farm	Net profit Total	Per Hectare	Per farm	Gross margin Total	Per Hectare	Per farm
		2	3	4	5	6	7	8	9	10	11	12	13			15	16	17	18	19	20	21
I. Head																						
i. W.C RD-25000		19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ii. W.C RD-45200		30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
III. Total		49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II. Middle																						
i. W.C RD-53700		3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ii. W.C RD-70800		30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
iii. Total		60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
III. Tail																						
i. W.C RD-115806		30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ii. W.C RD-132000		20	4.66	4178	897	209	9602	2061	483	13760	2957	659	27000	5794	1350	13220	2837	661	22822	4897	1141
iii. Total		50	4.66	4178	897	84	9602	2061	192	13760	2957	276	27000	5794	540	13220	2837	264	22822	4897	456
IV. All section		159	4.66	4178	897	26	9602	2061	60	13760	2957	87	27000	5794	170	13220	2837	83	22822	4897	144

APPENDIX TABLE A.30

SAMPLE HOUSEHOLDS DISPOSIBLE INCOME DURING 1987-88

Source	TOTAL INCOME							
	Head Section		Middle Section		Tail Section		All Section	
	Rs.	%	Rs.	%	Rs.	%	Rs.	%
1. Agriculture #								
i. Crops								
a.sample WC	204,779	11.19	506,985	26.06	32,057	5.00	743,819	16.84
b.other areas	75,809	4.14	108,561	4.58	248,984	38.86	433,354	9.81
c.All places	280,588	15.33	615,544	31.64	281,041	43.86	1,177,173	26.65
ii. Fruit	-	-	1,650	.08	15,000	2.34	23,650	.47
iii. Livestock Products	1,34,169	7.33	235,722	12.12	86,695	13.54	458,386	10.38
iv. Total	414,757	22.66	852,916	43.83	383,736	59.87	1652,409	37.51
2. Industry	16,000	0.87	75,000	3.85	-	-	44,000	1.00
3. Trade	236,400	12.92	62,000	3.20	-		298,400	6.76
4. Rent of Property	-	-	98,300	5.06	-	-	98,300	2.23
5. Paid Employment 2/ (Off farm)	11,02,920	60.27	859,846	44.20	215,000	33.71	2,177,766	49.33
6. Other Sources	60,000	3.28	-	-	36,000	5.63	96,000	2.17
7. All Sources	1830,077	100.00	1,945,416	100.00	640,736	100.00	4,416,229	100.00

1 / Net values after allowing for cost of production except in case of fruit of which only gross income is included and no account taken of fruit self-consumed.

2 / See Appendix Table 4.31.

APPENDIX TABLE [illegible]

MONTHLY INCOME OF [illegible] IN A MILE [illegible]

Sr. No.	Income Group (Rs.)	[illegible] Workers				[illegible] Workers				[illegible]				[illegible]				[illegible] Workers			
		No.	%	Total	Average	No.	%	Total	Average	No.	%	Total	Average	No.	%	Total	Average	No.	%	Total	Average
1.	501 - 1000	13	41.94	15,600	1200	16	8.77	16,750	1047	5	62.50	4,000	800	34	37.86	36,350	1069
2.	1001 - 1500	13	30.23	16,300	1254	21	50.00	31,400	1495	1	12.50	1,100	1100	40	38.83	48,800	1220
3.	1501 - 2000	6	13.95	11,600	1900	3	5.77	5,400	1800	-	-	-	-	9	8.74	16,200	1800
4.	2001 - 2500	-	-	-	-	3	5.77	7,400	2467	-	-	-	-	3	2.91	7,400	2467
5.	2501 - 3000	1	2.33	2,600	2600	1	1.92	3,000	3000	1	12.50	2,800	2800	3	2.91	8,400	2800
6.	3001 - 4000	2	4.65	7,000	3500	3	5.77	10,700	3567	-	-	-	-	5	4.85	17,700	3540
7.	4001 - 5000	2	4.65	9,700	4850	-	-	-	-	-	-	-	-	2	1.94	9,700	4850
8.	5001 and above	1	2.33	30,000	30000	-	-	-	-	1	12.50	10,000	10000	2	1.94	40,000	20000
9.	All Groups	42	100.00	91,910	2137	52	100.00	71,650	1378	8	100.00	18,000	2250	103	99.98	1,81,560	1763

Appendix Table 4-33

MANUAL LABOUR, ANIMAL LABOUR AND MACHINE DAY/HOUR SPENT PER CROP

Sr. No.	Crop	Head Section: RD. 22,000 Area	Manual Labour	Animal Labour	Machine hours	RD. 45,800 Area	Manual Labour	Animal Labour	Machine hours	Total Area	Manual Labour	Animal Labour	Machine hours
0	1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Maize	16.18	385	114	91	8.55	279	226	71	24.73	664	340	162
2.	Sorghum	1.92	42	37	-	5.56	66	26	37	7.48	108	63	37
3.	Sugarcane	-	-	-	-	4.96	602	169	14	4.96	602	169	14
4.	Pigeon Pea	-	-	-	-	-	-	-	-	-	-	-	-
5.	Wheat	31.31	954	228	223	20.33	690	154	211	51.64	1644	382	434
6.	Barley	1.47	53	4	2	1.53	121	44	18	3	174	48	26
7.	Berseem	2.13	98	31	19	5.31	579	187	36	7.44	677	218	55
8.	Pea	-	-	-	-	-	-	-	-	-	-	-	-
9.	Spinach	-	-	-	-	-	-	-	-	-	-	-	-
10.	Total	53.01	1532	414	341	46.24	2337	806	387	99.25	3869	1220	728

(Contd...

Appendix Table A-32

MANUAL LABOUR, ANIMAL LABOUR AND MACHINE DAY HOURS SPENT PER CROP

Sr. No.	Crop	Middle Section											
		RD. 53,700				RD. 70,600				Total			
		Area	Manual Labour	Animal Labour	Machine hours	Area	Manual Labour	Animal Labour	Machine hours	Area	Manual Labour	Animal Labour	Machine hours
0	1	14	15	16	17	18	19	20	21	22	23	24	25
1.	Maize	15.24	506	110	115	6.73	190	50	62	21.97	696	160	180
2.	Sorghum	18.17	232	72	-	4.24	116	67	25	22.41	348	39	29
3.	Sugarcane	3.14	486	104	11	0.35	41	11	-	3.49	527	115	11
4.	Pigeon Pea	-	-	-	-	1.45	11	2	2	1.45	11	2	2
5.	Wheat	24.29	1078	291	231	18.16	344	80	193	42.45	1422	371	424
6.	Barley	0.53	37	11	2	1.01	24	-	7	1.54	61	11	9
7.	Berseem	10.92	438	81	53	3.84	144	54	41	14.76	582	135	94
8.	Pea	-	-	-	-	3.73	324	5	29	3.73	324	5	29
9.	Spinach	-	-	-	-	-	-	-	-	-		-	-
10.	Total=	63.29	2777	669	415	39.12	1194	269	639	102.41	3971	838	785

(Contd....)

Appendix Table A-35

MANUAL LABOUR, ANIMAL LABOUR AND MACHINE DAYS/HOUR SPENT PER CROP

Sr. No.	Crop	Tail Section RD.115,696 Area	Manual Labour	Animal Labour	Machine hours	Tail Section RD 122,000 Area	Manual Labour	Animal Labour	Machine hours	Total Area	Manual Labour	Animal Labour	Machine hours	All places Area	Manual Labour	Animal Labour	Machine hours
0	1	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
1.	Maize	4.19	120	77	15	3.94	75	48	33	8.13	195	125	48	54.73	1545	625	390
2.	Sorghum	0.55	16	15	-	0.51	13	4	4	1.06	29	19	4	30.95	485	221	70
3.	Sugarcane	2.68	324	99	3	-	-	-	-	2.68	324	99	3	11.13	1452	323	28
4.	Pigeon Pea	-	-	-	-	-	-	-	-	-	-	-	-	1.06	11	2	9
5.	Wheat	17.60	425	123	136	11.93	380	81	83	29.53	805	204	271	123.62	3871	957	1129
6.	Barley	2.57	46	21	24	7.08	197	48	59	9.65	243	69	83	14.19	478	128	118
7.	Berseem	0.96	22	10	6	-	-	-	-	0.96	22	10	6	23.16	1281	363	155
8.	Pea	-	-	-	-	-	-	-	-	-	-	-	-	3.73	324	5	29
9.	Spinach	-	-	-	-	4.66	172	44	26	4.66	172	44	26	4.66	172	44	26
10.	Total	28.55	943	345	236	28.02	1662	225	205	56.57	1780	570	441	258.23	9620	2728	1954

(Concluded)

Appendix Table A-33

MANUAL LABOUR, ANIMAL LABOUR AND MACHINE DAY/HOUR SPENT PER CROP PER HECTARE

Sr. No.	Crop	Head Section: RD. 22,000 Manual Labour	RD. 22,000 Animal Labour	RD. 22,000 Machine hours	RD. 45,800 Manual Labour	RD. 45,800 Animal Labour	RD. 45,800 Machine hours	Total Manual Labour	Total Animal Labour	Total Machine hours
0	1	2	3	4	5	6	7	8	9	10
1.	Maize	24	7	6	33	26	8	27	14	7
2.	Sorghum	22	19	-	12	5	7	14	8	5
3.	Sugarcane	-	-	-	121	34	3	121	34	3
4.	Pigeon Pea	-	-	-	-	-	-	-	-	-
5.	Wheat	30.47	7.28	7.12	33.94	7.58	10.39	31.94	7.4	8.4
6.	Barley	3.05	2.72	5.44	79.08	28.76	11.76	58	16	8.57
7.	Berseem	46	14.55	8.92	109.04	35.22	6.78	91	29.3	7.29
8.	Pea	-	-	-	-	-	-	-	-	-
9.	Spinach	-	-	-	-	-	-	-	-	-
10.	Total	28.90	71.81	6.43	50.54	17.43	8.37	38.98	12.29	7.34

(Contd....)

Appendix Table A-33

MANUAL LABOUR, ANIMAL LABOUR AND MACHINE DAY/HOUR SPENT PER CROP PER HECTARE

Sr. No.	Crop	Middle Section								
		RD. 35,700			RD. 70,800			Total		
		Manual Labour	Animal Labour	Machine hours	Manual Labour	Animal Labour	Machine hours	Manual Labour	Animal Labour	Machine hours
0	1	11	12	13	14	15	16	17	18	19
1.	Maize	33	7	8	29	7	9	32	7	8
2.	Sorghum	13	4	-	27	1[illegible]	7	16	[illegible]	1
3.	Sugarcane	155	33	4	117	31	-	151	3[illegible]	5
4.	Pigeon Pea	-	-	-	10	2	8	1[illegible]	2	8
5.	Wheat	44.38	11.98	9.51	18.94	4.41	10.63	33.5	6.24	10
6.	Barley	69.81	20.75	3.77	23.70	-	6.93	3[illegible].61	7.14	5.34
7.	Bursee[illegible]	228.13	42.19	27.6	37.5	14.06	10.28	101.04	23.44	16.32
8.	Pea	-	-	-	86.86	1.34	7.77	86.86	1.34	7.77
9.	Spinach	-	-	-	-	-	-	-	-	-
10.	Total=	63.88	10.57	6.56	30.52	6.88	16.33	38.76	8.18	7.67

(Contd.....)

Appendix Table A-33

MANUAL LABOUR, ANIMAL LABOUR AND MACHINE DAY/HOUR SPENT PER CROP PER HECTARE

Sr. No.	Crop	Tail Section											
		RD.115.806			RD.132,000			Total			All places		
		Manual Labour	Animal Labour	Machine hours	Manual Labour	Animal Labour	Machine hours	Manual Labour	Animal Labour	Machine hours	Manual Labour	Animal Labour	Machine hours
0	1	27	28	29	30	31	32	33	34	35	36	37	38
1.	Maize	20	13	9	26	18	4	23	16	6	29	11	7
2.	Sorghum	25	8	8	29	27	-	27	13	4	16	-	2
3.	Sugarcane	-	-	-	121	37	1	121	37	1	131	34	3
4.	Pigeon Pea	-	-	-	-	-	-	-	-	-	1[illegible]	[illegible]	[illegible]
5.	Wheat	31.85	6.79	6.96	24.15	6.99	10.68	27.26	6.91	9.13	31.31	7.34	9.13
6.	Barley	27.82	6.78	8.33	17.90	8.17	9.34	25.18	7.15	9.60	33.[illegible]	8.89	9.32
7.	Berseem	-	-	-	22.92	10.42	6.25	22.92	10.42	6.25	90.47	25.84	10.95
8.	Pea	-	-	-	-	-	-	-	-	-	86.95	[illegible].34	[illegible]
9.	Spinach	36.91	9.44	5.58	-	-	-	36.91	9.44	5.58	36.91	9.44	5.58
10.	Total	57.89	8.03	7.32	33.03	12.08	8.27	31.47	10.08	7.80	37.25	10.56	7.57

Appendix Table A.34

IRRIGATION TIME ALLOWED PER TURN

Sample Watercourses	Water drawn once every:	Distribution of water users by number of hours of water supply: Upto one		1 - 2		2 - 4		4 - 6		6 - 8		More than 8		All cases
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	(No(=100)
I- Head Section														
i- RD.22000	12th day	2	10.53	2	10.53	7	36.84	2	10.53	1	5.26	5	26.32	19
ii- RD.45800	7th day	8	26.67	7	23.33	7	23.33	3	10.00	1	3.33	4	13.33	30
iii- Total		10	20.41	9	18.37	14	28.57	5	10.20	2	54.08	9	18.37	49
II- Middle Section														
i- RD.53700	7th day	2	6.67	8	26.67	12	40.00	6	20.00	-	-	2	6.67	30
ii- RD.70800	12th day	9	30.00	8	26.67	9	30.00	2	6.67	-	-	2	6.67	30
iii- Total		11	18.33	16	26.67	21	35.00	8	13.33	-	-	4	6.67	60
III- Tail Section														
i- RD. 115806	13th day	4	13.33	9	30.00	9	30.00	5	16.67	1	3.33	2	6.67	30
ii- RD. 132000	7th day	2	10.00	1	5.00	6	30.00	-	-	7	35.00	4	20.00	20
iii- Total		6	12.00	10	20.00	15	30.00	5	10.00	8	16.00	6	12.00	50
IV- All Section		27	16.98	35	22.01	50	31.45	18	11.32	10	6.29	19	11.95	159

Appendix Table 4.25

NUMBER OF WATER TURNS LOST DURING THE PERIOD APRIL - DECEMBER 1988

Sr. No.	Number of turns lost	Head Section RD. 22000 No.	%	RD 45800 No.	%	Total No.	%	Middle Section RD. 53700 No.	%	RD. 70800 No.	%	Total No.	%	Tail Section RD. 115806 No.	%	RD. 132000 No.	%	Total No.	%	All Places No.	%
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1.	None	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.	One	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.	Two	-	-	1	3.33	1	2.04	-	-	-	-	-	-	-	-	-	-	-	-	1	0,63
4.	Three	1	5.25	3	10.00	4	8.16	2	6.67	-	-	2	3.33	-	-	-	-	-	-	6	3.77
5.	Four	7	36.84	6	20.00	13	26.53	2	6.67	-	-	2	3.33	-	-	-	-	-	-	15	9.43
6.	Five	8	42.11	13	43.33	21	42.86	10	33.33	11	36.67	21	35.00	-	-	-	-	-	-	42	26.42
7.	More than five	3	15.79	7	23.33	10	20.41	16	53.33	19	63.33	35	58.33	30	100	20	100	50	100	95	59.75
8.	All cases	19	100.00	30	100.00	49	100.00	30	100.00	30	100.00	60	100.00	30	100	20	100	50	100	159	100.00

Note: The canal is closed in January every year. IN 1988 it was closed also during February and March for repair.

Appendix Table-A.36

USE OF TRACTOR BY SAMPLE FARMERS

Sr. No.	Section	Is tractor used ? Yes No.	Yes % of Col.6	No No.	No % of Col.6	Total No (=100)	Ownership Status of tractor Used: Own No.	Own % of Col.2	Rented in No.	Rented in % of Col.2	Source of supply of rented in tractors: Own village No.	Own village % of Col.9	Other Places No.	Other Places % of Col.9	Farmers reporting problems in tractor renting No.	% of Col.9
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	1. Head															
	i. RD.22,000	18	94.74	1	5.26	19	-	-	18	100.00	12	66.67	6	33.33	15	83.33
	ii. RD.45,800	26	86.67	4	13.33	30	3	11.54	23	88.46	16	69.56	7	30.43	12	52.17
	iii. Total	44	89.80	5	10.20	49	3	6.82	41	93.18	28	68.29	13	31.71	27	65.85
	2. Middle															
	i. RD.53,700	29	96.67	1	3.45	30	-	-	29	100.00	14	48.28	15	51.72	20	68.97
	ii. RD.70,800	30	100.00	-	-	30	2	6.67	28	93.33	6	21.43	22	78.57	23	82.14
	iii. Total	59	98.80	1	1.67	60	2	3.39	57	96.61	20	35.09	37	64.91	43	75.44
	3. Tail															
	i. RD.115,806	29	96.67	1	3.33	30	1	3.45	28	96.55	23	82.14	5	17.86	11	39.29
	ii. RD.132,000	20	100.00	-	-	20	1	5.00	19	95.00	19	100.00	-	-	-	-
	iii. Total	49	96.00	1	2.00	50	2	4.08	47	95.92	42	89.36	5	10.64	11	23.40
	4. All Sections	152	95.60	7	4.40	159	7	4.61	145	95.39	90	62.07	55	37.93	81	55.86

Appendix. 7 Pg-A.37

[illegible] - THRESHER - SAMPLE FARMERS

Sr. No.	Section	Is thresher used? Yes No.	Yes % of Col.6	No.	No % of Col.6	Total (=100)	Ownership Status of thresher used: Own No.	Own % of Col.2	Rented in No.	Rented in % of Col.2	Source of supply of rented in thresher: Own village No.	Own village % of Col.9	Other Places No.	Other Places % of Col.9	Farmers reporting problems in thresher renting No.	% of Col.9
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Head																
i. RD.22,000		18	94.74	1	5.26	19	-	-	18	100.00	10	55.56	8	44.44	14	77.78
ii. RD.45,800		30	100.00	-	-	30	1	3.33	29	96.67	21	72.41	8	27.59	13	44.83
iii. Total		48	97.96	1	2.04	49	1	2.08	47	97.92	31	65.96	16	34.04	27	57.45
2. Middle																
i. RD.53,700		30	100.00	-	-	30	-	-	30	-	10	33.33	20	66.67	19	63.33
ii. RD.70,800		30	100.00	-	-	30	-	-	30	-	5	16.67	25	83.33	24	80.00
iii. Total		60	100.00	-	-	60	-	-	60	-	15	25.00	45	75.00	43	71.67
3. Tail																
i. RD.115,806		30	100.00	-	-	30	2	6.67	28	93.33	18	64.29	10	35.71	12	42.86
ii. RD.132,000		20	100.00	-	-	20	1	5.00	19	95.00	19	100.00	-	-	-	-
iii. Total		50	100.00	-	-	50	3	6.00	47	94.00	37	78.72	10	21.28	12	25.53
4. All Sections		158	99.37	1	0.63	159	4	2.53	154	97.47	83	53.90	71	46.10	82	53.25

Appendix Table A.38

MAIZE CROPS' AREA USED AS FODDER AND FOR GRAIN PRODUCTION ON SAMPLE FARMS

Sl. No.	Sample water course	Total area under Maize (Hct=100)	Utilisation: Used for fodder, Hectare	Used for fodder, Percentage of Col.2	Used for grain production, Hectare	Used for grain production, Percentage of Col.2
0	1	2	3	4	5	6
1.	RD 22000	16.18	3.58	22.13	12.60	77.87
2.	RD 45800	8.55	2.84	33.22	5.71	66.78
3.	Head Section	24.73	6.42	25.96	18.31	74.04
4.	RD 53700	15.24	6.38	41.86	8.86	58.14
5.	RD 70800	6.73	0.51	7.58	6.22	92.42
6.	Middle Section	21.97	6.89	31.36	15.08	68.64
7.	RD 115806	4.19	4.04	96.42	0.15	3.58
8.	RD 132000	3.84	0.81	21.09	3.03	78.91
9.	Tail Section	8.03	4.85	60.40	3.18	39.60
10.	All Places	54.73	18.16	33.18	36.57	66.82

STATISTICAL TABLES OF SAMPLE WATER COURSE RD. 22000

323a

APPENDICES OF SCHEDULE-I

NO.	TITLE	PAGE NO
1.	TENURE STATUS OF SAMPLE FARMERS IN SAMPLE WATER COURSE RD. 22000	331
2.	LITERACY STATUS OF SAMPLE FARMERS IN SAMPLE WATER COURSE RD.22000	331
3.	LEVEL OF EDUCATION OF THE SAMPLE FARMERS IN RD. 22000	332
4.	HOUSEHOLD SIZE IN SAMPLE WATER COURSE RD.22000	333
5.	HOUSEHOLD SIZE AND COMPOSITION IN SAMPLE WATER COURSE RD.22000	333
6.	LITERACY AND ACTIVITY STATUS OF THE SAMPLE POPULATION IN SAMPLE WATER COURSE RD.22000	334
7.	DISTRIBUTION OF WORKING MEMBERS BY OCCUPATION IN SAMPLE WATER COURSE RD.22000	335
8.	PLACE OF WORK IN SAMPLE WATER COURSE RD.22000	335
9.	MONTHLY INCOME (OTHER THAN FARMING) IN SAMPLE WATER COURSE RD.22000	336
10.	LAND HOLDINGS OF SAMPLE HOUSEHOLDS OF SAMPLE WATER COURSE RD. 22000	337
11.	AREA RENTED IN/OUT ON CASH/BATAI IN SAMPLE WATER COURSE RD.22000	338
12.	LAND USE IN SAMPLE WATER COURSE RD.22000	338
13.	IRRIGATED AREA BY MEAN OF IRRIGATION IN SAMPLE WATER COURSE RD.22000	339
14.	NUMBER OF TUBEWELLS IN SAMPLE WATER COURSE RD.22000	339
15.	SOURCES OF FINANCE OF TUBEWELL IN SAMPLE WATER COURSE RD.22000	339

NO.	TITLE	PAGE NO
16.	NUMBER OF WATER TURNS (WARABANDI) PER FIELD IN SAMPLE WATER COURSE RD.22000	340
17.	TIME PER TURN OF WATER SUPPLY (WARABANDI) IN SAMPLE WATER COURSE RD.22000	340
18.	NUMBER OF WARABANDI LOST DURING KHARIF 1987 IN SAMPLE WATER COURSE RD.22000	341
19.	REASON FOR LOSS OF WATER TURN IN SAMPLE WATER COURSE RD.22000	341
20.	INCIDENCE OF EXCHANGE OF WATER WITH OTHER FARMERS IN SAMPLE WATER COURSE RD. 22000	341
21.	NUMBER OF TIMES WATER WAS EXCHANGED DURING KHARIF 1987 IN SAMPLE WATER COURSE RD.22000	341
22.	FREE WATER FOR IRRIGATION OTHER THAN ON EXCHANGE IN SAMPLE WATER COURSE RD.22000	342
23.	TAMPERING OF WATER IN SAMPLE WATER COURSE RD.22000	342
24.	DE-SILTING OF WATER CHANNEL IN 1 YEAR IN SAMPLE WATER COURSE RD.22000 ?	342
25.	WHEN WAS THE WATER CHANNEL DE-SILTED LAST IN SAMPLE WATER COURSE RD.22000 ?	343
26.	CANAL WATER PROBLEMS IN SAMPLE WATER COURSE RD.22000	344
27.	MANAGEMENT OF DE-SILTATION OF WATER COURSE: ARE THE FARMERS SATISFIED WITH THE EXISTING ARRANGEMENTS IN SAMPLE WATER COURSE RD.22000?	345
28.	INCIDENCE OF INDEBTEDNESS IN SAMPLE WATER COURSE RD.22000	345
29.	AMOUNT BORROWED BY SOURCE DURING THE TWELVE MONTH IN SAMPLE WATER COURSE RD.22000	346
30.	UTILISATION OF LOAN IN SAMPLE WATER COURSE RD.22000	346
31.	ANY IMPROVEMENT ON FARM CONTEMPLATED BY THE SAMPLE FARMERS IF THEY COULD GET ADEQUATE LOAN IN SAMPLE WATER COURSE RD.22000	346

NO.	TITLE	PAGE NO
32.	USE OF SELECTED FARM INPUTS AND SOURCE OF SUPPLY IN SAMPLE WATER COURSE RD.22000	347
33.	USE OF IMPROVED SEED IN SAMPLE WATER COURSE RD.22000	348
34.	INPUTS IN THE SUPPLY OF WHICH PROBLEMS HAVE BEEN REPORTED BY FARMERS IN SAMPLE WATER COURSE RD.22000	351
35.	SOURCE OF AGRICULTURAL INFORMATION OF SAMPLE FARMERS IN RD.22000	352
36.	MEMBERSHIP OF SOCIETIES/ASSOCIATION ETC. IN SAMPLE WATER COURSE RD.22000	353
37.	USE OF TRACTORS BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD. 22000	354
38.	USE OF THRASHER BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD. 22000	354

APPENDICES OF SCHEDULE-II (KHARIF)

1.	AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS IN SAMPLE WATER COURSE RD.22000	355
2.	AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS OUTSIDE SAMPLE WATER COURSE RD.22000	356
3.	DISPOSAL OF MAIN PRODUCTS OTHER THAN SUGARCANE IN SAMPLE WATER COURSE RD.22000	357
4.	DISPOSAL OF BY-PRODUCTS IN SAMPLE WATER COURSE RD. 22000	358
5.	MODE OF SALE OF MAIZE IN SAMPLE WATER COURSE RD. 22000	359
6.	MODE OF SALE OF SORGHUM IN SAMPLE WATER COURSE RD. 22000	360
7.	MODE OF SALE OF PIGEON PEA IN SAMPLE WATER COURSE RD. 22000	361

NO.	T I T L E	PAGE NO.
8.	UTILIZATION OF SUGARCANE IN SAMPLE WATER COURSE RD.22000	361
9.	UTILIZATION OF GUR PRODUCED BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD. 22000	361
10.	NUMBER OF FARMERS REPORTING CONSUMPTION OF CHEM[illegible] WATER COURSE RD. 22000	362
11.	QUANTITY OF CHEMICAL FERTILIZERS USED BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD. 22000	363
12.	CONSUMPTION OF FARM YARD MANURE IN SAMPLE WATER COURSE RD. 22000	364
13.	NUMBER OF SAMPLE FARMERS WHO USED INSECTICIDES/PESTICIDES/WEEDICIDES IN SAMPLE WATER COURSE RD.22000	365
14.	QUANTITY OF SEED USED BY SAMPLE FARMERS IN SAMPLE WATERCOURSE RD.22000	366
15.	PHYSICAL INPUT COST OF MAIZE IN SAMPLE WATER COURSE RD.22000	[illegible]
16.	LABOUR INPUT COST OF MAIZE IN SAMPLE WATER COURSE RD.22000	368
17.	PHYSICAL INPUT COST OF SORGHUM IN SAMPLE WATER COURSE RD.22000	370
18.	LABOUR INPUT COST OF SORGHUM IN SAMPLE WATER COURSE RD.22000	371
19.	PHYSICAL INPUT COST OF SUGARCANE IN SAMPLE WATER COURSE RD.22000	373
20.	LABOUR INPUT COST OF SUGARCANE IN SAMPLE WATER COURSE RD.22000	373
21.	PHYSICAL INPUT COST OF PAGAN PEA IN SAMPLE WATER COURSE RD.22000	373
22.	LABOUR INPUT COST OF PAGAN PEA IN SAMPLE WATER COURSE RD.22000	373

NO.	T I T L E	PAGE NO
23.	PRODUCTION COST AND PROFIT IN SAMPLE WATER COURSE RD.22000	374
24.	CROPPING PATTERN ON SAMPLE FARMS IN SAMPLE WATER COURSE RD.22000	375
25.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN IN CULTIVATION OF MAIZE IN SAMPLE WATER COURSE RD.22000	376
26.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN IN CULTIVATION OF SORGHUM IN SAMPLE WATER COURSE RD.22000	377
27.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF SUGARCANE IN SAMPLE WATER COURSE RD.22000	378
28.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN IN CULTIVATION OF PIGEON PEA IN SAMPLE WATER COURSE RD.22000	378
29.	NUMBER OF FRUIT PLANTS, TREES AND FRUIT PRODUCTION IN SAMPLE WATER COURSE RD.22000	378
30.	LIVESTOCK HOLDINGS OF SAMPLE HOUSEHOLDS IN SAMPLE WATER COURSE RD.22000	379
31.	MILK PRODUCTION AND UTILIZATION IN SAMPLE WATER COURSE RD. 22000	383
32.	INCOME FROM SALE OF DAIRY PRODUCTS (OTHER THAN MILK) DURING SIX MONTHS PRECEDING INTERVIEW OF SAMPLE HOUSEHOLDS IN KHARIF 1987 IN SAMPLE WATER COURSE RD.22000	385 385
33.	INCOME FROM HIRING OUT OF LIVESTOCK IN SAMPLE WATER COURSE RD. 22000	385
34.	INCOME FROM SELECTED SOURCES DURING SIX MONTHS BEFORE INTERVIEW IN KHARIF 1987 IN SAMPLE WATER COURSE RD. 22000	386
35.	PERMANENT LABOUR ON FARM IN SAMPLE WATER COURSE RD.22000	387

APPENDICES OF SCHEDULE-II (RABI)

NO.	TITLE	PAGE NO
1.	AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS IN SAMPLE WATERCOURSE RD.22000	388
2.	AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS OUTSIDE SAMPLE WATERCOURSE RD.22000	389
3.	DISPOSAL OF [illegible] SAMPLE WATER COURSE RD.22000	390
4.	DISPOSAL OF BY-PRODUCTS IN SAMPLE WATER COURSE RD.22000	392
5.	MODE OF SALE OF WHEAT IN SAMPLE WATER COURSE RD.22000	394
6.	MODE OF SALE OF BARLEY IN SAMPLE WATER COURSE RD.22000	394
7.	MODE OF SALE OF BERSEEM IN SAMPLE WATER COURSE RD.22000	[illegible]
8.	MODE OF SALE OF PEA IN SAMPLE WATER COURSE RD.22000	[illegible]
9.	MODE OF SALE OF SPINACH IN SAMPLE WATER COURSE RD.22000	395
10.	NUMBER OF FARMERS REPORTING CONSUMPTION OF CHEMICAL FERTILIZERS IN SAMPLE WATER COURSE RD.22000	396
11.	QUANTITY OF CHEMICAL FERTILIZERS USED BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD.22000	397
12.	CONSUMPTION OF FARM YARD MANURE IN SAMPLE WATER COURSE RD.22000	398
13.	NUMBER OF SAMPLE FARMERS WHO USED INSECTICIDES/PESTICIDES/WEEDICIDES IN SAMPLE WATER COURSE RD.22000	399
14.	QUANTITY OF SEED USED BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD.22000	400

NO.	T I T L E	PAGE NO
15.	PHYSICAL INPUT COST OF WHEAT IN SAMPLE WATER COURSE RD.22000	401
16.	LABOUR INPUT COST OF WHEAT IN SAMPLE WATER COURSE RD.22000	402
17.	PHYSICAL INPUT COST OF BARLEY IN SAMPLE WATER COURSE RD.22000	404
18.	LABOUR INPUT COST OF BARLEY IN SAMPLE WATER COURSE RD.22000	405
19.	PHYSICAL INPUT COST OF BERSEEM IN SAMPLE WATER COURSE RD.22000	407
20.	LABOUR INPUT COST OF BERSEEM IN SAMPLE WATER COURSE RD.22000	408
21.	PHYSICAL INPUT COST OF PEA IN SAMPLE WATER COURSE RD.22000	410
22.	LABOUR INPUT COST OF PEA IN SAMPLE WATER COURSE RD. 22000	410
23.	PHYSICAL INPUT COST OF SPINACH IN SAMPLE WATER COURSE RD.22000	410
24.	LABOUR INPUT COST OF SPINACH IN SAMPLE WATER COURSE RD. 22000	410
25.	PRODUCTION COST AND PROFIT IN SAMPLE WATER COURSE RD.22000	411
26.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF WHEAT IN SAMPLE WATER COURSE RD. 22000	412
27.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF BARLEY IN SAMPLE WATER COURSE RD. 22000	413
28.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF BERSEEM IN SAMPLE WATER COURSE RD. 22000	414
29.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF PEA IN SAMPLE WATER COURSE RD. 22000	415
30.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF SPINACH IN SAMPLE WATER COURSE RD. 22000	415

Table-1

TENURE STATUS OF SAMPLE FARMERS IN
SAMPLE WATER COURSE RD. 22000

Sr. No.	Location	Tenure Status: Owner		Owner cum tenant		Tenant		Total Farmers
		No.	%	No	%	No.	%	No=100
0	1	2	3	4	5	6	7	8
1.	Head of W.C.	7	77.78	2	22.22	-	-	9
2.	Middle of W.C.	5	100.00	-	-	-	-	5
3.	Tail of W.C.	5	100.00	-	-	-	-	5
4.	Total	17	89.47	2	10.53	-	-	19

W.C.= Water Course

Table-2

LITERACY STATUS OF SAMPLE FARMERS
IN SAMPLE WATER COURSE RD.22000

Sr. No.	Location	Literate		Illiterate		Total
		No.	%	No.	%	No (=100)
0	1	2	3	4	5	6
1.	Head of Water Course	1	1.	[illegible]	[illegible]	2
2.	Middle of Water Course	3	60	2	40.00	5
3.	Tail of Water Course	2	40	3	60.00	5
4.	T o t a l :-	6	32	13	68.00	19

Table-3

LEVEL OF EDUCATION OF THE SAMPLE FARMERS IN RD. 22000

Sr. No.	Level of Education	Location: Head of W.C No.	Head of W.C %	Middle of W.C No.	Middle of W.C %	Tail of W.C No.	Tail of W.C %	Total No(=100)
0.	1	2	3	4	5	6	7	8
1.	Class 1-5	-	-	2	66.66	1	50	3
2.	Class 6-9	1	100.00	1	33.33	1	50	3
3.	Matric	-	-	-	-	-	-	-
4.	Intermediate	-	-	-	-	-	-	-
5.	Graduate	-	-	-	-	-	-	-
6.	MA/M.Sc	-	-	-	-	-	-	-
7.	MBBS	-	-	-	-	-	-	-
8.	B.Sc (Eng)	-	-	-	-	-	-	-
9.	B.Sc (Agri)	-	-	-	-	-	-	-
10.	B.Com/BBA	-	-	-	-	-	-	-
11.	M.Com/MBA	-	-	-	-	-	-	-
12.	Other professional Diploma/Degree	-	-	-	-	-	-	-
13.	Other	-	-	-	-	-	-	-
14.	T o t a l	1	100	3	100	2	100	6

Table-4

HOUSEHOLD SIZE IN SAMPLE WATER COURSE RD.22000

Sr. No.	Location	Sample Household	Total Population	Average size of household
0	1	2	3	4
1.	Head of Watercourse	9	170	8.89
2.	Middle of Watercourse	5	62	12.40
3.	Tail of Watercourse	5	88	17.60
4.	Total	19	320	16.84

Table-5

HOUSEHOLD SIZE AND COMPOSITION IN SAMPLE WATER COURSE RD.22000

Sr. No.	Age Group (Years)	Sex	Total Members: Head No.	Head %	Middle No.	Middle %	Tail No.	Tail %	All Members No.	All Members %
0	1	2	3	4	5	6	7	8	9	10
1.	Below 5	Male	23	28.75	11	32.35	20	45.45	54	34.18
		Female	30	33.33	[illegible]	[illegible]	14	31.82	49	30.25
		Both	53	31.18	16	25.81	34	38.64	103	32.19
2.	5 and above	Male	57	71.25	23	67.65	24	54.55	104	65.82
		Female	60	66.67	23	82.14	30	68.18	113	69.75
		Both	117	68.82	46	74.19	54	61.36	217	67.81
3.	All Ages	Male	80	100.00	34	100.00	44	100.00	158	100.00
		Female	90	100.00	28	100.00	44	100.00	162	100.00
		Both	170	100.00	62	100.00	88	100.00	320	100.00

Table-6

LITERACY AND ACTIVITY STATUS OF THE SAMPLE POPULATION IN SAMPLE WATER COURSE RD.22000

Sr. No.	Location	Total Respondents	Sex	Total Members	Literate (excluding students)		At School		Total literates at school	
					No.	%	No.	%	No.	%
0		2		4	5	6	7	8	9	10
1.	Head of watercourse	9	Male	57	10	17.54	22	38.60	32	56.14
			Female	60	-	-	-	-	-	-
			Both	117	10	8.55	22	18.80	32	27.35
2.	Middle of water course	5	Male	23	6	26.09	10	43.48	16	69.57
			Female	23	-	-	1	4.35	1	4.35
			Both	46	6	13.04	11	23.91	17	36.96
3.	Tail of Watercourse	5	Male	24	3	12.50	13	54.17	16	66.67
			Female	30	-	-	2	6.67	2	6.67
			Both	54	3	5.56	15	27.78	18	33.33
4.	All places	19	Male	104	19	18.27	45	43.27	64	61.54
			Female	113	-	-	3	2.65	3	2.65
			Both	217	19	8.76	48	22.12	67	30.88

Table-7

DISTRIBUTION OF WORKING MEMBERS BY OCCUPATION
IN SAMPLE WATER COURSE RD.22000

Sr. No.	Occupation	Location: Head	Middle	Tail	Total
0	1	2	3	4	5
1.	Paid employment	5	3	4	12
	a. On Farm	-	-	-	-
	b. Off Farm	5	3	4	12
2.	Self employed	9	5	5	19
	a. Farming	9	5	5	19
	b. Trade/Industry Transport	-	-	-	-
	c. Artisans	-	-	-	-
	d. Other	-	-	-	-
3.	Grand Total	14	8	9	31

Table-8

PLACE OF WORK IN SAMPLE WATER COURSE RD.22000

Sr. No.	Place of Work	Head	Middle	Tail	Total
0	1	2	3	4	5
1.	Sample W.C and other places in Peshawar Distt.	4	3	4	11
2.	Elsewhere in NWFP	-	-	-	-
3.	Other Province	-	-	-	1
4.	Other Countries	-	-	-	-
5.	All Places	5	3	4	12

Table-9

MONTHLY INCOME (OTHER THAN FARMING)
IN SAMPLE WATER COURSE RD.22000

Sr. No.	Income Group (Rs. per month)	Location	Number	Total Income(Rs)	Average Income(Rs)
0	1	2	3	4	5
1.	Upto Rs. 500	Head	-	-	-
		Middle	-	-	-
		Tail	-	-	-
2.	501 to 1000	Head	2	1800	900
		Middle	2	1700	850
		Tail	3	2610	870
3.	1001 to 1500	Head	2	2550	1275
		Middle	1	1100	1100
		Tail	1	1500	1500
4.	1501 to 2000	Head	-	-	-
		Middle	-	-	-
		Tail	-	-	-
5.	2001 to 2500	Head	-	-	-
		Middle	-	-	-
		Tail	-	-	-
6.	2501 to 3000	Head	-	-	-
		Middle	-	-	-
		Tail	-	-	-
7.	3001 to 400	Head	-	-	-
		Middle	-	-	-
		Tail	-	-	-
8.	4001 to 5000	Head	-	-	-
		Middle	-	-	-
		Tail	-	-	-
9.	Above 5000	Head	-	-	-
		Middle	-	-	-
		Tail	-	-	-

Table-10

LAND HOLDINGS OF SAMPLE HOUSEHOLDS OF SAMPLE WATER COURSE RD. 2[illegible]

Sr. No.	Locality	Total Respondent	Location of Land	Area Owned Total	Area Owned Average	Area Rented in Total	Area Rented in Average	Area Rented Out Total	Area Rented Out Average	Operated Total	Operated Av[illegible]
0	1	2	3	4	5	6	7	8	9	10	
1.	Head of W.C	9	a. This water-course	11.68	1.30	2.[illegible]	0.31	-	-	14.51	[illegible]
			b. Other places	-	-	-	-	-	-	-	
			c. Total	11.68	1.30	2.83	0.31	-	-	1[illegible].51	[illegible]
2.	Middle of W.C.	5	a. This water-course	6.73	1.35		-	3.69	0.74	[illegible]	
			b. Other places	3.64	0.73	-	-	-	-	[illegible]	
			c. Total	10.37	2.07	-	-	3.69	0.[illegible]	6.68	
3.	Tail of W.C.	5	a. This water-course	10.82	3.76	-	-	13.35	2.67	5.[illegible]	[illegible]
			b. Other places	1.42	0.28	-	-	1.42	0.28	-	
			c. Total	20.24	4.05	-	-	14.77	2.95	5.47	[illegible]
4.	All Places	19	a. This water-course	37.23	1.96	2.83	0.15	17.04	0.90	23.02	[illegible]
			b. Other places	5.06	0.27	-	-	1.42	0.07	3.64	[illegible]
			c. Total	42.29	2.23	2.83	0.15	18.46	0.97	2[illegible]	[illegible]

Table-11

AREA RENTED IN/OUT ON C.S./PAYAI IN
SAMPLE WATER COURSE RD.22000

Sr. No.	Location	Area Rented In			Area Rented Out		
		Batai	Cash Rent	Total	Batai	Cash Rent	Total
0	1	2	3	4	5	6	7
1.	Head of W.C.	2.83	-	2.83	-	-	-
2.	Middle of W.C.	-	-	-	3.69	-	3.69
3.	Tail of W.C.	-	-	-	13.55	-	13.55
4.	All Places	2.83	-	2.83	17.24	-	17.24

Table-12

LAND USE IN SAMPLE WATER COURSE RD.22000

Sr. No.	Land Use	Head		Middle		Tail		All Places	
		Hectare	%	Hectare	%	Hectare	%	Hectare	%
0	1	2	3	4	5	6	7	8	9
1.	Crops	14.42	96.64	6.12	90.94	14.37	92.23	34.91	93.77
2.	Orchard	-	-	-	-	-	-	-	-
3.	Not available for cultivation	0.50	3.35	0.61	9.06	1.21	7.77	2.32	6.23
4.	Total Area	14.92	100	6.73	100	15.58	100	37.23	100

Table-13

IRRIGATED AREA BY MEANS OF IRRIGATION
IN SAMPLE WATER COURSE RD.22000

Sr. No.	Means of Irrigation	Head of W.C. Jareeb	%	Middle of W.C Jareeb	%	Tail of W.C Jareeb	%	Total Jareeb	%
0	1	2	3	4	5	6	7	8	9
1.	Canal Only	66.5	100	45.25	100	82.75	100	194.5	100
2.	Open well only	-	-	-	-	-	-	-	
3.	Tube-well only	-	-	-	-	-	-	-	-
4.	Mixed	-	-	-	-	-	-	-	
5.	Total (All types)	66.5	100	45.25	100	82.75	100	194.5	100

Table-14

NUMBER OF TUBEWELLS IN SAMPLE WATER COURSE RD.22000

(NO TUBEWELL HERE)

Table-15

SOURCES OF FINANCE OF TUBEWELL IN
SAMPLE WATER COURSE RD.22000

(NOT APPLICABLE; NO TUBEWELL HERE)

Table-16

NUMBER OF WATER TURNS (WARABANDI) PER FIELD
IN SAMPLE WATER COURSE RD.22000

Sr. No.	Particulars	Location: Head No.	Head %	Middle No.	Middle %	Tail No.	Tail %	All places No.	All places %
0	1	2	3	4	5	6	7	8	9
1.	Total Farmers	9	100	5	100	5	100	19	100
2.	One turn per week	9	100	5	100	5	100	19	100
3.	One turn per two weeks.	-	-	-	-	-	-	-	-
4.	Water not yet allotted but drawing once per week.	-	-	-	-	-	-	-	-

Table-17

TIME PER TURN OF WATER SUPPLY (WARABANDI)
IN SAMPLE WATER COURSE RD.22000

Sr. No.	Location	Water drawn once every	Distribution of water users by number of hours of water supply: Upto one No.	Upto one %	1 - 2 No.	1 - 2 %	2 - 4 No.	2 - 4 %	4 - 6 No.	4 - 6 %	6 - 8 No.	6 - 8 %	More than 8 No.	More than 8 %	All cases
1.	Head Section	12th day	-	-	2	22.22	5	55.56	1	11.11	-	-	1	11.11	9
2.	Middle Section	12th day	2	40.00	-	-	1	20.00	1	20.00	-	-	1	20.00	5
3.	Tail Section	12th day	-	-	-	-	1	20.00	-	-	1	20.00	3	60.00	5
4.	All Places	12th day	2	10.53	2	10.53	7	36.84	2	10.53	1	5.26	5	26.32	19

Table-18

NUMBER OF WATER TURNS LOST DURING THE PERIOD
APRIL - DECEMBER 1988 IN SAMPLE WATER COURSE RD.22000

No.	Number of turns lost	Head		Middle		Tail		All Places
		No.	%	No.	%	No.	%	No (=100)
0	1	2	3	4	5	6	7	8
1.	None	-	-	-	-	-	-	-
2.	One	-	-	-			-	-
3.	Two	-	-	-	-	-	-	-
4.	Three	-	-	1	100.00	-	-	1
5.	Four	3	42.86	3	42.86	1	14.29	7
6.	Five	5	62.50	1	12.50	2	25.00	8
7.	More than 5	1	33.33	-	-	2	66.67	3
8.	All	9	47.37	5	26.32	5	26.32	19

Note: The canal is closed in January every year. In 1988 it was closed also during February and March for repair

Table-19

REASON FOR LOSS OF WATER TURN IN SAMPLE WATER COURSE RD.22000

(TABLE NOT APPLICABLE)

Table - 20

INCIDENCE OF EXCHANGE OF WATER WITH OTHER FARMERS
IN SAMPLE WATER COURSE RD. 22000

(NIL REPORT)

Table - 21

NUMBER OF TIMES WATER WAS EXCHANGED DURING KHARIF
1987 IN SAMPLE WATER COURSE RD. 22000

(NOT APPLICABLE)

Table-22

FREE WATER FOR IRRIGATION OTHER THAN ON EXCHANGE IN SAMPLE WATER COURSE RD.22000

(NONE REPORTED)

Table-23

TAMPERING OF WATER IN SAMPLE WATER COURSE RD.22000

Sr. No.	Location	Is sample farmer's share of water tampered. Yes No.	Yes %	No No.	No %	Total Farmers No(=100)
0	1	2	3	4	5	10
1.	Head of W.C.	-	-	9	100.00	9
2.	Middle of W.C.	-	-	5	100.00	5
3.	Tail of W.C.	1	20.00	4	80.00	5
4.	All places	1	5.26	18	94.74	19

Table-24

DE-SILTING OF WATER COURSE IN A YEAR IN SAMPLE WATER COURSE RD.22000 ?

Sr.	Number of De-silting in a year	Head of W.C. No.	Head of W.C. %	Middle of W.C. No.	Middle of W.C. %	Tail of W.C No.	Tail of W.C %	All Places No.	All Places %
0	1	2	3	4	5	6	7	14	15
1.	One	-	-	-	-	2	40	2	10.53
2.	Two	2	22.22	4	80	2	40	8	42.11
3.	Three	-	-	-	-	-	-	-	-
4.	Four	3	33.33	-	-	-	-	3	15.79
5.	Five or More	4	44.44	-	-	-	-	4	21.05
6.	Not reported	-	-	1	20	1	20	2	10.53
7.	When need	-	-	-	-	-	-	-	-
8.	All cases	9	100	5	100	5	100	19	100.00

Table-25

WHEN WAS THE WATER COURSE DE-SILTED LAST
IN SAMPLE WATER COURSE RD.22000 ?

Sr. No.	Number of De-silting in a year	Head		Middle		Tail		All Places	
		No.	%	No.	%	No.	%	No.	%
0	1	2	3	4	5	6	7	4	5
1.	Rabi 1986-87 (Oct-86 to April-87)	-	-	-	-	1	20	1	5.26
2	Kharif 1987 (May-Nov.87)	8	88.88	4	80	2	40	14	73.68
3.	Rabi 1987-88 (December 87)	-	-	-	-	-	-	-	-
4.	Not cleared during last 12 month	-	-	-	-	-	-	-	-
5.	No Response	1	11.11	1	20	2	40	4	21.05
6.	When the canal was dry	-	-	-	-	-	-	-	-
7.	All cases	9	100	5	100	5	100	19	100

Table-26

CANAL WATER PROBLEMS IN SAMPLE WATER COURSE RD.22000

Sr. No.	Problems	Location (water course)	Is this problems faced Yes No.	Yes %	No No.	No %	Total Farmers No(=100)
0	1		3	4	5	6	7
1.	A general shortage of water	Head	8	88.88	1	11.11	9
		Middle	5	100	-	-	5
		Tail	4	80	1	20.00	5
		All points	17	89.47	2	10.52	19
2.	Defective slope of the channel	Head	-	-	9	100	9
		Middle	-	-	5	100	5
		Tail	-	-	5	100	5
		All points	-	-	19	100	19
3.	Siltation of the channel	Head	5	55.56	4	44.44	9
		Middle	-	-	5	100	5
		Tail	1	20	4	80	5
		All points	6	31.58	13	68.42	19
4.	Warabandi defects (in convenient timing)	Head	2	22.22	7	77.78	9
		Middle	1	20	4	80	5
		Tail	2	40	3	60	5
		All points	5	26.32	14	73.68	19
5.	Theft of water	Head	-	-	9	100	9
		Middle	3	60	2	40	5
		Tail	1	20	4	80	5
		All points	4	21.05	15	78.95	19

Table-27

MANAGEMENT OF DE-SILTATION OF WATER COURSE: ARE THE FARMERS SATISFIED WITH THE EXISTING ARRANGEMENTS IN SAMPLE WATER COURSES ?

Sr. No.	Location	Are the farmers satisfied with				Total Farmers No(=100)
		Yes		No		
		No.	%	No.	%	
0	1	2	3	4	5	6
1.	Head of W.C.	7	77.78	2	22.22	9
2.	Middle of W.C.	5	100.00	-	-	5
3.	Tail of W.C.	5	100.00	-	-	5
4.	All points	17	89.47	2	10.53	19

Table-28

INCIDENCE OF INDEBTEDNESS IN SAMPLE WATER COURSE RD.22000

(NO CASE OF INDEBTEDNESS REPORTED)

Table-29

AMOUNT BORROWED BY SOURCE DURING THE TWELVE MONTH IN SAMPLE WATER COURSE RD.22000

([illegible])

Table - 30

UTILISATION OF LOAN IN SAMPLE WATER COURSE RD.22000

(NOT APPLICABLE AS NO LOANS TAKEN)

Table-31

ANY IMPROVEMENT ON FARM CONTEMPLATED BY THE SAMPLE FARMERS [illegible] AS PLOTS LOAN IN SAMPLE WATER COURSE RD.22000

(NONE ANYWHERE)

Table-32

USE OF SELECTED FARM INPUTS AND SOURCE OF SUPPLY IN SAMPLE WATER COURSE RD.22000

Sr. No.	Name of Inputs	Location points of farm as W.C	Farms who use is No.	%	Sources of Supply: Villages No.	%	Outside No.	%	Both No.	%	Total Farmer No=(10
0	1	2	3	4	5	6	7	8	9	10	11
1.	Urea	Head	8	88.89	4	50.00	4	50.00	-	-	9
		Middle	4	80.00	-	-	4	100.00	-	-	5
		Tail	4	80.00	-	-	4	100.00	-	-	5
		All Places	16	84.21	4	25.00	12	75.00	-	-	19
2.	DAP	Head	6	66.67	1	16.67	5	83.33	-	-	9
		Middle	3	60.00	-	-	3	100.00	-	-	5
		Tail	1	20.00		-	1	100.00	-		5
		All Places	10	52.63	1	10.00	9	90.00	-	-	19
3.	NPK	Head	3	33.33	2	66.67	1	33.33	-	-	9
		Middle	4	80.00	-	-	4	100.00	-		5
		Tail	1	20.00	-	-	1	100.00			
		All Places	8	42.11	2	25.00	6	75.00		-	19
4.	NP	Head	-	-	-	-	-	-	-		
		Middle	-	-	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-	-	5
		All Places	-	-	-	-	-	-	-		19
5.	Ammonium Sulphate	Head	1	11.11	-	-	1	100.00			9
		Middle	-	-	-	-	-	-			5
		Tail	-	-	-	-	-	-	-	-	5
		All Places	1	5.26	-	-	1	100.00	-	-	19
6.	Ammonium Nitrate	Head	1	11.11	-	-	1	100.00	-	-	9
		Middle	-	-	-	-	-	-	-	-	5
		Tail	-	-	-	-	-	-	-	-	5
		All Places	1	5.26	-	-	1	100.00	-	-	19
7.	Insec-ticides/ Pesticides	Head	-	-	-	-	-	-	-	-	9
		Middle	-	-	-	-	-	-	-	-	5
		Tail	1	20.00	-	-	1	100.00	-	-	5
		All Places	1	5.26	-	-	1	100.00	-	-	19
8.	Weedici-des	Head	1	11.11	-	-	1	100.00	-	-	9
		Middle	-	-	-	-	-	-	-	-	5
		Tail	-	-	-	-	-	-	-	-	5
		All Places	1	5.26	-	-	1	100.00	-	-	19

Table-33

USE OF IMPROVED SEED IN SAMPLE WATER COURSE RD.22000

Sr. No.	Seed	Location	Farmers who: Know about this		Use this		If used; where purchased: In the village		Own		Other places		Total Farmers (No.=100)
			No.	% of Col.13	No.	% of Col.13	No.	% of Col.5	No.	% of Col.5	No.	% of Col.5	
0	1	2	3	4	5	6	7	8	9	10	11	12	13
1.	WHEAT												
		Head	4	44.44	4	44.44	-	-	4	100.0	-	-	9
	i- Pak-81	Middle	-	-	-	-	-	-	-	-	-	-	5
		Tail	-	-	-	-	-	-	-	-	-	-	5
		All Places	4	21.05	4	21.05	-	-	4	100.0	-	-	19
	ii- L-73	Head	-	-	-	-	-	-	-	-	-	-	9
		Middle	-	-	-	-	-	-	-	-	-	-	5
		Tail	-	-	-	-	-	-	-	-	-	-	5
		All Places	-	-	-	-	-	-	-	-	-	-	19
	iii- Sarhad-82	Head	-	-	-	-	-	-	-	-	-	-	9
		Middle	-	-	-	-	-	-	-	-	-	-	5
		Tail	-	-	-	-	-	-	-	-	-	-	5
		All Places	-	-	-	-	-	-	-	-	-	-	19
	iv- Khyber-79	Head	-	-	-	-	-	-	-	-	-	-	9
		Middle	-	-	-	-	-	-	-	-	-	-	5
		Tail	1	20.00	1	20.00	-	-	-	-	-	-	5
		All Places	1	5.26	1	5.26	-	-	-	-	-	-	19
	v- Pirsabaq-85	Head	-	-	-	-	-	-	-	-	-	-	9
		Middle	-	-	-	-	-	-	-	-	-	-	5
		Tail	-	-	-	-	-	-	-	-	-	-	5
		All Places	-	-	-	-	-	-	-	-	-	-	19
	vi- Maxipak	Head	3	33.33	3	33.33	1	33.33	2	66.67	-	-	9
		Middle	4	80.00	4	80.00	-	-	4	100.0	-	-	5
		Tail	-	-	-	-	-	-	-	-	-	-	5
		All Places	7	36.84	7	36.84	1	14.29	6	85.71	-	-	19

(Contd....)

Table-33

USE OF IMPROVED SEED IN SAMPLE WATER COURSE (D.22v)

Sr. No.	Seed	Location	Farmers who: Know about this		Use this		If used; where purchased: In the village		Own		Other places		Total Farmers
			No.	% of Col.13	No.	% of Col.13	No.	% of Col.5	No.	% of Col.5	No.	% of Col.5	No(=100)
0	1	2	3	4	5	6	7	8	9	10	11	12	13
	vii- Khushal	Head	-	-	-	-	-	-	-	-	-	-	9
		Middle	-	-	-	-	-	-	-	-	-	-	5
		Tail	1	20.00	1	20.00	1	100.00	-	-	-	-	5
		All Places	1	5.26	1	5.26	1	100.00	-	-	-	-	19
	viii- Chanab	Head	1	11.11	1	11.11	-	-	1	100.0	-	-	9
		Middle	-	-	-	-	-	-	-	-	-	-	5
		Tail	-	-	-	-	-	-	-	-	-	-	5
		All Places	1	5.26	1	5.26	-	-	1	100.0	-	-	19
2.	SUGARCANE												
	i- M-161	Head	-	-	-	-	-	-	-	-	-	-	
		Middle	-	-	-	-	-	-	-	-	-	-	
		Tail	-	-	-	-	-	-	-	-	-	-	
		All Places	-	-	-	-	-	-	-	-	-	-	19
	ii- CP-48	Head	-	-	-	-	-	-	-	-	-	-	9
		Middle	-	-	-	-	-	-	-	-	-	-	5
		Tail	-	-	-	-	-	-	-	-	-	-	5
		All Places	-	-	-	-	-	-	-	-	-	-	19
	iii- CO-310	Head	-	-	-	-	-	-	-	-	-	-	9
		Middle	-	-	-	-	-	-	-	-	-	-	5
		Tail	-	-	-	-	-	-	-	-	-	-	5
		All Places	-	-	-	-	-	-	-	-	-	-	19

(Contd.....)

Table-33

USE OF IMPROVED SEED IN SAMPLE WATER COURSE RD.22000

Sr. No.	Seed	Location	Farmers who: Know about this No.	% of Col.13	Use this No.	% of Col.13	If used; where purchased: In the village No.	% of Col.5	Own No.	% of Col.5	Other places No.	% of Col.5	Total Farmers No(=100)
0	1	2	3	4	5	6	7	8	9	10	11	12	13
3.	MAIZE	Head	7	77.78	7	77.78	-	-	7	100.0	-	-	9
		Middle	4	80.00	4	80.00	-	-	4	100.0	-	-	5
	i- Sarhad White	Tail	-	-	-	-	-	-	-	-	-	-	5
		All Places	11	57.89	11	57.89	-	-	11	100.0	-	-	19
	ii-Changaz	Head	-	-	-	-	-	-	-	-	-	-	9
		Middle	-	-	-	-	-	-	-	-	-	-	5
		Tail	-	-	-	-	-	-	-	-	-	-	5
		All Places	-	-	-	-	-	-	-	-	-	-	19
	iii- Zia	Head	-	-	-	-	-	-	-	-	-	-	9
		Middle	-	-	-	-	-	-	-	-	-	-	5
		Tail	-	-	-	-	-	-	-	-	-	-	5
		All Places	-	-	-	-	-	-	-	-	-	-	19
	iv- Shaheen	Head	-	-	-	-	-	-	-	-	-	-	9
		Middle	-	-	-	-	-	-	-	-	-	-	5
		Tail	2	22.22	2	22.22	-	-	1	50.00	1	50.00	9
		All Places	2	10.53	2	10.53	-	-	1	50.00	1	50.00	19
	v- Hameshah	Head	-	-	-	-	-	-	-	-	-	-	9
		Middle	-	-	-	-	-	-	-	-	-	-	5
		Tail	-	-	-	-	-	-	-	-	-	-	5
		All Places	-	-	-	-	-	-	-	-	-	-	19
4.	RICE	Head	-	-	-	-	-	-	-	-	-	-	9
		Middle	-	-	-	-	-	-	-	-	-	-	5
	i- Irri-6	Tail	-	-	-	-	-	-	-	-	-	-	5
		All Places	-	-	-	-	-	-	-	-	-	-	19
	ii- Basmati	Head	-	-	-	-	-	-	-	-	-	-	9
		Middle	-	-	-	-	-	-	-	-	-	-	5
		Tail	-	-	-	-	-	-	-	-	-	-	5
		All Places	-	-	-	-	-	-	-	-	-	-	19

(Concluded)

Table-34

INPUTS IN THE SUPPLY OF WHICH PROBLEMS HAVE BEEN REPORTED BY FARMERS IN SAMPLE WATERCOURSE RD.22000

Sr. No.	Location	Total Farmers No(=100)	Farmers reporting problems in supply of: Fertilizer		Improved seed		Farm Insecticides		Machinery	
			No	%	No	%	No	%	No	%
0	1	2	3	4	5	6	7	8	9	10
1.	Head	9	7	77.78	3	33.33	1	11.11	-	-
2.	Middle	5	4	80.00	-	-	-	-	-	-
3.	Tail	5	3	60.00	2	40.00	1	20.00	-	-
4.	All Places	19	14	73.68	5	26.32	2	10.53	-	-

Table-25

SOURCE OF AGRICULTURAL INFORMATION OF SAMPLE FARMERS IN RD.22000

Sr. No.	Source	Number and percentage* of farmers in this agri. information from this source								Number and percentage** of sample Farmers who used this:							
		Head of W.C.		Middle of W.C.		Tail of W.C.		All Places		Head of W.C.		Middle of W.C.		Tail of W.C.		All Places	
		No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1.	Agriculture Department	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.	Demonstration plots laid by insecticides/ pesticides firms	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.	Radio	2	22	1	20	1	20	4	21	1	50	1	100	-	-	2	50
4.	Television	1	11	1	20	1	20	3	16	-	-	-	-	-	-	-	-
5.	Newspaper	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	Landlord	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Other Farmers	2	22	1	20	-	-	3	16	2	100	1	100	-	-	3	100
8.	Input suppliers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Other sources specify	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Total Farmers = 19
Head = 9
Middle = 5
Tail = 5

* of total sample farmers in the section concerns

** of these who took information from source grower in col.1

Table-36

MEMBERSHIP OF SOCIETIES/ASSOCIATION ETC.
IN SAMPLE WATER COURSE RD.22000

Sr. No.	Institution	Locality	Are the sample farmers members of the societies/associations as in col.2 Yes No				Not applicable		Total Farmers No (100)
			No	%	No	%	No	%	
0	1	2	3	4	5	6	7	8	9
1.	Water Users Association	Head	-	-	1	11.11	8	88.89	9
		Middle	-	-	-	-	5	100.0	5
		Tail	-	-	2	40.00	3	60.00	5
		All Places	-	-	3	15.79	16	84.21	19
2.	Cooperative Society	Head	-	-	1	11.11	8	88.89	9
		Middle	-	-	1	20.00	4	80.00	5
		Tail	-	-	-	-	5	100.0	5
		All Places	-	-	2	10.53	17	89.47	19
3.	Union Council	Head	-	-	9	100.0	-	-	9
		Middle	-	-	5	100.0	-	-	5
		Tail	-	-	5	100.0	-	-	5
		All Places	-	-	19	100.0	-	-	19
4.	Other Societies/ Association	Head	-	-	8	88.89	1	11.11	9
		Middle	-	-	1	20.00	4	80.00	5
		Tail	-	-	3	60.00	2	40.00	5
		All Places	-	-	12	63.16	7	36.84	19

Table-37

USE OF TRACTORS BY SAMPLE FARMERS IN
SAMPLE WATER COURSE RD. 22000

Sr. No.	Section	Is tractor used? Yes No.	Yes % of col.2	No No.	No % of col.4	Total No. (=100)	Ownership Status of tractor used: Own No.	Own % of col.2	Rented in No.	Rented in % of col.2	Source of supply of rented in tractor: Own Village No.	Own Village % of col.9	Other Places No.	Other Places % of col.9	Farmer reporting problems in tractor supply No.	% of col.6
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.	Head	9	100	-	-	9	-	-	9	100	4	44.44	5	55.56	7	77.78
2.	Middle	5	100	-	-	5	-	-	5	100	5	100.00	-	-	5	100.00
3.	Tail	4	80	1	20	5	-	-	4	100	3	75.00	1	25.00	3	60.00
4.	All Sections	18	95	1	5	19	-	-	18	100	12	66.67	6	33.33	15	78.95

Table-38

USE OF THRASHER BY SAMPLE FARMERS IN
SAMPLE WATER COURSE RD. 22000

Sr. No.	Section	Is Thrasher used? Yes No.	Yes % of col.2	No No.	No % of col.2	Total No. (=100)	Ownership Status of Thrasher used: Own No.	Own % of col.2	Rented in No.	Rented in % of col.2	Source of supply of rented in Thrasher: Own Village No.	Own Village % of col.9	Other Places No.	Other Places % of col.9	Farmer reporting problems in Thrasher supply No.	% of col.6
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.	Head	8	89	1	11	9	-	-	8	88.89	2	25.00	6	75.00	7	77.78
2.	Middle	5	100	-	-	5	-	-	5	100.00	5	100.00	-	-	3	60.00
3.	Tail	5	100	-	-	5	-	-	5	100.00	3	60.00	2	40.00	4	80.00
4.	All Sections	18	95	1	5	19	-	-	18	100.00	10	55.55	8	44.44	14	77.78

Table-1

AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS IN SAMPLE WATERCOURSE RD.22000

Sr. No.	Crops	Location	Area	Main Product			By Product		
				Unit	Total	Per Hectare	Unit	Total	Per Hectare
0	1	2	3	4	5	6	7	8	9
1.	Maize Grain	Head	6.68	Mds	81.50	12.20	Bundle	995	148.9
		Middle	1.32	Mds	15.00	11.36	Bundle	200	151.5
		Tail	4.60	Mds	81.70	17.76	Bundle	870	189.1
		Total	12.60	Mds	178.20	14.14	Bundle	2065	163.8
2.	Maize Fodder	Head	0.40	Bundle	630.00	1575.00		-	
		Middle	2.37	Bundle	1950.00	822.78		-	-
		Tail	0.81	Bundle	60.00	74.07		-	-
		Total	3.58	Bundle	2640.00	737.43			
3.	Sorghum (fodder)	Head	-	Rs.	-	-		-	
		Middle	-	Rs.	-	-		-	-
		Tail	1.92	Rs.	7250.00	3776.04		-	-
		Total	1.92	Rs.	7250.00	3776.04		-	
4.	Sugarcane Converted into Gur	Head	-	Mds of Gur	-	-	C.T. Mds		
							Bagg: Mds		-
		Middle	-	Mds of Gur	-	-	C.T. Mds		-
							Bagg: Mds	-	-
		Tail	-	Mds of Gur	-	-	C.T. Mds	-	-
							Bagg: Mds	-	-
		Total	-	Mds of Gur	-	-	C.T. Mds	-	-
							Bagg: Mds	-	-
5.	Sugarcane sold in field	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	-	-	-	-	-	-	-
6.	Pigeon Pea	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	
		Tail	-	-	-	-	-	-	-
		Total	-	-	-	-	-	-	-

C.T.= Cane Top Bagg= Bagasse

Table-2

AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS OUTSIDE SAMPLE WATERCOURSE RD.22000

Sr. No.	Crops	Location	Area	Main Product			By Product		
				Unit	Total	Per Hectare	Unit	Total	Per Hectare
0	1	2	3	4	5	6	7	8	9
1.	Maize Grain	Head	-	Mds	-	-	Bundle	-	-
		Middle	1.11	Mds	26.00	23.24	Bundle	370	333.33
		Tail	1.42	Mds	42.00	29.58	Bundle	400	281.69
		Total	2.53	Mds	68.00	26.88	Bundle	770	304.35
2.	Maize Fodder	Head	-	Bundle	-	-		-	-
		Middle	-	Bundle	-	-		-	-
		Tail	-	Bundle	-	-		-	-
		Total	-	Bundle	-	-		-	-
3.	Sorghum (fodder)	Head	-	Rs.	-	-		-	-
		Middle	-	Rs.	-	-		-	-
		Tail	1.92	Rs.	7250.00	3776.04		-	-
		Total	1.92	Rs.	7250.00	3776.04			-
4.	Sugarcane Converted into Gur	Head	-	Mds of Gur	-	-	C.T. Mds	-	-
							Bagg: Mds	-	-
		Middle	-	Mds of Gur	-	-	C.T. Mds	-	-
							Bagg: Mds	-	-
		Tail	-	Mds of Gur	-	-	C.T. Mds	-	-
							Bagg: Mds	-	-
		Total	-	Mds of Gur	-	-	C.T. Mds	-	-
							Bagg: Mds	-	-
5.	Sugarcane Sold in field	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	-	-	-	-	-	-	-
6.	Pigeon Pea	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	-	-	-	-	-	-	-

C.T.= Cane Top Bagg= Bagasse

Table-2

DISPOSAL OF MAIN PRODUCTS OTHER THAN SUGARCANE IN SAMPLE WATER COURSE RD.22.00

Sr. No.	Crop mode of disposal	Maize (Maunds)								Sorghum (Ra)								Sugarcane (Mds)								Pigeon Pea Bundles							
		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places	
		Qty.	%	Qty.	%	Qt.	%	Qt.	%	Rs.	%	Rs.	%	Rs.	%	Rs.	%	Qt.	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%
0	1	2	3	4	5	6	7	8	9	1	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
I	Total Output	82	100	41	100	124	100	247	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II.	Disposal																																
	1.Retained for H.use	77	93.90	33	80.49	29	23.39	139	56.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.Sold	-	-	-	-	42	33.87	42	17.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3.Landlord's Share	2	2.4	7	17.07	40	32.26	49	19.84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4.Artisan's dues	-	-	-	-	1	0.81	2	0.81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5.Given to Labourers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6.Seed	-	-	-	-	10	8.06	10	4.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7.Usher/Charity	3	3.66	-	-	2	1.61	5	2.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8.Other Specify	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
III.	Total =All Uses	82	100	41	100	124	100	247	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-4

DISPOSAL OF BY-PRODUCTS IN SAMPLE WATER COURSE RD. 22000

Sr. No.	Crop mode of disposal	Maize (Qty. in Bundles)								Sorghum (Rupees)							
		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places	
		Qty.	%	Qty.	%	Qty	%	Qty.	%	Rs.	%	Rs.	%	Rs.	%	Rs.	%
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
I	Total Output	1625	100	2520	100	1330	100	5475	100	-	-	-	-	7250	100	7250	100
II.	Disposal																
	1.Retained for H.use	1110	68.00	245	9.72	525	39.47	1880	34.34	-	-	-	-	3800	52.41	3800	52.41
	2.Sold	200	12.31	1290	51.19	400	30.08	1890	31.52	-	-	-	-	525	7.24	525	7.24
	3.Landlord's Share	315	19.38	985	39.09	405	30.45	1705	31.14	-	-	-	-	2925	40.34	2925	40.34
	4.Artisan's dues	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	5.Given to Labourers	-	-	-	-	-	-	-	-	-	-	-	-				-
	6.Seed	-	-	-	-	-	-	-	-	-	-	-		-		-	-
	7.Usher/Charity	-	-	-	-	-	-	-	-	-	-	-	-	-			
	8.Other Specify	-	-	-	-	-	-	-	-	-	-	-	-	-			-
III.	Total =All Uses	1625	100	2520	100	1330	100	5475	100	-	-	-	-	7250	100	7250	100

Contd.

Sugarcane (C.Tops and Bagasse in Maunds)															
Head				Middle				Tail				All Places			
C.T.	Bagg:	Total	%	C.T.	Bagg:	Total	%	C.T.	Bagg:	Total	%	C.T.	Bagg:	Total	%
18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

C.T.= Cane Tops Bagg: Bagasse

(Concluded)

Table-5

MODE OF SALE OF MAIZE IN SAMPLE WATER COURSE RD. 22000

Sr. No.	Mode of Sale	Head		Middle		Tail		All Places	
		Qty	%	Qty	%	Qty	%	Qty	%
0	1	2	3	4	5	6	7	8	9
I.	In Village	-	-	-	-	42	100	42	100
	1. To Beoparis	-	-	-	-	-	-	-	
	2. To Shop Keepers	-	-	-	-	-	-	-	-
	3. To others	-	-	-	-	42	100	42	100
II.	In other villages	-	-	-	-	-	-	-	-
	1. To Beoparis	-	-	-	-	-	-	-	-
	2. To Shop Keepers	-	-	-	-	-	-	-	-
	3. To others	-	-	-	-	-	-	-	-
III.	In Peshawar	-	-	-	-	-	-	-	-
	1. Through Commission Agents	-	-	-	-	-	-	-	-
	2. To whole sellers		-	-	-	-	-	-	-
	3. To others	-	-	-	-	-	-	-	-
IV.	In Other urban centres	-	-	-	-	-	-	-	-
V.	Total Sales	-	-	-	-	42	100	42	100

Table-6

MODE OF SALE OF SORGHUM IN SAMPLE WATER COURSE RD. 22000

Sr. No.	Mode of Sale	Head		Middle		Tail		All Places	
		Qty	%	Qty	%	Qty	%	Qty	%
0	1	2	3	4	5	6	7	8	9
I.	In Village	-	-	-	-	525	100	525	100
	1. To Beoparis	-	-	-	-	-	-	-	-
	2. To Shop Keepers	-	-	-	-	-	-	-	-
	3. To others	-	-	-	-	525	100	525	100
II.	In other Villages	-	-	-	-	-	-	-	-
	1. To Beoparis	-	-	-	-	-	-	-	-
	2. To Shop Keepers	-	-	-	-	-	-	-	-
	3. To others	-	-	-	-	-	-	-	-
III.	In Peshawar	-	-	-	-	-	-	-	-
	1. Through Commission Agents	-	-	-	-	-	-	-	-
	2. To whole sellers	-	-	-	-	-	-	-	-
	3. To others	-	-	-	-	-	-	-	-
IV.	In other urban centres	-	-	-	-	-	-	-	-
V.	Total Sales	-	-	-	-	525	100	525	100

Table 7

MODE OF SALE OF PIGEON PEA IN SAMPLE WATER COURSE RD. 22000

(NOT APPLICABLE)

Table-8

UTILIZATION OF SUGARCANE IN SAMPLE WATER COURSE RD.22000

(NOT APPLICABLE)

Table-9

UTILIZATION OF GUR PRODUCED BY SAMPLE FARMERS
IN SAMPLE WATER COURSE RD. 22000

(NOT APPLICABLE)

Table-10

NUMBER OF FARMERS REPORTING CONSUMPTION OF CHEMICAL FERTILIZERS IN SAMPLE WATER COURSE RD. 22000

Sr. No.	Location of farm	Total farmers growing this crop No(=100)	Farmers using fertilizers: Urea No.	Urea %	D A P No.	D A P %	N P K No.	N P K %	N P No.	N P %	Ammonium Sulphate No.	Ammonium Sulphate %	Ammonium Nitrate No.	Ammonium Nitrate %	P.Sulphate No.	P.Sulphate %
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
I.	MAIZE															
	a.Head of W.C.	9	9	100.00	2	22.22	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	5	5	100.00	-	-	-	-	-	-	-	-	-		-	-
	c.Tail of W.C.	3	2	66.67	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	17	16	94.12	2	11.76	-	-	-	-	-	-	-	-	-	-
II.	SORGHUM															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	3	1	33.33	-		-				-	-	-	-	-	-
	d.All Places	3	1	33.33	-	-	-	-	-	-	-	-	-	-	-	-
III.	SUGARCANE															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IV.	PIGEON PEA															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-		-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-		-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-		-	-	-	-
	d.All Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-11

QUANTITY OF CHEMICAL FERTILIZERS USED BY SAMPLE FARMERS IN SAMPLE WATER COURSE NO. 22000

Sr. No.	Location of farm	Area sown (Hectare)	Quantity of fertilizer used: (KG) Urea Total	Urea Per Hectare	D.A.P. Total	D.A.P. Per Hectare	M.O.P. Total	M.O.P. Per Hectare	N.P. Total	N.P. Per Hectare	Ammonium Sulphate Total	Ammonium Sulphate Per Hectare	Ammonium Nitrate Total	Ammonium Nitrate Per Hectare	P.Sulphate Total	P.Sulphate Per Hectare
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
I.	MAIZE															
	a.Head of W.C.	7.34	975	133	100	14		-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	3.46	400	116	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	5.41	150	28	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	16.21	1525	94	100	6	-	-	-	-	-	-	-	-	-	-
II.	SORGHUM															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	1.92	50	26	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	1.92	50	26	-	-	-	-	-	-	-	-	-	-	-	-
III.	SUGARCANE															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IV.	PIGEON PEA															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-12

CONSUMPTION OF FARM YARD MANURE IN
SAMPLE WATER COURSE RD. 22000

Sr. No.	Location of farm	Total farmers growing this crop	Farmers using Farm Yard Manure No.	%	Area Sown (Hectare)	Quantity used (KG) Total	Per Hectare
0	1	2	3	4	5	6	7
I.	MAIZE						
	a.Head of W.C.	9	4	44.44	7.34	8024	1093
	b.Middle of W.C.	5	0	-	3.46	-	-
	c.Tail of W.C.	3	1	33.33	5.41	1493	276
	d.All Places	17	5	29.41	16.21	9517	587
II.	SORGHUM						
	a.Head of W.C.	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-
	c.Tail of W.C.	3	-	-	1.92	-	-
	d.All Places	3	-	-	1.92	-	-
III.	SUGARCANE						
	a.Head of W.C.	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-
IV.	PIGEON PEA						
	a.Head of W.C.	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-

Table-13

NUMBER OF SAMPLE FARMERS WHO USED INSECTICIDES/ PESTICIDES/WEEDICIDES IN SAMPLE WATERCOURSE RD.22000

Sr. No.	Location of farm	Total Farmer Growing this crops No(=100)	Farmers who used:Insect:/ Pesticides		Farmers who used: Weedicides	
			No.	%	No.	%
0	1	2	3	4	5	6
I.	MAIZE					
	a. Head of W.C.	9	-	-	-	-
	b. Middle of W.C.	5	-	-	-	-
	c. Tail of W.C.	3	-	-	-	-
	d. All places	17	-	-	-	-
II.	SORGHUM					
	a. Head of W.C.	-	-	-	-	-
	b. Middle of W.C.	-	-	-	-	-
	c. Tail of W.C.	3	-	-	-	-
	d. All places	3	-	-	-	-
III.	SUGARCANE					
	a. Head of W.C.	-	-	-	-	-
	b. Middle of W.C.	-	-	-	-	-
	c. Tail of W.C.	-	-	-	-	-
	d. All places	-	-	-	-	-
IV.	PIGEON PEA					
	a. Head of W.C.	-	-	-	-	-
	b. Middle of W.C.	-	-	-	-	-
	c. Tail of W.C.	-	-	-	-	-
	d. All places	-	-	-	-	-

Table-14

QUANTITY OF SEED USED BY SAMPLE FARMERS
IN SAMPLE WATERCOURSE RD.22000

(Kg)

Sr. No.	Crop	Total Area (Hectare)	Head Quantity used			Middle Quantity used			Tail Quantity used			All Places Quantity used		
			Impr-oved	Local	Total	Impr-oved	Local	Total	Impr-oved	Local	Total	Impr-oved	Local	Total
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Maize	16.21	-	391	391	-	185	185	-	246	246	-	822	822
2.	Sorghum	1.92	-	-	-	-	-	-	-	65	65	-	65	65
3.	Sugarcane	-	-	-	-	-	-	-	-	-	-	-	-	-
4.	Pigeon Pea	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-15

PHYSICAL INPUT COST IN SAMPLE WATER F[illegible]2000

Crop: Maize Area: 8.96 i) Head : 2.33 ha ii) Middle: 4.20 ha iii) Tail: 2.43 ha

Sr. No.	Physical Input	Head: Purchased Total	Head: Purchased Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (2+4) Total	Head: Total (2+4) Per Hect.	Middle: Purchased Total	Middle: Purchased Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (8+10) Total	Middle: Total (8+10) Per Hect.	Tail: Purchased Total	Tail: Purchased Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (14+16) Total	Tail: Total (14+16) Per Hect.	All Places: Purchased (2+8+14) Total	All Places: Purchased (2+8+14) Per Hect.	All Places: Self Supplied (4+10+16) Total	All Places: Self Supplied (4+10+16) Per Hect.	All Places: Total Total	All Places: Total Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Seed	991	135	-	-	991	135	487	141	-	-	487	141	770	142	-	-	770	142	2248	139	-	-	2248	139
2.	Farm Yard Manure	-	-	680	93	680	93	-	-	-	-	-	-	-	-	80	15	80	15	-	-	760	47	760	47
3.	Chemical Fertilizer	2900	395	-	-	2900	395	1055	305	-	-	1055	305	430	79	-	-	430	79	4385	271	-	-	4385	271
4.	Insecticide/ Pesticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Water Charges	435	59	-	-	435	59	205	59	-	-	205	59	321	59	-	-	321	59	961	59	-	-	961	59
6.	Dues of Artisans	200	27	-	-	200	27	424	123	-	-	424	123	120	22	-	-	120	22	744	46	-	-	744	46
7.	Total	4526	617	680	93	5206	709	2171	627	-	-	2171	627	1641	303	80	15	1721	318	8338	514	760	47	9098	561

Table-16

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.22000

Crops Maize | Area:16.18 | i) Head : 7.08 ha | ii) Middle: 4.20 ha | iii) Tail: 2.43 ha

Sr. No.	Operations	Self Labour Inputs	Head: Paid Total	Head: Paid Per Hect:	Head: Self Supplied Total	Head: Self Supplied Per Hect:	Head: Total (3+5) Total	Head: Total (3+5) Per Hect:	Middle: Paid Total	Middle: Paid Per Hect:	Middle: Self Supplied Total	Middle: Self Supplied Per Hect:	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect:	Tail: Paid Total	Tail: Paid Per Hect:	Tail: Self Supplied Total	Tail: Self Supplied Per Hect:	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect:	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect:	All Places: Self Supp: (5+11+17) Total	All Places: Self Supp: (5+11+17) Per Hect:	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Ploughing	i.Manual		-	-	263	37	263	37	-	-	78	21	78	21	-	-	2250	416	2250	416	-	-	2591	160	2591	160
	ii.Animal		-	-	150	21	150	21	-	-	-	-	-	-	-	-	3750	693	3750	693	-	-	3900	241	3900	241
	iii.Machine		2208	312	-	-	2208	312	1138	308	-	-	1138	308	-	-	-	-	-	-	3346	207	-	-	3346	207
	iv.Total		2208	312	413	58	2621	370	1138	308	78	21	1216	330	-	-	6000	1109	6000	1109	3346	207	6491	401	9837	608
2. Levelling	i.Manual		-	-	45	6	45	6	-	-	-	-	-	-	-	-	150	28	150	28	-	-	195	12	195	12
	ii.Animal		-	-	75	11	75	11	-	-	-	-	-	-	-	-	250	46	250	46	-	-	325	20	325	20
	iii.Machine		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total		-	-	120	17	120	17	-	-	-	-	-	-	-	-	400	74	400	74	-	-	520	32	520	32
3. Planking	i.Manual		-	-	53	7	53	7	-	-	-	-	-	-	-	-	105	19	105	19	-	-	158	10	158	10
	ii.Animal		-	-	75	11	75	11	-	-	-	-	-	-	-	-	165	30	165	30	-	-	240	15	240	15
	iii.Machine		300	42	-	-	300	42	-	-	-	-	-	-	-	-	-	-	-	-	300	19	-	-	300	19
	iv.Total		300	42	128	18	428	60	-	-	-	-	-	-	-	-	270	50	270	50	300	19	398	25	698	43
4. Sowing	i.Manual		-	-	113	16	113	16	-	-	46	12	46	12	-	-	218	40	218	40	-	-	377	23	377	23
	ii.Animal		-	-	75	11	75	11	-	-	-	-	-	-	-	-	200	37	200	37	-	-	275	17	275	17
	iii.Machine		1020	144	-	-	1020	144	588	159	-	-	588	159	-	-	-	-	-	-	1608	99	-	-	300	99
	iv.Total		1020	144	188	27	1208	171	588	159	46	12	634	172	-	-	418	77	418	77	1606	99	652	40	2260	140
5. Watering	i.Manual		-	-	1050	148	1050	148	-	-	309	84	309	84	-	-	271	50	271	50	-	-	1630	101	1630	101
6. F.Y.Manure	i.Manual		-	-	285	40	285	40	-	-	-	-	26	7	-	-	83	15	83	15	-	-	368	23	368	23

(Contd....)

Table-16

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.22000

Crops Maize — Area: 16.18 — i) Head : 7.08 ha — ii) Middle: 4.20 ha — iii) Tail: 2.43 ha

Sr. No.	Operations	Self Labour Inputs	Head: Paid Total	Head: Paid Per Hect:	Head: Self Supplied Total	Head: Self Supplied Per Hect:	Head: Total (3+5) Total	Head: Total (3+5) Per Hect:	Middle: Paid Total	Middle: Paid Per Hect:	Middle: Self Supplied Total	Middle: Self Supplied Per Hect:	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect:	Tail: Paid Total	Tail: Paid Per Hect:	Tail: Self Supplied Total	Tail: Self Supplied Per Hect:	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect:	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect:	All Places: Self Supp: (5+11+17) Total	All Places: Self Supp: (5+11+17) Per Hect:	All Places: Total (21) Total
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
7. Chemical		i.Manual	-	-	272	38	272	38	-	-	134	36	134	36	-	-	50	9	50	9	-	-	456	28	456
8. Hoeing/Weed		i.Manual	-	-	900	127	900	127	-	-	-	-	-	-	-	-	-	-	-	-	-	-	900	56	900
9. Harvesting		i.Manual	-	-	1785	252	1785	252	-	-	375	102	375	102	-	-	803	148	803	148	-	-	2963	183	2963
10.Carriage to Threshing Yard		i.Manual	-	-	668	94	668	94	-	-	-	-	-	-	-	-	360	67	360	67	-	-	1028	64	1028
		ii.Animal	-	-	570	81	570	81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	570	35	570
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	1238	187	1238	189	-	-	-	-	-	-	-	-	360	67	360	67	-	-	1598	99	1598
11.Threshing/ Winnowing		i.Manual	-	-	615	87	615	87	-	-	-	-	-	-	-	-	263	49	263	49	-	-	878	54	878
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	615	87	615	87	-	-	-	-	-	-	-	-	263	49	263	49	-	-	878	54	878
12.Total		i.Manual	-	-	6049	854	6049	854	-	-	942	255	942	255	-	-	4553	842	4553	842	-	-	11544	713	11544
		ii.Animal	-	-	945	148	945	148	-	-	-	-	-	-	-	-	4365	807	4365	807	-	-	5310	334	5310
		iii.Machine	3528	498	-	-	3528	498	1726	468	-	-	1726	468	-	-	-	-	-	-	5254	325	-	-	5254
		iv.Total	3528	498	6994	1002	10522	1500	1726	468	942	255	2668	723	-	-	8918	1648	8918	1648	5254	325	16854	1048	22108

(Conclud

Table-17

PHYSICAL INPUT COST IN SAMPLE WATER RD.22000

Crop: Sorghum Area: 1.92 Ha i) Head : [illegible] ha ii) Middle: 0.00 ha iii) Tail: 1.92 ha

Sr. No.	Physical Input	Head						Middle						Tail						All Places					
		Purchased		Self Supplied		Total (2+4)		Purchased		Self Supplied		Total (8+10)		Purchased		Self Supplied		Total (14+16)		Purchased (2+8+14)		Self Supplied (14+16+18)		Total	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
1	2	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Seed	-	-	-	-	-	-	-	-	-	-	-	-	885	461	-	-	885	461	885	461	-	-	885	461
2.	Farm Yard Manure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.	Chemical Fertilizer	-	-	-	-	-	-	-	-	-	-	-	-	140	73	-	-	140	73	140	73	-	-	140	73
4.	Insecticide/ Pesticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Water Charges	-	-	-	-	-	-	-	-	-	-	-	-	84	44	-	-	84	44	84	44	-	-	84	44
6.	Dues of Artisans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Total	-	-	-	-	-	-	-	-	-	-	-	-	1109	578	-	-	1109	578	1109	578	-	-	1109	578

Table-18

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.22000

Crops: Sorghum Area: 1.92 ha. i) Head : 0.00 ha ii) Middle: 0.00 ha iii) Tail: 1.92 ha

Sr. No.	Operations	Labour Inputs	Head: Paid Total	Head: Paid Per Hect:	Head: Self Supplied Total	Head: Self Supplied Per Hect:	Head: Total (3+5) Total	Head: Total (3+5) Per Hect:	Middle: Paid Total	Middle: Paid Per Hect:	Middle: Self Supplied Total	Middle: Self Supplied Per Hect:	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect:	Tail: Paid Total	Tail: Paid Per Hect:	Tail: Self Supplied Total	Tail: Self Supplied Per Hect:	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect:	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect:	All Places: Self Supp: (5+11+17) Total	All Places: Self Supp: (5+11+17) Per Hect:	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Ploughing		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	735	383	735	383	-	-	735	383	735	383
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1185	617	1185	617	-	-	1185	617	1185	617
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1920	1000	1920	1000	-	-	1920	1000	1920	1000
2. Leveling		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	45	23	45	23	-	-	45	23	45	23
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	75	39	75	39	-	-	75	39	75	39
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	120	63	120	63	-	-	120	63	120	63
3. Planking		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	45	23	45	23	-	-	45	23	45	23
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	20	38	20	-	-	38	20	38	20
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	83	43	83	43	-	-	83	43	83	43
4. Sowing		i.Manual	-		-	-	-	-	-	-	-	-	-	-	-	-	285	148	285	148	-	-	285	148	285	148
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	475	247	475	247	-	-	475	247	475	247
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	760	396	760	396	-	-	760	396	760	396
5. Watering		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	90	47	90	47	-	-	90	47	90	47
6. F.Y.Manure		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Conted...)

Table-19

LABOUR INPUT COST IN SAMPLE HAISI COURSE PD.2200/

Crops: Sorghum Area: 1.92 i) Head: 0.40 ha ii) Middle: 0.60 ha iii) Tail: 1.92 ha

Sr. No.	Operations	Labour Inputs	Head: Paid Total	Head: Paid Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (3+5) Total	Head: Total (3+5) Per Hect.	Middle: Paid Total	Middle: Paid Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect.	Tail: Paid Total	Tail: Paid Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect.	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect.	All Places: Self Supp. (5+11+17) Total	All Places: Self Supp. (5+11+17) Per Hect.	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect.
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
7. Chemical		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	45	23	45	23	-	-	45	23	45	23
8. Hoeing/Weed:		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9. Harvesting		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	45	23	45	23	-	-	45	23	45	23
10.Carriage to Threshing yard.		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11.Threshing/ Winnowing		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12. Total		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1290	672	1290	672	-	-	1290	672	1290	672
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1773	923	1773	923	-	-	1773	923	1773	923
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3063	1595	3063	1595	-	-	3063	1595	3063	1595

(Concluded)

Table-19

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.22000
(SUGARCANE)

(NOT APPLICABLE)

Table-20

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD.22000
(SUGARCANE)

(NOT APPLICABLE)

Table-21

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.22000
(PIGEON PEA)

(NOT APPLICABLE)

Table-22

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD.22000
(PIGEON PEA)

NOT APPLICABLE)

Table-23

PRODUCTION COST AND PROFIT IN SAMPLE WATER COURSE RD.22000

Sr. No.	Crops	Location	Area (Hectare)	Total Output: Main Product (Mds)	Total Output: By-product Unit	Total Output: Total Output	Market Price per unit (ex-farm): MP (Rs)	Market Price per unit (ex-farm): BF (Rs)	Total value of output: MP	Total value of output: BF	Total value of output: Total	Value per Hectare: MP	Value per Hectare: BF	Value per Hectare: Total	Total Farming cost: Physical inputs	Total Farming cost: Labour cost	Total Farming cost: Total	Cost per hectare	Profit/loss (+) (-): Total	Profit/loss (+) (-): Per Hectare	Total Imputed costs: Physical input	Total Imputed costs: Labour	Total Imputed costs: Total	Carry home Income =col.19+23: Total	Carry home Income =col.19+23: Per Hectare
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1. Maize	Head		7.08	81.50	Bundles	1605	118	2	9617	3250	12867	1359	459	1817	5206	1638	15726	2221	-2959	-404	-	6942	6939	4133	584
	Middle		3.69	15.00	Bundles	2150	118	2	1770	4300	6070	480	1165	1645	2171	2703	4874	1321	1196	324	-	978	978	2174	589
	Tail		5.41	81.70	Bundles	930	118	2	9641	1860	11501	1782	344	2126	1721	8616	10337	1911	1164	215	-	8616	8616	9780	1808
	A.Places		16.18	178.20	Bundles	4705			21028	9410	30438	1300	582	1881	9098	21839	30937	1912	-499	-31	-	16586	16586	16087	994
2. Sorghum	Head		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Middle		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tail		1.92	Hectare	Rs.	-	3777	-	7250	-	7250	3777	-	3777	1109	3063	4172	2173	3080	1604	-	3063	3063	6143	3199
	A.Places		1.92	Hectare	Rs.	-	3777	-	7250	-	7250	3777	-	3777	1109	3063	4172	2173	3080	1604	-	3063	3063	6143	3199
3. Sugar-cane (Gur)	Head		-	-	Mds C.T.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	Mds Bagg:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Middle		-	-	Mds C.T.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	Mds Bagg:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tail		-	-	Mds C.T.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	Mds Bagg:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	A.Places		-	-	Mds C.T.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	Mds Bagg:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4. Pigeon Pea	Head		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Middle		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tail		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	A.Places		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

C.T.= Cane Tops Bagg: Bagasse

Table-24

CROPPING PATTERN ON SAMPLE FARMS IN SAMPLE WATER COURSE RD.22000

Sr. No.	Crops	Area: Head			Middle			Tail			All Places		
		Hect-are	% of season	% of year	Hect-are	% of season	% of year	Hect-are	% of season	% of year	Hect-are	% of season	% of year
0	1	2	3	4	5	6	7	8	9	10	11	12	13
I.	Kharif 1987												
	1. Maize	7.08	100.00	36.62	3.69	100.00	30.78	5.41	73.81	24.94	16.18	89.39	30.52
	2. Sorghum	-	-	-	-	-	-	1.92	26.19	8.85	1.92	10.61	3.62
	3. Sugarcane	-	-	-	-	-	-	-	-	-	-	-	-
	4. Pigeon Pea	-	-	-	-	-	-	-	-	-	-	-	-
	5. All Kharif Crops	7.08	100.00	36.62	3.69	52.00	30.78	7.33	100.00	30.79	18.10	100.00	34.14
II.	Rabi 1987-88												
	1. Wheat	11.23	71.68	50.10	7.59	91.45	63.30	12.49	86.90	57.58	31.31	89.69	59.06
	2. Barley	0.51	4.16	2.64	-	-	-	0.96	6.69	4.43	1.47	4.21	2.77
	3. Berseem	2.64	4.16	2.64	0.71	8.55	5.92	0.91	6.34	4.20	2.13	6.10	4.02
	4. Spinach	-	-	-	-	-	-	-	-	-	-	-	-
	5. All Rabi Crops	12.25	100.00	63.37	8.30	100.00	69.22	14.36	100.00	62.21	34.91	100.00	65.86
III.	Kharif + Rabi	19.33	-	100.00	11.99	-	100.00	21.69	-	100.00	53.01	-	100.00

Table-25

MANUAL/ANIMAL/MACHINE TIME DEVOTED IN CULTIVATION
OF MAIZE IN SMALL WATER [illegible] PD.22000

Sr. No.	Operations	Head (Area sown: 7.08)						Middle (Area sown: [illegible])						Tail (Area sown: 5.41)						All Places (Area sown: 16.18)					
		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Ploughing	8.75	1.24	3.00	0.42	37.50	5.30	2.60	0.70	-	-	20.30	5.50	75.00	13.86	75.00	13.86	-	-	86.35	5.34	78.00	4.82	57.80	3.57
2.	Levelling	1.50	0.21	1.50	0.21	-	-	0.60	0.16	-	-	-	-	5.00	0.92	5.00	0.92	-	-	7.10	0.44	6.50	0.40	-	-
3.	Planking	1.75	0.25	1.50	0.21	-	-	0.60	0.16	-	-	-	-	3.50	0.65	3.50	0.65	-	-	5.25	0.32	5.00	0.31	5.00	0.31
4.	Sowing	3.75	0.53	1.50	0.21	17.50	2.47	1.53	0.41	-	-	10.50	2.85	7.25	1.34	4.00	0.74	-	-	12.53	0.77	5.50	0.34	28.00	1.73
5.	Watering	35.00	4.74	-	-	-	-	10.32	2.80	-	-	-	-	9.03	1.67	-	-	-	-	54.35	3.36	-	-	-	-
6.	F.Y.Manure	9.50	1.34	-	-	-	-	-	-	-	-	-	-	2.75	0.51	-	-	-	-	12.25	0.76	-	-	-	-
7.	Che:Fertilizer	9.05	1.28	-	-	-	-	4.45	1.12	-	-	-	-	1.68	0.31	-	-	-	-	15.18	0.94	-	-	-	-
8.	Hoeing/Weeding	30.00	4.24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30.00	1.85	-	-	-	-
9.	Harvesting	59.50	8.40	-	-	-	-	12.50	3.39	-	-	-	-	26.75	4.94	-	-	-	-	98.75	6.10	-	-	-	-
10.	Carriage to Threshing/yard Gani	22.25	3.14	19.00	2.68	-	-	-	-	-	-	-	-	12.00	2.22	-	-	-	-	34.25	2.12	19.00	1.17	-	-
11.	Thres:/Winnowing /can Crushing	20.50	2.90	-	-	-	-	-	-	-	-	-	-	8.75	1.62	-	-	-	-	29.25	1.81	-	-	-	-
12.	Gur Making	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13.	Total	201.55	28.47	26.50	3.74	60.00	8.47	32.00	8.67	-	-	30.80	8.35	151.71	28.04	87.50	16.17	-	-	385.26	23.81	114.00	7.05	90.80	5.61

Table-25

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF
SORGHUM IN SAMPLE WATER COURSE RD.22000

Sr. No.	Operations	Head (Area sown: 0.00)						Middle (Area sown: 0.00)						Tail (Area sown: 1.92)						All Places (Area sown: 1.92)					
		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	3	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Ploughing	-	-	-	-	-	-	-	-	-	-	-	-	24.50	12.76	24.50	12.76	-	-	24.50	12.76	24.50	12.76	-	-
2.	Levelling	-	-	-	-	-	-	-	-	-	-	-	-	1.50	0.78	1.50	0.78	-	-	1.50	0.78	1.50	0.78	-	-
3.	Planking	-	-	-	-	-	-	-	-	-	-	-	-	1.50	0.78	1.50	0.78	-	-	1.50	0.78	1.50	0.78	-	-
4.	Sowing	-	-	-	-	-	-	-	-	-	-	-	-	9.50	4.95	9.50	4.95	-	-	9.50	4.95	9.50	4.95	-	-
5.	Watering	-	-	-	-	-	-	-	-	-	-	-	-	3.00	1.56	-	-	-	-	3.00	1.56	-	-	-	-
6.	F.Y.Manure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Che:Fertilizer	-	-	-	-	-	-	-	-	-	-	-	-	0.50	0.26	-	-	-	-	0.50	0.26	-	-	-	-
8.	Hoeing/Weeding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Harvesting	-	-	-	-	-	-	-	-	-	-	-	-	1.50	0.78	-	-	-	-	1.50	2.78	-	-	-	-
10.	Carriage to threshing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11.	Threshing/Winnowing/cane crushing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12.	Gur Making	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13.	Total	-	-	-	-	-	-	-	-	-	-	-	-	42.00	21.88	37.00	19.27	-	-	42.00	21.88	37.00	19.27	-	-

Table-27

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF SUGARCANE IN SAMPLE WATER COURSE RD.22000

(NOT APPLICABLE)

Table-28

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF PIGEON PEA IN SAMPLE WATER COURSE RD.22000

(NOT APPLICABLE)

Table-29

NUMBER OF FRUIT PLANTS, TREES AND FRUIT
PRODUCTION IN SAMPLE WATER COURSE RD. 22000

(NOT APPLICABLE)

Table-30

LIVESTOCK HOLDINGS OF SAMPLE HOUSEHOLDS IN
SAMPLE WATER COURSE RD.22000

Sr. No.	Kind of Livestock	No. of H.hold who possess these	Number of livestock possessed											
			Head											
			Milker			Bulls			Total			In-milk		
			a	b	c	a	b	c	a	b	c	a	b	c
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Buffalo	4	5	1.25	0.56	4	1.00	0.44	9	2.25	1.00	4	1.00	0.44
2.	Cow	5	8	1.60	0.89	9	1.80	1.00	17	3.40	1.89	4	0.80	0.44
3.	Goat	4	5	1.25	0.56	17	4.25	1.89	22	5.50	2.44	6	1.50	0.67
4.	Sheep	1	1	1.00	0.11	1	1.00	0.11	2	2.00	0.22	-	-	-
5.	Bullock	1	-	-	-	2	2.00	0.22	2	2.00	0.22	-	-	-
6.	He Buffalo	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Horse/Mule	-	-	-	-	-	-	-	-	-	-	-	-	-
8.	Donkey	4	-	-	-	4	1.00	0.44	4	1.00	0.44	-	-	-
9.	Camel	-	-	-	-	-	-	-	-	-	-	-	-	-
10.	Total	19	19	1.00	2.11	37	1.95	4.11	56	2.95	6.22	14	0.74	1.56
11.	Poultry	9	18	2.00	2.00	95	10.56	10.56	113	12.56	12.56	113	12.56	12.56

(Contd....)

Total Household: 19
Head: 9
Middle: 5
Tail: 5

a. Total animal
b. Number per owner
c. Number per sample household in general

Table-30

LIVESTOCK HOLDINGS OF SAMPLE HOUSEHOLDS IN
SAMPLE WATER COURSE RD.22000

Sr. No.	Kind of Livestock	No. of H.hold who possess these:	Number of livestock possessed											
			Middle											
			Minor			Adult			Total			In-milk		
			a	b	c	a	b	c	a	b	c	a	b	c
0	0	15	16	17	18	19	20	21	22	23	24	25	26	27
1.	Buffalo	2	1	0.50	0.20	1	0.50	0.20	2	1.00	0.40	1	0.50	0.20
2.	Cow	1	2	2.00	0.40	2	2.00	2.00	4	4.00	0.80	2	2.00	0.40
3.	Goat	1	3	3.00	0.60	2	2.00	0.40	5	5.00	1.00	-	-	-
4.	Sheep	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Bullock	1	-	-	-	2	2.00	0.40	2	2.00	0.40	-	-	-
6.	He Buffalo	1	-	-	-	3	3.00	0.60	3	3.00	0.60	-	-	-
7.	Horse/Mule	-	-	-	-	-	-	-	-	-	-	-	-	-
8.	Donkey	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Camel	-	-	-	-	-	-	-	-	-	-	-	-	-
10.	Total	6	6	1.00	1.20	10	1.67	2.00	16	2.67	3.20	3	0.50	0.60
11.	Poultry	5	14	2.80	2.80	25	5.00	5.00	39	7.80	7.80	-	-	-

(Contd....)

Total Household: 19
Head: 9
Middle: 5
Tail: 5

a. Total animal
b. Number per owner
c. Number per sample household in general

Table-30

LIVESTOCK HOLDINGS OF SAMPLE HOUSEHOLDS
IN SAMPLE WATER COURSE RD.22000

Sr. No.	Kind of Livestock	No. of HH.hold who possess these:	Number of Livestock possessed											
			Minor			Adult			Total			In-milk		
			a	b	c	a	b	c	a	b	c	a	b	c
0	0	28	29	30	31	32	33	34	35	36	37	38	39	40
1.	Buffalo	3	4	1.33	0.80	2	0.67	0.40	6	2.00	1.20	2	0.67	0.40
2.	Cow	3	2	0.67	0.40	3	1.00	0.60	5	1.67	1.00	3	1.00	0.60
3.	Goat	1	-	-	-	1	1.00	0.20	1	1.00	0.20	-	-	-
4.	Sheep	2	1	0.50	0.20	3	1.50	0.60	4	2.00	0.80	-	-	-
5.	Bullock	1	-	-	-	2	2.00	0.40	2	2.00	0.40	-	-	-
6.	He Buffalo	1	1	1.00	0.20	-	-	-	1	1.00	0.20	-	-	-
7.	Horse/Mule	-	-	-	-	-	-	-	-	-	-	-	-	-
8.	Donkey	2	-	-	-	2	1.00	0.40	2	1.00	0.40	-	-	-
9.	Camel	-	-	-	-	-	-	-	-	-	-	-	-	-
10.	Total	13	8	0.62	1.60	13	1.00	2.60	21	1.62	4.20	5	0.38	1.00
11.	Poultry	3	17	5.67	3.40	24	8.00	4.80	41	13.67	8.20	-	-	-

(Contd....)

Total Household: 19
Head: 9
Middle: 5
Tail: 5

a. Total animal
b. Number per owner
c. number per sample household in general

Table-30

LIVESTOCK HOLDING OF SAMPLE HOUSEHOLDS
IN SAMPLE WATER COURSE RD.22000

Sr. No.	Kind of Livestock	No. of household who possess theses:				Number of livestock [illegible]											
						All places											
						Minor			Adult			Total			In-milk		
		Head	Middle	Tail	All Places	a	b	c	a	b	c	a	b	c	a	b	c
0	0	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
1.	Buffalo	4	2	3	9	10	1.11	0.53	7	0.78	0.37	17	1.89	0.89	7	0.78	0.37
2.	Cow	5	1	3	9	12	1.33	0.63	14	1.56	0.74	26	2.89	1.37	9	1.00	0.47
3.	Goat	4	1	1	6	8	1.33	0.42	20	3.33	1.05	28	4.67	1.47	6	1.00	0.32
4.	Sheep	1	-	2	3	2	0.67	0.11	4	1.33	0.21	6	2.00	0.32	-	-	-
5.	Bullock	1	1	1	3	-	-	-	6	2.00	0.32	6	2.00	0.32	-	-	-
6.	He Buffalo	-	1	1	2	1	0.50	0.05	3	1.50	0.16	4	2.00	0.21	-	-	-
7.	Horse/Mule	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8.	Donkey	4	-	2	6	-	-	-	6	1.00	0.32	6	1.00	0.32	-	-	-
9.	Camel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.	Total	19	6	13	38	33	0.87	1.74	60	1.58	3.16	93	2.45	4.89	22	0.56	1.16
11.	Poultry	9	5	3	17	49	2.88	2.58	144	8.47	7.57	49	2.88	2.58	-	-	-

Total Household:19
Head: 9
Middle: 5
Tail: 5

a. Total animal (Concluded)
b. Number per owner
c. Number per sample household in general

Table-31

MILK PRODUCTION AND UTILIZATION IN SAMPLE
WATER COURSE RD. 22000

Sr. No.	Particulars	Unit	Head (Total sample farmers = 9)					Middle (Total sample farmers= 5)				
			Buffalo	Cow	Goat	Sheep	Total	Buffalo	Cow	Goat	Sheep	Total
0	1	2	3	4	5	6	7	8	9	10	11	12
1.	In milk animals	Number	4.00	4.00	6.00	-	14.00	1.00	2.00	-	-	3.00
2.	Number of owners	Number	4.00	2.00	2.00	-	8.00	1.00	1.00	-	-	2.00
3.	Avg.Daily milk production	Litre	4.90	4.00	1.00	-	9.90	4.00	3.00	-	-	
4.	Avg.Monthly milk Production (1 x 3 x 30)	Litre	558.00	480.00	180.00	-	4158.00	120.00	180.00	-	-	
5.	Avg.Monthly sale (in normal in-milk state)	Litre	-	-	-	-	-	-	-	-	-	
6.	5 as %age of 4 (5÷4x100)	%age	-	-	-	-	-	-	-	-	-	
7.	Lactation period	Day	305.00	200.00	90.00	90.00	-	305.00	200.00	90	90	
8.	Total Production per lactation period (1x3x7)	Litre	5978.00	3200.00	540.00	-	7918.0	1220.00	1200.0	-	-	
9.	Estimated sale per lactation period (6x8)÷100		-	-	-	-	-	-	-	-	-	
10.	Price per litre	Rs.	-	-	-	-	-	-	-	-	-	
11.	Estimated receipt from sales per lactation period (9x10)	Rs.	-	-	-	-	-	-	-	-	-	
12.	Avg. annual sale proceeds											
	a. per owner household 11÷2	Rs.	-	-	-	-	-	-	-	-	-	
	b. per sample household in general	Rs.	-	-	-	-	-	-	-	-	-	

(Contd....)

Table-31

MILK PRODUCTION AND UTILIZATION IN SAMPLE
WATER COURSE RD. 22000

Sr. No.	Particulars	Unit	Jail (Total sample farmers = 5)					A.Places(Total Sample Farmers= 19)				
			Buffalo	Cow	Goat	Sheep	Total	Buffalo	Cow	Goat	Sheep	Total
0	1		14	15	16	17	18	19	20	21	22	23
1.	In Milk Animal	Number	2	3.00	-	-	5.00	7.00	9	6	-	22.00
2.	Number of Owner	Number	2	3.00	-	-	5.00	7.00	6	2	-	15.00
3.	Avg.Daily Milk Production	Litre	4	2.70	-	-	6.70	4.81	3	1	-	8.81
4.	Avg. Monthly Milk Production (1 x 3 x 30)	Litre	240	243.00	-	-	-	1010.00	810	180	-	-
5.	Avg. Monthly sale (in normal in-milk state)	Litre	-	-	-	-	-	-	-	-	-	-
6.	5 as Tage if 4 (5÷4x100)	Tage	-	-	-	-	-	-	-	-	-	-
7.	Lactation Period	Day	305	200.00	-	-	-	305.00	200	90	-	-
8.	Total Production per lactation period (1x3x7)	Litre	2440	1620.00	-	-	4060.00	10269.35	5400	540	-	-
9.	Estimated sale per lactation period(6x8)÷100		-	-	-	-	-	-	-	-	-	-
10.	Price per litre	Rs.	-	-	-	-	-	-	-	-	-	-
11.	Estimated receipt from sales per lactation period (9x10)	Rs.	-	-	-	-	-	-	-	-	-	-
12.	Avg. Annual sale Proceeds:											
	a: per owner household (11 ÷ 2)	Rs.	-	-	-	-	-	-	-	-	-	-
	b: per sample household in general	Rs.	-	-	-	-	-	-	-	-	-	-

Table-32

INCOME FROM SALE OF DAIRY PRODUCTS (OTHER THAN MILK)
DURING SIX MONTHS PROCEEDING INTERVIEW OF
SAMPLE HOUSEHOLDS IN KHARIF 1987 IN
SAMPLE WATER COURSE RD.22000

(NOT APPLICABLE)

Table-33

INCOME FROM HIRING OUT OF LIVESTOCK IN
SAMPLE WATER COURSE RD. 22000

(NOT APPLICABLE)

Table-34

INCOME FROM SELECTED SOURCES DURING SIX MONTHS BEFORE INTERVIEW IN KHARIF 1987. IN SAMPLE WATER COURSE RD. 22000

Sr. No.	Particulars	Unit	Sources: Rent of Land	Rent of other property	Trade	Industry	Foreign remitt-ances	Home remitt-ances	Other
0	1	2	3	4	5	6	7	8	9
1.	H.holds reporting income:	No							
	Head		-	-	-	-	-	-	1
	Middle		-	-	-	-	-	-	-
	Tail		-	-	-	-	-	-	-
	All Places		-	-	-	-	-	-	1
2.	Total Income:	Rs.							
	Head		-	-	60000	-	-		12000
	Middle		-	-	-	-	-	-	-
	Tail		-	-	-	-	-	-	-
	All Places	Rs.	-	-	60000	-	-	-	12000
3.	Avg. Income of Recipients:	Rs.							
	Head		-		20000	-	-	-	12000
	Middle		-	-	-	-	-	-	-
	Tail		-	-	-	-	-	-	-
	All Places	Rs.	-	-	20000	-	-	-	12000
4.	Avg. Income of sample households in General:	Rs.							
	Head		-	-	6667	-	-	-	1333
	Middle		-	-	-	-	-	-	-
	Tail		-	-	-	-		-	-
	All Places	Rs.	-	-	3158	-	-	-	632

Households:

1. Head 9
2. Middle 5
3. Tail 5
4. Total 19

Table-35

PERMANENT LABOUR ON FARM IN SAMPLE WATER COURSE RD.22000

Sr. No.	PARTICULARS	UNIT	HEAD	MIDDLE	TAIL	ALL PLACES
0	1	2	3	4	5	6
1.	Total sample H.holds	No	9	5	5	19
2.	H.holds who have permanent labour	No	1	-	-	1
3.	2 as % of 1	No	11.11	-	-	5.26
4.	Total labourers	No	1	-	-	1
5.	Labourers per:					
	a) Employing H.holds	No	1	-	-	1
	b) Sample H.hold in General	Rs.	0.11	-	-	0.05
6.	Wages paid in Kharif in cash	Rs.	2100	-	-	2100
7.	Value of other payments made in Kharif	Rs.	1200	-	-	1200
8.	Total payments (6 + 7)	Rs.	3300	-	-	3300
9.	Avg. payment per paying household	Rs.	3300	-	-	3300
10.	Avg. payment per sample household	Rs.	366.67	-	-	173.68

Table-1

AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS IN SAMPLE WATERCOURSE RD.22000

Sr. No.	Crops	Location	Area	Main Product			By Product		
				Unit	Total	Per Hectare	Unit	Total	Per Hectare
0	1	2	3	4	5	6	7	8	9
1.	Wheat	Head	[illegible]	Mds	[illegible]	[illegible]	Bundle	[illegible]	[illegible]
		Middle	7.59	Mds	299.33	39.44	Bundle	592.5	78.06
		Tail	12.49	Mds	411.00	32.91	Bundle	808	64.69
		Total	31.31	Mds	917.86	29.32	Bundle	1818	58.06
2.	Barley Grain	Head	0.51	Mds	3.90	13.00	Mds	10	33.33
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	0.51	Mds	3.90	13.00	-	10	33.33
3.	Barley Fodder	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-		
		Tail	0.96	-	-	-	Rs.	1600	3478.26
		Total	0.96	-	-	-	Rs.	1600	3478.26
4.	Berseem	Head	0.51	Rs.	3200.00	6274.51	-	-	-
		Middle	0.71	Rs.	4200.00	5915.49	-	-	-
		Tail	0.91	Rs.	4200.00	4615.38	-	-	-
		Total	2.13	Rs.	11600.00	5446.01	-	-	-
5.	Pea	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	-	-	-	-	-	-	-
6.	Spinach	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	-	-	-	-	-	-	-

Table-2

AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS OUTSIDE SAMPLE WATERCOURSE RD.22000

Sr. No.	Crops	Position	Area	Main Product			By Product		
				Unit	Total	Per Hectare	Unit	Total	Per Hectar
0	1	2	3	4	5	6	7	8	9
1.	Wheat	Head	-	Mds	-	-	Bundle	-	-
		Middle	2.02	Mds	50.00	24.75	Bundle	97	48.02
		Tail	2.02	Mds	60.00	29.70	Bundle	100	49.50
		Total	4.04	Mds	100.00	27.23	Bundle	197	48.76
2.	Barley Grain	Head	-		-	-		-	-
		Middle	-		-	-		-	-
		Tail	-		-	-		-	-
		Total	-		-	-		-	-
3.	Barley Fodder	Head	-		-	-		-	-
		Middle	-		-	-		-	-
		Tail	-		-	-		-	-
		Total	-		-	-		-	-
4.	Berseem	Head	-		-	-		-	-
		Middle	-		-	-		-	-
		Tail	-		-	-		-	-
		Total	-		-	-		-	-
5.	Pea	Head	-		-	-		-	-
		Middle	-		-	-		-	-
		Tail	-		-	-		-	-
		Total	-		-	-		-	-
6.	Spinach	Head	-		-	-		-	-
		Middle	-		-	-		-	-
		Tail	-		-	-		-	-
		Total	-		-	-		-	-

Table-3

DISPOSAL OF MAIN PRODUCTS IN SAMPLE WATER COURSE RD.22000

Sr. No.	Crop mode of Disposal	Wheat (Mds)								Barley (Mds)							
		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places	
		Qty.	%	Qty.	%	Qty	%	Qty.	%	Qty	%	Qty	%	Qty	%	Qty	%
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
I	Total Output	207.5	100.00	349.38	100.0	471.00	100.0	1027.88	100.0	3.9	100.0	-	-	-	-	3.9	100.00
II.	Disposal																
	1.Retained for H.use	158.5	76.39	222.00	63.54	215.56	45.77	596.06	57.99	0.9	23.08	-	-	-	-	0.9	23.08
	2.Sold	-	-	50.00	14.31	60.00	12.74	110.00	10.70	3.0	76.92	-	-	-	-	3.0	76.92
	3.Landlord's Share	25.0	12.05	55.00	15.74	124.06	26.34	204.06	19.85	-	-	-	-	-	-	-	-
	4.Artisan's dues	4.5	2.17	5.00	1.43	10.50	2.23	20.00	1.95	-	-	-	-	-	-	-	-
	5.Given to Labourers	5.0	2.41	5.00	1.43	39.88	8.47	49.88	4.85	-	-	-	-	-	-	-	-
	6.Seed	3.0	1.45	3.00	0.86	4.50	0.96	10.50	1.02	-	-	-	-	-	-	-	-
	7.Usher/Charity	10.5	5.06	7.38	2.11	13.00	2.76	30.88	3.00	-	-	-	-	-	-	-	-
	8.Other Specify	1.0	0.48	2.00	0.57	3.50	0.74	6.50	0.63	-	-	-	-	-	-	-	-
III.	Total =All Uses	207.5	100.00	349.38	100.0	471.00	100.0	1027.88	100.0	3.9	100.0	-	-	-	-	3.9	100.00

(Contd....)

Table-3

DISPOSAL OF MAIN PRODUCTS IN SAMPLE WATER COURSE RD.22000

Sr. No.	Crop wise of Disposal	Kharif								Rabi															
		Kharif Fodder								6 Mds.								Rabi Fodder							
		Head		Middle		Tail		All Classes		Head		Middle		Tail		All Classes		Head		Middle		Tail		All Classes	
		Qty.	%	Qty.	%	Qty.	%	Qty.	%	Qty.	%	Qty.	%	Qty.	%	Qty.	%	Qty.	%	Qty.	%	Qty.	%	Qty.	%
0		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
I	Total Output	3200	100	4200	100	4200	100	11600	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II.	Disposal																								
	1.Retained for H.use	3200	100	1500	35.71	2900	69.05	7600	65.52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.Sold	-	-	600	14.29	-	-	600	5.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3.Landlord's Share	-	-	2100	50.00	1300	30.95	3400	29.31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4.Artisan's dues	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5.Given to Labourers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6.Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7.Usher Charity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8.Other Specify	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
III.	Total Well Uses	3200	100	4200	100	4200	100	11600	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(Concluded)

Table-4

DISPOSAL OF BY-PRODUCTS IN SAMPLE WATER COURSE RD.22000

Sr. No.	Crop Mode of Disposal	Wheat (Mds)								Barley (Rs)							
		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places	
		Qty.	%	Qty.	%	Qty.	%	Qty.	%	Rs.	%	Rs.	%	Rs.	%	Rs.	%
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
I	Total Output	417.5	100	689.5	100	908	100	2015	100	280	100	-	-	1600	100	1880	100.00
II.	Disposal																
	1.Retained for H.use	335	80.24	472	68.46	371	40.86	1178	58.46	280	100	-	-	800	50	1080	57.45
	2.Sold	-	-	97	14.07	404	44.49	501	24.86	-	-	-	-	-	-	-	-
	3.Landlord's Share	82.5	19.76	120.5	17.48	133	14.65	336	16.67	-	-	-	-	800	50	800	42.55
	4.Artisan's dues	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5.Given to Labourers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6.Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7.Usher/Charity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8.Other Specify	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
III.	Total =All Uses	417.5	100	689.5	100	908	100	2015	100	280	100	-	-	1600	100	1880	100.00

(Contd....)

Table-4

DISPOSAL OF BY-PRODUCTS IN SAMPLE WATER COURSE RD.22000

Sr. No.	Crop Mode of Disposal	Barseem Fa								Tara								Rice Straw							
		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places	
		Rs.	%	Rs.	%	Rs.	%	Rs.	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%
0	1	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
I	Total Output	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II.	Disposal																								
	1.Reserved for House	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.Sale	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3.Landlord's Share	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4.Artisan's Dues	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5.Given to Labourers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6.Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7.Other Charity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8.Other Specify	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
III.	Total =All Uses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(Concluded)

Table-5

MODE OF SALE OF WHEAT IN SAMPLE WATER COURSE RD.22000

(NOT APPLICABLE)

Table-6

MODE OF SALE OF BARLEY IN SAMPLE WATER COURSE RD.22000

Sr. No.	Mode of Sale	Head		Middle		Tail		All Places	
		Qty	%	Qty	%	Qty	%	Qty	%
0	1	2	3	4	5	6	7	8	9
I.	In Village	3	100	-	-	-	-	3	100
	1. To Beoparis	-	-	-	-	-		-	-
	2. To Shop Keepers	-	-	-	-	-	-	-	-
	3. To others	3	100	-	-	-	-	3	100
II.	In other Villages	-	-	-	-	-	-	-	-
	1. To Beoparis	-	-	-	-	-	-	-	-
	2. To Shop Keepers	-	-	-	-	-	-	-	-
	3. To others	-	-	-	-	-	-	-	-
III.	In Peshawar	-	-	-	-	-	-	-	-
	1. Through Commission Agents	-	-	-	-	-	-	-	-
	2. To whole sellers	-	-	-	-	-	-	-	-
	3. To others	-	-	-	-	-	-	-	-
IV.	In other urban centres	-	-	-	-	-	-	-	-
V.	Total Sales	3	100	-	-	-	-	3	100

Table-7

MODE OF SALE OF BERSEEM IN SAMPLE WATER COURSE RD.22000

Sr. No.	Mode of Sale	Head		Middle		Tail		All Places	
		Qty	%	Qty	%	Qty	%	Qty	%
0	1	2	3	4	5	6	7	8	9
I.	In Village	-	-	600	100	-	-	600	100
	1. To Beoparis	-	-	-	-	-	-	-	-
	2. To Shop Keepers	-	-	-	-	-	-	-	-
	3. To others	-	-	600	100	-	-	600	100
II.	In other Villages	-	-	-	-	-	-	-	-
	1. To Beoparis	-	-	-	-	-	-	-	-
	2. To Shop Keepers	-	-	-	-	-	-	-	-
	3. To others	-	-	-	-	-	-	-	-
III.	In Peshawar	-	-	-	-	-	-	-	-
	1. Trough Commission Agents	-	-	-	-	-	-	-	-
	2. To whole sellers	-	-	-	-	-	-	-	-
	3. To Other	-	-	-	-	-	-	-	-
IV.	In other urban centres	-	-	-	-	-	-	-	-
V.	Total Sales	-	-	600	100	-	-	600	100

Table-8

MODE OF SALE OF PEA IN SAMPLE WATER COURSE RD.22000

(NOT APPLICABLE)

Table-9

MODE OF SALE OF SPINACH IN SAMPLE WATER COURSE RD.22000

(NOT APPLICABLE)

Table-10

NUMBER OF FARMERS REPORTING CONSUMPTION OF CHEMICAL FERTILIZERS IN SAMPLE WATER COURSE RD.22000

Sr. No.	Location of farm	Total farmers growing this crop No(=100)	Farmers using fertilizers: Urea		D A P		N P K		N P		Ammonium Sulphate		Ammonium Nitrate		P.Sulphate	
			No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
I.	WHEAT															
	a.Head of W.C.	7	24	29.17	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	5	19.5	25.64	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	5	23	21.74	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	17	66.5	25.56	-	-	-	-	-	-	-	-	-	-	-	-
II.	BARLEY															
	a.Head of W.C.	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	2	0.5	400.00	-	-	-	-	-	-	-	-	-	-		-
	d.All Places	4	0.5	800.00	-	-	-	-	-	-	-	-	-	-	-	-
III.	BERSEEM															
	a.Head of W.C.	3	2	150.00	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	2	1	200.00	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	4	1	400.00	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	9	4	225.00	-	-	-	-	-	-	-	-	-	-	-	-
IV.	P E A															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V.	SPINACH															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-11

QUANTITY OF CHEMICAL FERTILIZERS USED BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD.22000

Sr. No.	Location of farm	Area Sown (Hectare)	Quantity of fertilizer used: (KG)													
			Urea		D A P		N P K		N P		Ammonium Sulphate		Ammonium Nitrate		P.Sulphate	
			Total	Per Hect-are	Total	Per Hect-are	Total	Per Hect-are	Total	Per Hect-are	Total	Per Hect-are	Total	Per Hect-are	Total	Per Hect-are
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
I.	WHEAT															
	a.Head of W.C.	11.23	1200	106.86	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	7.59	975	128.46	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	12.49	1150	92.07	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	31.31	3325	106.20	-	-	-	-	-	-	-	-	-	-	-	-
II.	BARLEY															
	a.Head of W.C.	0.51	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	0.46	25	54.35	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	0.97	25	25.77	-	-	-	-	-	-	-	-	-	-	-	-
III.	BERSEEM															
	a.Head of W.C.	0.51	100	196.08	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	0.71	50	70.42	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	0.91	50	54.95	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	2.13	200	131.00	-	-	-	-	-	-	-		-	-	-	-
IV.	P E A															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V.	SPINACH															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-12

CONSUMPTION OF FARM YARD MANURE
IN SAMPLE WATER COURSE RD.22000

Sr. No.	Location of farm	Total farmers growing this crop	Farmers using Farm Yard Manure		Area Sown (Hec-tare)	Quantity used (KG)	
			No.	%		Total	Per Hectare
0	1	2	3	4	5	6	7
I.	WHEAT						
	a.Head of W.C.	7	2	14.29	11.23	1492.8	133
	b.Middle of W.C.	5	-	-	7.59	-	-
	c.Tail of W.C.	5	-	-	12.49	-	-
	d.All Places	17	1	5.88	31.31	1492.8	48
II.	BARLEY						
	a.Head of W.C.	2	-	-	0.51	-	-
	b.Middle of W.C.	-	-	-	-	-	-
	c.Tail of W.C.	2	-	-	0.46	-	-
	d.All Places	4	-	-	0.97	-	-
III.	BERSEEM						
	a.Head of W.C.	3	-	-	0.51	-	-
	b.Middle of W.C.	2	-	-	0.71	-	-
	c.Tail of W.C.	4	1	25.00	0.91	2239.2	2461
	d.All Places	9	1	11.11	2.13	2239.2	1051
IV.	PEA						
	a.Head of W.C.	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-
V.	SPINACH						
	a.Head of W.C.	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-

Table-13

NUMBER OF SAMPLE FARMERS WHO USED INSECTICIDES/ PESTICIDES/WEEDICIDES IN SAMPLE WATER COURSE RD.22000

Sr. No.	Location of farm	Total Farmer Growing this crops No(=100)	Farmers who used:Insect:/ Pesticides		Farmers who used: Weedicides	
			No.	%	No.	%
0	1	2	3	4	5	6
I.	WHEAT					
	a. Head of W.C.	7	-	-	-	-
	b. Middle of W.C.	5	-	-	-	-
	c. Tail of W.C.	5	-	-	-	-
	d. All places	17	-	-	-	-
II.	BARLEY					
	a. Head of W.C.	2	-	-	-	-
	b. Middle of W.C.	-	-	-	-	-
	c. Tail of W.C.	2	-	-	-	-
	d. All places	4	-	-	-	-
III.	BERSEEM					
	a. Head of W.C.	3	-	-	-	-
	b. Middle of W.C.	2	-	-	-	-
	c. Tail of W.C.	4	-	-	-	-
	d. All places	9	-	-	-	-
IV.	PEA					
	a. Head of W.C.	-	-	-	-	-
	b. Middle of W.C.	-	-	-	-	-
	c. Tail of W.C.	-	-	-	-	-
	d. All places	-	-	-	-	-
V.	SPINACH					
	a. Head of W.C.	-	-	-	-	-
	b. Middle of W.C.	-	-	-	-	-
	c. Tail of W.C.	-	-	-	-	-
	d. All places	-	-	-	-	-

Table-14

QUANTITY OF SEED USED BY [illegible] FARMERS
IN SAMPLE WATER COURSE [illegible]

(Kg)

Sr. No.	Crop	Total Area (hectare)	Head Quantity used			Middle Quantity used			Tail Quantity used			All Places Quantity used		
			Improved	Local	Total	Improved	Local	Total	Improved	Local	Total	Improved	Local	Total
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Wheat	0.97	-	10.5	10.5	-	16	16	-	20.5	20.5	-	47	47
2.	Barley	31.31	120	990	1110	-	721	721	829	350	1179	949	2061	3010
3.	Berseem	2.13	-	38	38	-	-	-	-	45	45	-	83	83
4.	P e a	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Spinach	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-15

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD.22000

Crop: Wheat Area: 31.31 ha. i) Head :11.23 ha ii) Middle: [illegible] ha. iii) Tail:12.49 ha.

Sr. No.	Physical Input	Head						Middle						Tail						All Places					
		Purchased		Self Supplied		Total (2+4)		Purchased		Self Supplied		Total (8+10)		Purchased		Self Supplied		Total (14+16)		Purchased (2+8+14)		Self Supplied (4+10+16)		Total	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Seed	2475	220	90	8	2565	228	1753	231	90	12	1043	243	2760	221	120	10	2880	231	6988	223	300	10	7288	233
2.	Farm Yard Manure	-	-	140	12	140	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	140	4	140	4
3.	Chemical Fertilizer	3220	287	-	-	3220	287	2528	333	-	-	2528	333	3055	245	-	-	3055	245	8803	281	-	-	8803	281
4.	Insecticide/ Pesticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Water Charges	666	59	-	-	666	59	450	59	-	-	450	59	741	59	-	-	741	59	1857	59	-	-	1857	59
6.	Dues of Artisans	450	40	-	-	450	4[illegible]	550	72	-	-	550	72	1300	104	-	-	1300	104	2300	73	-	-	2300	73
7.	Total	6811	606	230	20	7041	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	708	7856	629	120	10	7976	639	19947	637	440	14	20387	651

Table-10

LABOUR INPUT COST IN SAMPLE WATER COURSE NO.-2000

Crop: Wheat — A: 31.31 ha. — i) Head: 11.65 ha. — ii) Middle: 7.55 ha. — iii) Tail: 12.49 ha.

Sr. No.	Self Operations	Labour Inputs	Head: Self Paid Total	Head: Self Paid Per Hect.	Head: Supplied Total	Head: Supplied Per Hect.	Head: Total (3+5) Total	Head: Total (3+5) Per Hect.	Middle: Self Paid Total	Middle: Self Paid Per Hect.	Middle: Supplied Total	Middle: Supplied Per Hect.	Middle: Total (7+9) Total	Middle: Total (7+9) Per Hect.	Tail: Self Paid Total	Tail: Self Paid Per Hect.	Tail: Total Supplied Total	Tail: Total Supplied Per Hect.	Tail: Paid (15+17) Total	Tail: Paid (15+17) Per Hect.	Tail: Self Supp. (3+9+15) Total	Tail: Self Supp. (3+9+15) Per Hect.	All Places: Total (5+11+17) Total	All Places: Total (5+11+17) Per Hect.	All Places: (21+23) Total	All Places: (21+23) Per Hect.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Ploughing	i.Manual	-	-	1020	91	1020	91	-	-	150	20	150	20			2700	216	2700	216	-		3870	124	3870	124
	ii.Animal	-	-	1650	147	1650	147	-	-	-	-	-		30	2	4100	328	4400	352	300	1	5750	184	6050	193
	iii.Machine	3000	267	-	-	3000	267	2490	332	-	-	2490	332	1730	30	-	-	1730	30	6570	210	-	-	6570	210
	iv.Total	3000	267	2670	238	5670	505	2490	332	150	20	2640	352	1390	32	6800	544	8830	598	6870	211	9620	307	16490	527
2. Levelling	i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	270	22	270	22	-	-	270	9	270	9
	ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400	32	400	32	-	-	400	13	400	13
	iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	670	54	670	54	-	-	670	21	670	21
3. Planking	i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	443	35	480	38	36	1	443	14	480	15
	ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	38	3	700	56	700	56	-	-	700	22	700	22
	iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total	-	-	-	-	-	-	-	-	-	-	-	-	38	3	1143	91	1180	94	36	1	1143	36	1180	38
4. Sowing	i.Manual	-	-	500	45	500	45	-	-	180	24	180	24	-	-	1631	131	1631	131	-	-	2311	74	2311	74
	ii.Animal	-	-	550	49	550	49	-	-	-	-	-	-	-	-	2200	176	2200	176	-	-	2750	88	2750	88
	iii.Machine	1980	176	-	-	1980	176	2055	271	-	-	2055	271	-	-	1080	86	1080	86	4035	129	1080	34	5115	163
	iv.Total	1980	176	1050	93	3030	270	2055	271	180	24	2235	294	-	-	4911	393	4911	393	4035	129	6141	196	10176	325
5. Watering	i.Manual	-	-	715	64	715	64	-	-	267	35	267	35	-	-	233	19	233	19	-	-	1215	39	1215	39
6. F.Y.Manure	i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60	5	60	5	-	-	60	2	60	2

(Contd....)

Table-16

LABOUR INPUT COST IN SAMPLE WATER COURSE NO.22000

Crops: Wheat — Area:31.31 ha. — i) Head: 11.23 ha. — ii) Middle: 7.59 ha. — iii) Tail: 12.49 ha.

Sr. No.	Operations	Self Labour Inputs	Head: Paid Total	Head: Paid Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (3+5) Total	Head: Total (3+5) Per Hect.	Middle: Paid Total	Middle: Paid Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect.	Tail: Paid Total	Tail: Paid Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect.	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect.	All Places: Self Supp. (5+11+17) Total	All Places: Self Supp. (5+11+17) Per Hect.	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
7. Chemical		i.Manual	-	-	237	21	237	21	-	-	165	22	165	22	-	-	128	10	128	10	-	-	530	17	530	17
8. Hoeing/Weeding		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9. Harvesting		i.Manual	660	55	4410	398	5130	457	-	-	4050	534	4050	534	660	53	5100	406	5760	461	1320	42	13620	435	14940	477
10.Carriage to Threshing Yard		i.Manual	-	-	555	49	555	49	-	-	230	37	290	37	-	-	1470	118	1470	118	-	-	2305	74	2305	74
		ii.Animal	-	-	370	33	370	33	-	-	-	-	-	-	-	-	1960	157	1960	157	-	-	2330	74	2330	74
		iii.Machine	300	27	-	-	300	27	380	50	-	-	380	50	-	-	-	-	-	-	680	22	-	-	680	22
		iv.Total	300	27	925	82	1225	109	380	50	230	37	660	87	-	-	3430	275	3430	275	680	22	4635	148	5315	170
11.Threshing/ Winnowing		i.Manual	90	8	705	63	795	71	114	15	390	51	195	66	-	-	1290	103	1290	103	204	7	2385	76	2589	83
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii.Machine	1750	156	-	-	1750	156	2640	348	-	-	2640	348	3480	279	-	-	3480	279	7870	251	-	-	7870	251
		iv.Total	1840	164	705	63	2545	227	2754	363	390	51	3144	414	3480	279	1290	103	4770	382	8074	258	2385	76	10459	334
12.Total		i.Manual	750	67	8202	730	8952	797	114	15	5482	722	5596	737	660	56	13324	1067	13983.9	1123	1524	50	27008	863	28531.9	912
		ii.Animal	-	-	2570	229	2570	229	-	-	-	-	-	-	338	24	9360	749	9688	773	338	10	11930	381	12268	391
		iii.Machine	7030	626	-	-	7030	626	7565	997	-	-	7565	997	4560	365	1080	86	5640	452	19155	612	1080	34	20235	646
		iv.Total	7780	693	10772	959	18552	1652	7679	1012	5482	722	13161	1734	5558	445	23764	1903	29321	2348	21017	671	40018	1278	61034	1949

(Concluded)

Table [illegible]

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD.22000

Crop: Barley Area: 1.47 ha. [illegible] : 0.51 ha. ii) Middle : 0.00 ha. iii) Tail: 0.96 ha.

Sr. No.	Physical Input	Head						Middle						Tail						All Places					
		Purchased		Self Supplied		Total (2+4)		Purchased		Self Supplied		Total (8+10)		Purchased		Self Supplied		Total (14+16)		Purchased (2+8+14)		Self Supplied (14+10+16)		Total	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Seed	119	233	-	-	119	233		-	-	-	-	-	113	118	-	-	113	118	232	239	-	-	232	239
2.	Farm Yard Manure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.	Chemical Fertilizer	-	-	-	-	-	-	-	-	-	-	-	-	65	68	-	-	65	68	65	44	-	-	65	44
4.	Insecticide/ Pesticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Water Charges	30	59	-	-	30	59	-	-	-	-	-	-	27	28	-	-	27	28	58	39	-	-	58	39
6.	Dues of Artisans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Total	149	293	-	-	149	293	-	-	-	-	-	-	205	214	-	-	205	214	354	241	-	-	354	241

Table-18

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.22000

Crops: Barley Area: 1.47 Head : 0.5 ii) Middle: 0.00 ha iii) Tail: 0.96 ha

Sr. No.	Operations	Labour Inputs	Head: Paid Total	Head: Paid Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (3+5) Total	Head: Total (3+5) Per Hect.	Middle: Paid Total	Middle: Paid Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect.	Tail: Paid Total	Tail: Paid Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect.	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect.	All Places: Self Supp. (5+11+17) Total	All Places: Self Supp. (5+11+17) Per Hect.	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Ploughing		i.Manual	-	-	72	141	72	141	-	-	-	-	-	-	-	-	23	49	23	49	-	-	95	97	95	9
		ii.Animal	100	196	-	-	100	196	-	-	-	-	-	-	-	-	25	54	25	54	100	103	25	26	125	12
		iii.Machine	120	235	-	-	120	235	-	-	-	-	-	-	120	261	-	-	120	261	240	247	-	-	240	24
		iv.Total	220	431	72	141	292	573	-	-	-	-	-	-	120	261	48	103	168	364	340	351	120	123	460	47
2. Leveling		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	8	4	8	-	-	4	4	4	
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	14	6	14	-	-	6	6	6	
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		iv.Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	22	10	22	-	-	10	10	10	1
3. Planking		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	4	2	4	-	-	2	2	2	
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	7	3	7	-	-	3	3	3	
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		iv.Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	11	5	11	-	-	5	5	5	
4. Sowing		i.Manual	-	-	21	41	21	41	-	-	-	-	-	-	-	-	23	49	23	49	-	-	44	45	44	4
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	27	13	27	-	-	13	13	13	1
		iii.Machine	120	235	-	-	120	235	-	-	-	-	-	-	75	163	-	-	75	163	195	201	-	-	195	20
		iv.Total	120	235	21	41	141	276	-	-	-	-	-	-	75	163	36	76	110	239	195	201	56	58	251	25
5. Watering		i.Manual	-	-	30	59	30	59	-	-	-	-	-	-	-	-	15	15	-	-	-	-	45	31	45	3
6. F.Y.Manure		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Contd...

Table-18

LABOUR INPUT COST IN DIFFERENT CROPS COURSE PD/22000

Crops: Barley Area: 1.47 ha. ii. Middle : 0.[illegible] ha iii. Tail: 0.96 ha

Sr. No.	Operations	Labour Inputs	Head						Tail																	
			Paid		Self Supplied		Total (3+5)		Paid		Self Supplied		Total (9+11)		Paid		Self Supplied		Total (15+17)		All Places: Paid (4+14)		All Places: Self Supp: (6+16)		All Places: Total (21+23)	
			Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
7. Chemical		i.Manual	-	-	6	12	6	12	-	-	-	-	-	-	-	-	2	4	2	4	-	-	3	3	8	8
8. Hoeing/Weeding		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9. Harvesting		i.Manual	-	-	240	471	240	471	-	-	-	-	-	-	-	-	240	-	240	-	-	-	480	247	480	24
10.Carriage to Threshing yard.		i.Manual	-	-	36	71	36		-	-	-	-	-	-	-	-	-	-	-	-	-	-	36	37	36	3
		ii.Animal	40	79	-	-	40	78	-	-	-	-	-	-	-	-	-	-	-	-	40	41	-	-	40	4
		iii.Machine	50	98	-	-	50	98	-	-	-	-	-	-	-	-	-	-	-	-	50	52	-	-	50	5
		iv.Total	90	176	36	71	126	247	-	-	-	-	-	-	-	-	-	-	-	-	90	93	36	37	126	13
11.Threshing/ Winnowing		i.Manual	-	-	30	59	30	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	31	30	3
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		iii.Machine	60	118	-	-	60	118	-	-	-	-	-	-	-	-	-	-	-	-	60	62	-	-	60	6
		iv.Total	60	118	30	59	90	176	-	-	-	-	-	-	-	-	-	-	-	-	60	62	30	31	90	9
12. Total		i.Manual	-	-	435	853	435	583	-	-	-	-	-	-	-	-	307.48	110	307.48	110	-	-	742.48	501	742.48	50
		ii.Animal	140	275	-	-	140	275	-	-	-	-	-	-	-	-	47	102	47	102	140	144	47	48	187	19
		iii.Machine	350	686	-	-	350	686	-	-	-	-	-	-	195	424	-	-	195	424	545	562	-	-	545	56
		iv.Total	490	961	435	853	925	1814	-	-	-	-	-	-	195	424	354	212	549	636	685	706	789	549	1474	12

(Concluded)

Table-19

Table 19. INPUT COST IN SAMPLE WATER COURSE RD.22000

Crop: Berseem Area: 2.13 ha. i) Head : 0.51 ha. ii) Middle: 0.71 ha. iii) Tail: 0.91 ha.

Sr. No.	Physical Input	Head						Middle						Tail						All Places					
		Purchased		Self Supplied		Total (2+4)		Purchased		Self Supplied		Total (8+10)		Purchased		Self Supplied		Total (14+16)		Purchased (2+8+14)		Self Supplied (4+10+16)		Total	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Seed	210	412	-	-	210	412	300	423	-	-	300	423	460	-	-	-	460	-	970	455	-	-	970	455
2.	Farm Yard Manure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	240	-	240	-	-	-	240	113	240	113
3.	Chemical Fertilizer	260	510	-	-	260	510	130	183	-	-	130	183	133	-	-	-	133	-	523	245	-	-	523	245
4.	Insecticide/ Pesticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Water Rate	22	43	-	-	22	43	31	43	-	-	31	43	40	-	-	-	40	-	92	43	-	-	92	43
6.	Dues of Artisans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Total	492	964	-	-	492	964	461	649	-	-	461	649	632	-	240	-	872	-	1584	744	240	113	1824	856

Table-20

LABOUR INPUT COST IN [illegible] WATER COURSE RD.22000

Crops: Bersee[illegible]

Sr. No.	Operations	Labour Inputs	Head (Area: 2.13 ha) Paid Total	Head Paid Per Hect.	Head Self Supplied Total	Head Self Supplied Per Hect.	Head Total (3+5) Total	Head Total (3+5) Per Hect.	Middle (Area: 51 ha) Paid Total	Middle Paid Per Hect.	Middle Self Supplied Total	Middle Self Supplied Per Hect.	Middle Total (9+11) Total	Middle Total (9+11) Per Hect.	Tail Paid Total	Tail Paid Per Hect.	Tail Self Supplied Total	Tail Self Supplied Per Hect.	Tail Total (15+17) Total	Tail Total (15+17) Per Hect.	All Places Paid (3+9+15) Total	All Places Paid Per Hect.	All Places Self Supp. (5+11+17) Total	All Places Self Supp. Per Hect.	All Places Total (21+23) Total
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1. Ploughing	i.Manual		30	59	4	7	34	66	-	-	23	32	23	32	-	-	150	165	150	165	30	[illegible]	176	83	206
	ii.Animal		40	78	-	-	40	78	-	-	-	-	-	-	-	-	225	247	225	247	40	[illegible]	225	106	265
	iii.Machine		60	118	-	-	60	118	360	507	-	-	360	507	240	264	-	-	240	264	660	310	-	-	660
	iv.Total		130	255	4	7	134	262	360	507	23	32	383	539	240	264	375	412	615	676	730	343	401	188	1131
2. Levelling	i.Manual		-	-	-	-	-	-	-	-	-	-	-	-	-	-	19	21	19	21	-	-	19	9	19
	ii.Animal		-	-	-	-	-	-	-	-	-	-	-	-	-	-	31	34	31	34	-	-	31	15	31
	iii.Machine		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total		-	-	-	-	-	-	-	-	-	-	-	-	-	-	50	55	50	55	-	-	50	23	50
3. Planking	i.Manual		-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	10	9	10	-	-	9	4	9
	ii.Animal		-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	17	16	17	-	-	16	7	16
	iii.Machine		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total		-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	27	25	27	-	-	25	12	25
4. Sowing	i.Manual		30	59	8	16	38	74	-	-	30	42	30	42	-	-	120	132	120	132	30	14	158	74	188
	ii.Animal		40	78	-	-	40	78	-	-	-	-	-	-	-	-	113	124	113	124	40	19	113	53	153
	iii.Machine		30	59	-	-	30	59	220	310	-	-	220	310	150	165	-	-	150	165	400	188	-	-	400
	iv.Total		100	196	8	15	108	211	220	310	30	42	250	352	150	165	233	255	383	420	470	221	270	127	740
5. Watering	i.Manual		-	-	60	118	60	118	-	-	90	127	90	127	-	-	60	66	60	66	-	-	210	99	210
6. F.Y.Manure	i.Manual		-	-	-	-	-	-	-	-	-	-	-	-	-	-	60	66	60	66	-	-	60	28	60

Table-20

LABOUR INPUT COST IN [illegible] MAIZE WATER COURSE RS.22000

Crop: Pulses | Area: 2.13 ha | (i) Head: 0.51 ha | (ii) Middle: 0.71 ha | (iii) Tail: 0.91 ha

Sr. No.	Operations	Labour Inputs	Head Paid Total	Head Paid Per Hect.	Head Self Supplied Total	Head Self Supplied Per Hect.	Head Total (3+5)	Head Total Per Hect.	Middle Paid Total	Middle Paid Per Hect.	Middle Self Supplied Total	Middle Self Supplied Per Hect.	Middle Total (9+11)	Middle Total Per Hect.	Tail Paid Total	Tail Paid Per Hect.	Tail Self Supplied Total	Tail Self Supplied Per Hect.	Tail Total (15+17)	Tail Total Per Hect.	All Places Paid (3+9+15) Total	All Places Paid Per Hect.	All Places Self Supp. (5+11+17) Total	All Places Self Supp. Per Hect.	All Places Total (21+23) Total	All Places Total Per Hect.
			27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
	1	2																								
7. Chemical	i.Manual	-	-	8	15	8	15	-	-	11	16	11	16	-	-	6	6	6	6	-	-	24	11	24	11
8. Hoeing/Weed.	i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9. Harvesting	i.Manual	-	-	360	706	360	706	-	-	360	507	360	507	-	-	900	989	900	989	-	-	1620	761	1620	761
10.Carriage to Threshing yard	i.Manual	-	-	90	176	90	176	-	-	180	254	180	254	-	-	360	396	360	396	-	-	630	296	630	296
	ii.Animal	-	-	120	35	120	235	-	-	240	338	240	338	-	-	490	538	490	538	-	-	850	399	850	399
	iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total	-	-	210	412	210	412	-	-	420	592	420	592	-	-	850	934	850	934	-	-	1480	695	1480	695
11.Threshing/ Winnowing	i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12. Total	i.Manual	60	119	529	1037	589	1154	-	-	694	977	694	977	-	-	1684	1850	1684	1850	60	28	2906	1364	2966	1393
	ii.Animal	80	157	120	235	200	392	-	-	240	338	240	338	-	-	874	961	874	961	80	38	1234	580	1314	617
	iii.Machine	90	176	-	-	90	176	580	817	-	-	580	817	390	429	-	-	390	692	1060	498	-	-	1060	498
	iv.Total	230	451	649	1272	879	1723	580	817	934	1315	1514	2132	390	429	2558	3075	2948	3503	1200	563	4381	4140	5340	2620

Concluded

Table-21

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD.22000
(P E A)

(NOT APPLICABLE)

Table-22

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.22000
(P E A)

(NOT APPLICABLE)

Table-23

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD.22000
(SPINACH)

(NOT APPLICABLE)

Table-24

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.22000
(SPINACH)

(NOT APPLICABLE)

Table-85

PRODUCTION COST AND BENEFIT IN SAMPLE WATER COURSE NO.RD.22001

Sr. No.	Crops	Location	Area (Hectare)	Total Output: Main Product (Mds)	Total Output: By-product Unit	Total Output: By-product Total Output	Market Price per unit (Rs-fer): MF (Rs)	Market Price per unit (Rs-fer): BF (Rs)	Total value of output: MF	Total value of output: BF	Total value of output: Total	Value per hectare: MF	Value per hectare: BF	Value per hectare: Total	Total Farming cost: Physical inputs	Total Farming cost: Labour cost	Total Farming cost: Total	Cost per hectare	Profit/loss (-): Total	Profit/loss (-): Per hectare	Total Imputed costs: Physical input	Total Imputed costs: Labour cost	Total Imputed costs: Total	Carry home Income =col.19+23: Total	Carry home Income =col.19+23: Per hectare
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1. Wheat	Head		11.23	207.50	Mds	417.5	100	34	20750	14074	34824	1846	1253	3101	7049.94	18552	25598	2279	9231	822	-	10772	10772	20003	1781
	Middle		7.59	223.27	Mds	592.5	100	39	22327	23071	45398	2944	3044	5988	5370.79	13161	18531	2442	34876	4516	-	5482	5482	39758	5238
	Tail		12.49	411.00	Mds	918.0	100	41	41100	38158	79258	3291	2575	5865	7975.58	29381	37297	2996	35961	2879	-	23764	23764	59725	3070
	A.Places		31.31	917.87	Mds	1848.0	100		91787	69103	160891	2933	2207	5139.3	15606.67	61034	81421	3600	79469	2538	-	4019	4019	119486	3132
2. Barley	Head		0.51	3.90	Mds	10	90	26	351	280	631	688	549	1237	149.24	925	1074	2106	-443	-869	-	435	435	-8	-16
	Middle		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tail		0.96	Hect:	Rs.	-	1667	-	1600	-	1600	1667	-	1667	204.78	549.36	754.14	786	846	881	-	354	354	1200	1250
	A.Places		1.47	-		-	-	-	-	-	2231	1327	190	1515	354.02	1474.3	1828.30	1244	403	274	-	789	789	1192	811
3. Berseem	Head		0.51	Hect:	Rs.	-	6275	-	3200	-	3200	6275	-	6275	491.75	878.75	1370.50	2687	1820	3587	-	648.75	648.75	2478	4859
	Middle		0.71	Hect:	Rs.	-	5915	-	4200	-	4200	5915	-	5915	460.88	1513.75	1974.60	2781	2225	3134	-	933.75	933.75	3159	4449
	Tail		0.96	Hect:	Rs.	-	4615	-	4200	-	4200	4615	-	4615	871.58	2946.11	3819.60	4197	380	418	-	2558.11	2558.11	2938	4328
	A.Places		2.13	Hect:	Rs	-	5446	-	11600	-	11600	5446	-	5446	1824.21	5340.61	7164.80	3364	4435	2082	-	4140.61	4140.61	8575	4496
4. Pea	Head		-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Middle		-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tail		-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	A.Places		-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5. Spinach	Head		-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Middle		-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tail		-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	A.Places		-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-26

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF WHEAT IN SAMPLE WATER COURSE NO.22000

Sr. No.	Operations	Head (Area sown: 11.23)						Middle (Area sown: 7.59)						Tail (Area sown: 12.49)						All Places (Area sown: 31.31)					
		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours	
		Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Ploughing	39.00	3.47	-	-	50.00	4.40	39.00	5.01	-	-	55.00	7.25	90.00	7.21	88.00	7.05	18.00	1.44	167.00	5.33	88.00	2.81	123.00	3.93
2.	Levelling	-	-	-	-	-	-	-	-	-	-	-	-	9.00	0.72	8.00	0.64	-	-	9.00	0.29	8.00	0.26	-	-
3.	Planking	-	-	-	-	-	-	-	-	-	-	-	-	15.00	1.20	15.00	1.20	-	-	15.00	0.48	15.00	0.48	-	-
4.	Sowing	19.00	1.69	11.00	0.98	32.00	2.85	6.00	0.79	-	-	35.00	4.61	54.00	4.32	44.00	3.52	18.00	1.44	79.00	2.52	55.00	1.76	85.00	2.71
5.	Watering	19.00	1.69	-	-	-	9.00	1.19	-	-	-	-	-	8.00	0.64	-	-	-	-	36.00	1.15	-		-	-
6.	F.Y.Manure	2.00	0.18	2.00	0.18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.00	0.06	2.00	0.06	-	-
7.	Che:Fertilizer	8.00	0.71	-	-	-	6.00	0.79	-	-	-	-	-	4.00	0.32	-	-	-	-	18.00	0.57	-	-	-	-
8.	Hoeing/Weeding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Harvesting	151.00	13.45	-	-	-	-	135.00	17.79	-	-	-	-	192.00	15.37	-	-	-	-	478.00	15.27	-	-	-	-
10.	Carriage to Threshing	19.00	1.69	11.00	0.98	-	-	4.00	0.53	-	-	-	-	49.00	3.92	49.00	3.92	-	-	72.00	2.30	60.00	1.92	-	-
11.	Threshing Winnowing	26.00	2.32	-	-	12.00	1.07	16.00	2.11	-	-	3.00	0.40	36.00	2.88	-	-	-	-	78.00	2.49	-	-	15.00	0.48
12.	Total	283.00	25.20	24.00	2.14	94.00	8.37	214.00	28.19	-	-	93.00	12.25	457.00	36.59	204.00	16.33	36.00	2.88	954.00	30.47	228.00	7.28	223.00	7.12

Table-27

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF BARLEY IN SAMPLE WATERCOURSE RD.22000

Sr. No.	Operations	Head (Area sown: 0.51)						Middle (Area sown: [illegible])						Tail (Area sown: 0.96)						All Places (Area sown: 1.47)					
		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Ploughing	2.00	3.92	2.00	3.92	2.00	3.92	-	-	-	-	-	-	0.75	0.78	0.50	0.52	2.00	2.08	2.75	1.87	2.50	1.70	4.00	2.72
2.	Levelling	-	-	-	-	-	-	-	-	-	-	-	-	0.13	0.13	0.13	0.13	-	-	0.13	0.09	0.13	0.09	-	-
3.	Planking	-	-	-	-	-	-	-	-	-	-	-	-	0.60	0.63	0.06	0.06	-	-	0.60	0.41	0.06	0.04	-	-
4.	Sowing	0.25	0.49	-	-	2.00	3.92	-	-	-	-	-	-	30.00	31.25	0.25	0.26	2.00	2.08	30.25	20.58	0.25	0.17	4.00	2.72
5.	Watering	1.00	1.96	-	-	-	-	-	-	-	-	-	-	0.50	0.52	-	-	-	-	1.50	1.02	-	-	-	-
6.	F.Y.Manure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Che:Fertilizer	0.20	0.39	-	-	-	-	-	-	-	-	-	-	0.06	0.06	-	-	-	-	0.26	0.18	-	-	-	-
8.	Hoeing/Weeding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Harvesting	8.00	15.69	-	-	-	-	-	-	-	-	-	-	8.00	8.33	-	-	-	-	16.00	10.88	-	-	-	-
10.	Carriage to threshing	1.00	1.96	1.00	1.96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.00	0.68	1.00	0.68	-	-
11.	Threshing/ Winnowing	1.00	1.96	1.00	1.96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.00	0.68	1.00	0.68	-	-
12.	Total	13.45	26.37	4.00	7.84	4.00	7.84	-	-	-	-	-	-	40.04	41.70	0.94	0.97	4.00	4.17	53.49	36.33	4.94	3.36	8.00	5.44

Table-26

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF BERSEEM IN SAMPLE WATER COURSE RD.22000

Sr. No.	Operations	Head (Area sown: 0.51)						Middle (Area sown: 0.71)						Tail (Area sown: 0.91)						All Places (Area sown: 2.13)					
		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Ploughing	1.00	1.96	1.00	1.96	1.00	1.96	0.75	1.06	-	-	6.00	8.45	5.00	5.49	5.00	5.49	4.00	4.40	6.75	3.17	6.00	2.82	11.00	5.16
2.	Levelling	-	-	-	-	-	-	-	-	-	-	-	-	0.63	0.69	0.63	0.69	-	-	0.63	0.30	0.63	0.30	-	-
3.	Planking	-	-	-	-	-	-	-	-	-	-	-	-	0.30	0.33	0.30	0.33	-	-	0.30	0.14	0.30	0.14	-	-
4.	Sowing	1.00	1.96	1.00	1.96	0.50	0.98	1.00	1.41	-	-	4.00	5.63	4.00	4.40	2.00	2.00	3.00	3.30	6.00	2.82	3.00	1.41	7.50	3.52
5.	Watering	2.00	3.92	-	-	-	-	3.00	4.23	-	-	2.00	2.20	-	-	-	-	-	-	7.00	3.29	-	-	-	-
6.	F.Y.Manure	-	-	-	-	-	-	-	-	-	-	2.00	2.20	-	-	-	-	-	-	2.00	0.94	-	-	-	-
7.	Che:Fertilizer	0.25	0.49	-	-	-	-	0.37	0.52	-	-	0.18	0.20	-	-	-	-	-	-	0.80	0.38	-	-	-	-
8.	Hoeing/Weeding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Harvesting	12.00	23.53	-	-	-	-	12.00	16.90	-	-	-	-	30.00	32.97	-	-	-	-	54.00	25.35	-	-	-	-
10.	Carriage to Threshing	3.00	5.88	3.00	5.88	-	-	6.00	8.45	6.00	8.45	-	-	12.00	13.19	12.00	13.19	-	-	21.00	9.86	21.00	9.86	-	-
11.	Threshing/ Winnowing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12.	Total	19.25	37.75	5.00	9.80	1.50	2.94	23.12	32.56	6.00	8.45	10.00	14.08	56.11	61.66	19.93	21.90	7.00	7.69	98.48	46.23	30.93	14.52	18.50	8.69

Table-29

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF PEA IN SAMPLE WATER COURSE RD.22000

(NOT APPLICABLE)

Table-30

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF SPINACH IN SAMPLE WATER COURSE RD.22000

(NOT APPLICABLE)

STATISTICAL TABLES OF SAMPLE WATER COURSE RD. 45800

415 a

APPENDICES OF PANEL-I

NO.	TITLE	PAGE NO
1.	TENURE STATUS OF SAMPLE FARMERS IN SAMPLE WATER COURSE RD. 45800	423
2.	LITERACY STATUS OF SAMPLE FARMERS IN SAMPLE WATER COURSE RD.45800	423
3.	LEVEL OF EDUCATION OF THE SAMPLE FARMERS IN RD. 45800	424
4.	HOUSEHOLD SIZE IN SAMPLE WATER COURSE RD.45800	425
5.	HOUSEHOLD SIZE AND COMPOSITION IN SAMPLE WATER COURSE RD.45800	425
6.	LITERACY AND ACTIVITY STATUS OF THE SAMPLE POPULATION IN SAMPLE WATER COURSE RD. 45800	426
7.	DISTRIBUTION OF WORKING MEMBERS BY OCCUPATION IN SAMPLE WATER COURSE RD.45800	427
8.	PLACE OF WORK IN SAMPLE WATER COURSE RD.45800	427
9.	MONTHLY INCOME (OTHER THAN FARMING) IN SAMPLE WATER COURSE RD.45800	428
10.	LAND HOLDINGS OF SAMPLE HOUSEHOLDS OF SAMPLE WATER COURSE RD. 45800	429
11.	AREA RENTED IN/OUT ON CASH/BATAI IN SAMPLE WATER COURSE RD.45800	430
12.	LAND USE IN SAMPLE WATER COURSE RD.45800	430
13.	IRRIGATED AREA BY MEAN OF IRRIGATION IN SAMPLE WATER COURSE RD.45800	431
14.	NUMBER OF TUBEWELLS IN SAMPLE WATER COURSE RD.45800	431
15.	SOURCES OF FINANCE OF TUBEWELL IN SAMPLE WATER COURSE RD.45800	431

NO.	TITLE	PAGE NO
16.	NUMBER OF WATER TURNS (WARABANDI) PER FIELD IN SAMPLE WATER COURSE RD.45800	432
17.	TIME PER TURN OF WATER SUPPLY (WARABANDI) IN SAMPLE WATER COURSE RD.45800	432
18.	NUMBER OF WARABANDI LOST DURING KHARIF 1987 IN SAMPLE WATER COURSE RD.45800	433
19.	REASON FOR LOSS OF WATER TURN IN SAMPLE WATER COURSE RD.45800	434
20.	INCIDENCE OF EXCHANGE OF WATER WITH OTHER FARMERS IN SAMPLE WATER COURSE RD. 45800	434
21.	NUMBER OF TIMES WATER WAS EXCHANGED DURING KHARIF 1987 IN SAMPLE WATER COURSE RD.45800	434
22.	FREE WATER FOR IRRIGATION OTHER THAN ON EXCHANGE IN SAMPLE WATER COURSE RD.45800	434
23.	TAMPERING OF WATER IN SAMPLE WATER COURSE RD.45800	434
24.	DE-SILTING OF WATER COURSE IN A YEAR IN SAMPLE WATER COURSE RD.45800 ?	435
25.	WHEN WAS THE WATER COURSE DE-SILTED LAST IN SAMPLE WATER COURSE RD.45800 ?	436
26.	CANAL WATER PROBLEMS IN SAMPLE WATER COURSE RD.45800	437
27.	MANAGEMENT OF DE-SILTATION OF WATER COURSE: ARE THE FARMERS SATISFIED WITH THE EXISTING ARRANGEMENTS IN SAMPLE WATER COURSE RD.45800?	438
28.	INCIDENCE OF INDEBTEDNESS IN SAMPLE WATER COURSE RD.45800	438
29.	AMOUNT BORROWED BY SOURCE DURING THE TWELVE MONTH IN SAMPLE WATER COURSE RD.45800	439
30.	UTILIZATION OF LOAN IN SAMPLE WATER COURSE RD.45800	440

NO.	TITLE	PAGE NO
31.	ANY IMPROVEMENT ON FARM CONTEMPLATED BY THE SAMPLE FARMERS IF THEY COULD GET ADEQUATE LOAN IN SAMPLE WATER COURSE RD.45800	440
32.	USE OF SELECTED FARM INPUTS AND SOURCE OF SUPPLY IN SAMPLE WATER COURSE RD.45800	441
33.	USE OF IMPROVED SEED IN SAMPLE WATER COURSE RD.45800	442
34.	INPUTS IN THE SUPPLY OF WHICH PROBLEMS HAVE BEEN REPORTED BY FARMERS IN SAMPLE WATER COURSE RD.45800	445
35.	SOURCE OF AGRICULTURAL INFORMATION OF SAMPLE FARMERS IN RD.45800	446
36.	MEMBERSHIP OF SOCIETIES/ASSOCIATION ETC. IN SAMPLE WATER COURSE RD.45800	447
37.	USE OF TRACTORS BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD. 45800	448
38.	USE OF THRASHER BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD. 45800	448

APPENDICES OF SCHEDULE-II (KHARIF)

1.	AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS IN SAMPLE WATER COURSE RD.45800	449
2.	AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS OUTSIDE SAMPLE WATER COURSE RD.45800	450
3.	DISPOSAL OF MAIN PRODUCTS OTHER THAN SUGARCANE IN SAMPLE WATER COURSE RD.45800	451
4.	DISPOSAL OF BY-PRODUCTS IN SAMPLE WATER COURSE RD. 45800	452
5.	MODE OF SALE OF MAIZE IN SAMPLE WATER COURSE RD. 45800	453

NO.	T I T L E	PAGE NO
6.	MODE OF SALE OF SORGHUM IN SAMPLE WATER COURSE RD. 45800	454
7.	MODE OF SALE OF PIGEON PEA IN SAMPLE WATER COURSE RD. 45800	455
8.	UTILIZATION OF SUGARCANE IN SAMPLE WATER COURSE RD.45800	456
9.	UTILIZATION OF GUR PRODUCED BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD.45800	456
10.	NUMBER OF FARMERS REPORTING CONSUMPTION OF CHEMICAL FERTILIZERS IN SAMPLE WATER COURSE RD. 45800	457
11.	QUANTITY OF CHEMICAL FERTILIZERS USED BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD. 45800	458
12.	CONSUMPTION OF FARM YARD MANURE IN SAMPLE WATER COURSE RD. 45800	459
13.	NUMBER OF SAMPLE FARMERS WHO USED INSECTICIDES/PESTICIDES/WEEDICIDES IN SAMPLE WATER COURSE RD.45800	460
14.	QUANTITY OF SEED USED BY SAMPLE FARMERS IN SAMPLE WATERCOURSE RD.45800	461
15.	PHYSICAL INPUT COST OF MAIZE IN SAMPLE WATER COURSE RD.45800	462
16.	LABOUR INPUT COST OF MAIZE IN SAMPLE WATER COURSE RD.45800	463
17.	PHYSICAL INPUT COST OF SORGHUM IN SAMPLE WATER COURSE RD.45800	465
18.	LABOUR INPUT COST OF SORGHUM IN SAMPLE WATER COURSE RD.45800	466
19.	PHYSICAL INPUT COST OF SUGARCANE IN SAMPLE WATER COURSE RD.45800	468
20.	LABOUR INPUT COST OF SUGARCANE IN SAMPLE WATER COURSE RD.45800	469

NO.	T I T L E	PAGE NO
21.	PHYSICAL INPUT COST OF PIGEON PEA IN SAMPLE WATER COURSE RD.45800	471
22.	LABOUR INPUT COST OF PIGEON PEA IN SAMPLE WATER COURSE RD.45800	471
23.	PRODUCTION COST AND PROFIT IN SAMPLE WATER COURSE RD.45800	472
24.	CROPPING PATTERN ON SAMPLE FARMS IN SAMPLE WATER COURSE RD.45800	473
25.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF MAIZE IN SAMPLE WATER COURSE RD.45800	474
26.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF SORGHUM IN SAMPLE WATER COURSE RD.45800	475
27.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF SUGARCANE IN SAMPLE WATER COURSE RD.45800	476
28.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN IN CULTIVATION OF PIGEON PEA IN SAMPLE WATER COURSE RD.45800	477
29.	NUMBER OF FRUIT PLANTS, TREES AND FRUIT PRODUCTION IN SAMPLE WATER COURSE RD.45800	477
30.	LIVESTOCK HOLDINGS OF SAMPLE HOUSEHOLDS IN SAMPLE WATER COURSE RD.45800	478
31.	MILK PRODUCTION AND UTILIZATION IN SAMPLE WATER COURSE RD. 45800	482
32.	INCOME FROM SALE OF DAIRY PRODUCTS (OTHER THAN MILK) DURING SIX MONTHS PROCEEDING INTERVIEW OF SAMPLE HOUSEHOLDS IN KHARIF 1987 IN SAMPLE WATER COURSE RD.45800	484
33.	INCOME FROM HIRING OUT OF LIVESTOCK IN SAMPLE WATER COURSE RD. 45800	484
34.	INCOME FROM SELECTED SOURCES DURING SIX MONTHS BEFORE INTERVIEW IN KHARIF 1987 IN SAMPLE WATER COURSE RD. 45800	485
35.	PERMANENT LABOUR ON FARM IN SAMPLE WATER COURSE RD.45800	486

APPENDICES OF SCHEDULE-II (RABI)

NO.	T I T L E	PAGE NO
1.	AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS IN SAMPLE WATERCOURSE RD.45800	487
2.	AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS OUTSIDE SAMPLE WATERCOURSE RD.45800	488
3.	DISPOSAL MAIN PRODUCTS IN SAMPLE WATERCOURSE RD.45800	489
4.	DISPOSAL OF BY-PRODUCTS IN SAMPLE WATER COURSE RD.45800	491
5.	MODE OF SALE OF WHEAT IN SAMPLE WATER COURSE RD.45800	493
6.	MODE OF SALE OF BARLEY IN SAMPLE WATER COURSE RD.45800	493
7.	MODE OF SALE OF BERSEEM IN SAMPLE WATER COURSE RD.45800	494
8.	MODE OF SALE OF PEA IN SAMPLE WATER COURSE RD.45800	494
9.	MODE OF SALE OF SPINACH IN SAMPLE WATER COURSE RD.45800	494
10.	NUMBER OF FARMERS REPORTING CONSUMPTION OF CHEMICAL FERTILIZERS IN SAMPLE WATER COURSE RD.45800	495
11.	QUANTITY OF CHEMICAL FERTILIZERS USED BY SAMPLE SAMPLE FARMERS IN SAMPLE WATER COURSE RD.45800	496
12.	CONSUMPTION OF FARM YARD MANURE IN SAMPLE WATER COURSE RD.45800	497
13.	NUMBER OF SAMPLE FARMERS WHO USED INSECTICIDES/ PESTICIDES/WEEDICIDES IN SAMPLE WATER COURSE RD.45800	497
14.	QUANTITY OF SEED USED BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD.45800	498
15.	PHYSICAL INPUT COST OF WHEAT IN SAMPLE WATER COURSE RD.45800	499

NO.	T I T L E	PAGE NO
16.	LABOUR INPUT COST OF WHEAT IN SAMPLE WATER COURSE RD.45800	500
17.	PHYSICAL INPUT COST OF BARLEY IN SAMPLE WATER COURSE RD.45800	502
18.	LABOUR INPUT COST OF BARLEY IN SAMPLE WATER COURSE RD.45800	503
19.	PHYSICAL INPUT COST OF BERSEEM IN SAMPLE WATER CO[illegible]	505
20.	LABOUR INPUT COST OF BERSEEM IN SAMPLE WATER COURSE RD.45800	506
21.	PHYSICAL INPUT COST OF PEA IN SAMPLE WATER COURSE RD.45800	508
22.	LABOUR INPUT COST OF PEA IN SAMPLE WATER COURSE RD. 45800	508
23.	PHYSICAL INPUT COST OF SPINACH IN SAMPLE WATER COURSE RD.45800	508
24.	LABOUR INPUT COST OF SPINACH IN SAMPLE WATER COURSE RD. 45800	508
25.	PRODUCTION COST AND PROFIT IN SAMPLE WATER COURSE NO.RD.45800	509
26.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF WHEAT IN SAMPLE WATER COURSE RD. 45800	510
27.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF BARLEY IN SAMPLE WATER COURSE RD. 45800	511
28.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF BERSEEM IN SAMPLE WATER COURSE RD. 45800	512
29.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF PEA IN SAMPLE WATER COURSE RD. 45800	513
30.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF SPINACH IN SAMPLE WATER COURSE RD. 45800	513

Table-1

TENURE STATUS OF SAMPLE FARMERS IN
SAMPLE WATER COURSE RD. 45800

Sr. No.	Location	Tenure Status: Owner		Owner cum tenant		Tenant		Total Farmers No=100
		No.	%	No	%	No.	%	
0	1	2	3	4	5	6	7	8
1.	Head of W.C.	10	100.00	-	-	-	-	10
2.	Middle of W.C.	8	80.00	2	20.00	-	-	10
3.	Tail of W.C.	9	90.00	1	10.00	-	-	10
4.	Total	27	90.00	3	10.00	-	-	30

W.C.= Water Course

Table-2

LITERACY STATUS OF SAMPLE FARMERS
IN SAMPLE WATER COURSE RD.45800

Sr. No.	Location	Literate		Illiterate		Total No (=100)
		No.	%	No.	%	
0	1	2	3	4	5	6
1.	Head of Water Course	3	40	7	70	10
2.	Middle of Water Course	4	40	6	60	10
3.	Tail of Water Course	3	30	7	70	10
4.	T o t a l :-	10	33	20	67	30

Table-3

LEVEL OF EDUCATION OF THE SAMPLE FARMERS IN RD. 45800

Sr. No.	Level of Education	Location: Head of W.C No.	Head of W.C %	Middle of W.C No.	Middle of W.C %	Tail of W.C No.	Tail of W.C %	Total No(=100)
0.	1	2	3	4	5	6	7	8
1.	Class 1-5	1	33.33	1	25.00	1	33.33	3
2.	Class 6-9	2	66.67	1	25.00	1	33.33	4
3.	Matric	-	-	-	-	-	-	-
4.	Intermediate	-	-	1	25.00	-	-	1
5.	Graduate	-	-	-	-	1	33.33	-
6.	MA/M.Sc	-	-	-	-	-	-	-
7.	MBBS	-	-	-	-	-	-	-
8.	B.Sc (Eng)	-	-	-	-	-	-	-
9.	B.Sc (Agri)	-	-	-	-	-	-	-
10.	B.Com/BBA	-	-	-	-	-	-	-
11.	M.Com/MBA	-	-	-	-	-	-	-
12.	Other professional Diploma/Degree	-	-	-	-	-	-	-
13.	Other	-	-	-	-	-	-	-
14.	T o t a l	3	100	4	100	3	100	10

Table-4

HOUSEHOLD SIZE IN SAMPLE WATER COURSE RD.45800

Sr. No.	Location	Sample Household	Total Population	Average size of household
0	1	2	3	4
1.	Head of Watercourse	10	209	20.90
2.	Middle of Watercourse	10	125	12.50
3.	Tail of Watercourse	10	129	12.90
4.	Total	30	463	15.43

Table-5

HOUSEHOLD SIZE AND COMPOSITION IN SAMPLE WATER COURSE RD.45800

Sr. No.	Age Group (Years)	Sex	Total Members: Head No.	Head %	Middle No.	Middle %	Tail No.	Tail %	All Places No.	All Places %
0	1	2	3	4	5	6	7	8	9	10
1.	Below 5	Male	39	35.45	18	29.03	27	42.19	84	35.59
		Female	35	35.35	25	39.68	20	30.77	80	35.24
		Both	74	35.41	43	34.40	47	36.43	164	35.42
2.	5 and above	Male	71	64.55	44	70.97	37	57.81	152	64.41
		Female	64	64.55	38	60.32	45	69.23	147	64.76
		Both	135	64.59	82	65.60	82	63.57	299	64.58
3.	All Ages	Male	110	100.00	62	100.00	64	100.00	236	100.00
		Female	99	100.00	63	100.00	65	100.00	227	100.00
		Both	209	100.00	125	100.00	129	100.00	463	100.00

Table-6

LITERACY AND ACTIVITY STATUS OF THE SAMPLE POPULATION IN SAMPLE WATER COURSE RD.45800

Sr. No.	Location	Total Respondents	Sex	Total Members	Literate (excluding students)		At School		Total literates at school	
					No	%	No.	%	No	%
0	1	2	3	4	5	6	7	8	9	10
1.	Head of watercourse	10	Male	71	29	40.85	40	56.34	69	97.18
			Female	64	8	12.50	4	6.25	12	18.75
			Both	135	37	27.41	44	32.59	81	60.00
2.	Middle of water course	10	Male	44	17	38.64	28	63.64	[illegible]	[illegible]
			Female	38	3	7.89	2	5.26	5	13.16
			Both	82	20	24.39	30	36.59	50	60.98
3.	Tail of Watercourse	10	Male	37	13	35.14	20	54.05	33	89.19
			Female	45	-		-	-	-	-
			Both	82	13	15.85	20	24.39	33	40.24
4.	All places	30	Male	152	59	38.82	88	57.89	147	96.71
			Female	147	11	7.48	6	4.08	17	11.56
			Both	299	70	23.41	94	31.44	164	54.85

Table-7

DISTRIBUTION OF WORKING MEMBERS BY OCCUPATIONS
IN SAMPLE WATER COURSE RD.45800

Sr. No.	Occupation	Location: Head	Middle	Tail	Total
0	1	2	3	4	5
1.	Paid employment	4	19	8	31
	a. On Farm	-	-	-	-
	b. Off Farm	4	19	8	31
2.	Self employed	10	10	10	30
	a. Farming	10	10	10	30
	b. Trade/Industry Transport	-	-	-	-
	c. Artisans	-	-	-	-
	d. Other	-	-	-	-
3.	Grand Total	14	29	18	61

Table-8

PLACE OF WORK IN SAMPLE WATER COURSE RD.45800

Sr. No.	Place of Work	Head	Middle	Tail	Total
0	1	2	3	4	5
1.	Sample W.C and other places in Peshawar Distt.	2	14	1	17
2.	Elsewhere in NWFP	-	4	3	7
3.	Other Province	-	1	-	1
4.	Other Countries	2	-	4	6
5.	All Places	4	19	8	31

Table-9

MONTHLY INCOME (OTHER THAN FARMING)
IN SAMPLE WATER COURSE RD.45800

Sr. No.	Income Group (Rs. per month)	Location	Number	Total Income(Rs)	Average Income(Rs)
0	1	2	3	4	5
1.	Upto Rs. 500	Head	-	-	
		Middle	-	-	-
		Tail	-	-	-
2.	501 to 1000	Head	2	1350	675.00
		Middle	7	7350	1050.00
		Tail	1	700	700.00
3.	1001 to 1500	Head	-	-	
		Middle	7	8850	1264.29
		Tail	2	2300	1150.00
4.	1501 to 2000	Head	-	-	-
		Middle	2	2800	1400.00
		Tail	4	8000	2000.00
5.	2001 to 2500	Head	-	-	
		Middle	-	-	-
		Tail	-	.	.
6.	2501 to 3000	Head	-	-	-
		Middle	1	2600	2600.00
		Tail	-	-	.
7.	3001 to 400	Head	1	3000	3000.00
		Middle	1	4000	4000.00
		Tail	-	-	-
8.	4001 to 5000	Head	1	5000	5000.00
		Middle	1	4700	4700.00
		Tail	-	.	-
9.	Above 5000	Head	-	-	-
		Middle	-	-	-
		Tail	1	30000	30000.00

Table-10

LAND HOLDINGS OF SAMPLE HOUSEHOLDS OF SAMPLE WATER COURSE RD. 45800

Sr. No.	Locality	Total respondent	Location of Land	Area Owned Total	Area Owned Average	Area Rented in Total	Area Rented in Average	Area Rented Out Total	Area Rented Out Average	Operated Holding Total	Operated Holding Average
0	1	2	3	4	5	6	7	8	9	10	11
1.	Head of W.C	10	a.This water-course	20.03	2.00	-	-	1.72	0.17	18.31	1.83
			b.Other places	5.46	0.55	-	-	4.86	0.49	0.60	0.06
			c. Total	25.49	2.55	-	-	6.58	0.66	18.91	1.89
2.	Middle of W.C.	10	a.This water-course	25.80	2.58	6.27	0.63	14.37	1.44	17.70	1.77
			b.Other places	32.68	3.27	-	-	20.64	2.06	12.04	1.20
			c. Total	58.48	5.85	6.27	0.63	35.01	3.50	29.74	2.97
3.	Tail of W.C.	10	a.This water-course	7.18	0.72	1.21	0.12	1.01	0.10	7.38	0.74
			b.Other places	3.64	0.36	-	-	-	-	3.64	0.36
			c. Total	10.82	1.08	1.21	0.12	1.01	0.10	11.02	1.10
4.	All Places	30	a.This water-course	53.01	1.77	7.48	0.25	17.10	0.57	43.39	1.45
			b.Other places	41.78	1.39	-	-	25.50	0.85	16.28	0.54
			c. Total	94.79	3.16	7.48	0.25	42.60	1.42	59.67	1.99

Table-11

AREA RENTED IN/OUT ON CASH/BATAI IN
SAMPLE WATER COURSE RD.45800

Sr. No.	Location	Area Rented In			Area Rented Out		
		Batai	Cash Rent	Total	Batai	Cash Rent	Total
0	1	2	3	4	5	6	7
1.	Head of W.C.	-	-	-	1.72	-	1.72
2.	Middle of W.C.	6.27	-	6.27	14.37	-	14.37
3.	Tail of W.C.	1.21	-	1.21	1.01	-	1.01
4.	All Places	7.48	-	7.48	17.10	-	17.10

Table-12

LAND USE IN SAMPLE WATER COURSE RD.45800

Sr. No.	Land Use	Head		Middle		Tail		All Places	
		Hec-tare	%	Hec-tare	%	Hec-tare	%	Hec-tare	%
0	1	2	3	4	5	6	7	8	9
1.	Crops	20.44	99.03	26.25	96.29	6.22	74.13	52.91	93.99
2.	Orchard	0.20	0.97	0.20	0.74	0.10	1.21	0.50	0.89
3.	Not available for cultivation	-	-	0.81	2.97	2.07	24.67	2.88	5.12
4.	Total Area	20.64	100.00	27.26	100.00	8.39	100.00	56.29	100.00

Table-13

IRRIGATED AREA BY MEANS OF IRRIGATION
IN SAMPLE WATER COURSE RD.45800

Sr. No.	Means of Irrigation	Head of W.C. Jareeb	%	Middle of W.C Jareeb	%	Tail of W.C Jareeb	%	Total Jareeb	%
0	1	2	3	4	5	6	7	8	9
1.	Canal Only	101	100	281.75	100	35	100	417.75	100
2.	Open well only	-	-	-	-	-	-	-	-
3.	Tube-well only	-	-	-	-	-	-	-	-
4.	Mixed	-	-	-	-	-	-	-	-
5.	Total (All types)	101	100	281.75	100	35	100	417.75	100

Table-14

NUMBER OF TUBEWELLS IN SAMPLE WATER COURSE RD.22000

(NO TUBEWELL HERE)

Table-15

SOURCES OF FINANCE OF TUBEWELL IN
SAMPLE WATER COURSE RD.22000

(NOT APPLICABLE; NO TUBEWELL HERE)

Table-16

NUMBER OF WATER TURNS (WARABANDI) PER FIELD
IN SAMPLE WATER COURSE RD.45800

Sr. No.	Particulars	Location: Head No.	Head %	Middle No.	Middle %	Tail No.	Tail %	All places No.	All places %
0	1	2	3	4	5	6	7	8	9
1.	Total Farmers	10	100	10	100	10	100	30	100
2.	One turn per week	10	100	10	100	10	100	30	100
3.	One turn per two weeks.	-	-	-	-	-	-	-	-
4.	Water not yet allotted but drawing once per week.	-	-	-	-	-	-	-	-

Table-17

TIME PER TURN OF WATER SUPPLY (WARABANDI)
IN SAMPLE WATER COURSE RD.45800

Sr. No.	Location	Water drawn once every	Distribution of water users by number of hours of water supply: Upto one No.	Upto one %	1 - 2 No.	1 - 2 %	2 - 4 No.	2 - 4 %	4 - 6 No.	4 - 6 %	6 - 8 No.	6 - 8 %	More than 8 No.	More than 8 %	All cases No(=100)
1.	Head Section	7th day	-	-	4	40.00	3	30.00	-	-	1	10.00	2	20.00	10
2.	Middle Section	7th day	2	20.00	3	30.00	2	20.00	2	20.00	-	-	1	10.00	10
3.	Tail Section	7th day	6	60.00	-	-	2	20.00	1	10.00	-	-	1	10.00	10
4.	All Places	7th day	8	26.67	7	23.33	7	23.33	3	10.00	1	3.33	4	13.33	30

Table-18

NUMBER OF WATER TURNS LOST DURING THE PERIOD
APRIL - DECEMBER 1988 IN SAMPLE WATER COURSE RD.45800

No.	Number of turns lost	Head No.	Head %	Middle No.	Middle %	Tail No.	Tail %	All Places No (=100)
0	1	2	3	4	5	6	7	8
1.	None	-	-	-	-	-	-	-
2.	One	-	-	-	-	-	-	-
3.	Two	1	100.00	-	-	-	-	1
4.	Three	-	-	3	100.00	-	-	3
5.	Four	2	33.33	1	16.67	3	50.00	6
6.	Five	6	46.15	2	15.38	5	38.46	13
7.	More than 5	1	14.29	4	57.14	2	28.57	7
8.	All	10	33.33	10	33.33	10	33.33	30

Note: The canal is closed in January every year. In 1988 it was closed also during February and March for repair.

Table-19

REASON FOR LOSS OF WATER TURN IN SAMPLE WATER COURSE RD.45800

Sr. No.	Reason	Turns lost: Head No.	Head %	Middle No.	Middle %	Tail No.	Tail %	All Places No.	All Places %
0	1	2	3	4	5	6	7	6	7
1.	Because there was no water in the main canal.	1	100	1	100	-	-	2	66.67
2.	Because there was no sufficient water in the main canal.	-	-	-	-	1	100	1	33.33
3.		1	100	1	100	1	100	3	100.00

Table-20

INCIDENCE OF EXCHANGE OF WATER WITH OTHER FARMERS IN SAMPLE WATER COURSE RD. 45800

(NIL REPORT)

Table - 21

NUMBER OF TIMES WATER WAS EXCHANGED DURING KHARIF 1987 IN SAMPLE WATER COURSE RD. 45800

(NOT APPLICABLE)

Table-22

FREE WATER FOR IRRIGATION OTHER THAN ON EXCHANGE IN SAMPLE WATER COURSE RD.45800

(NIL REPORTED)

Table-23

TAMPERING OF WATER IN SAMPLE WATER COURSE RD.45800

Sr. No.	Location	Is Sample farmer's share of water tampered ? Yes No.	Yes %	No No.	No %	Total Farmers No(=100)
0	1	2	3	4	5	10
1.	Head of W.C.	-	-	10	100.00	10
2.	Middle of W.C.	6	60.00	4	40.00	10
3.	Tail of W.C.	2	20.00	8	80.00	10
4.	All places	8	26.67	22	73.33	30

Table-24

DE-SILTING OF WATER COURSE IN A YEAR IN SAMPLE WATER COURSE RD.45800 ?

Sr.	Number of De-silting in a year	Head of W.C.		Middle of WC		Tail of W.C		All Places	
		No.	%	No.	%	No.	%	No.	%
0	1	2	3	4	5	6	7	14	15
1.	One	-	-	3	30	1	10	4	13.33
2.	Two	-	-	1	10	8	80	9	30.00
3.	Three	-	-		-	-	-	-	-
4.	Four	-	-	-		-	-	-	-
5.	Five or More	10	100	6	60	-	-	16	53.33
6.	Not reported	-	-	-	-	1	10	1	3.33
7.	When need	-	-	-	-	-	-	-	-
8.	All cases	10	100	10	100	10	100	30	100.00

Table-25

WHEN WAS THE WATER COURSE DE-SILTED LAST
IN SAMPLE WATER COURSE RD.45800 ?

Sr. No.	Number of De-silting in a year	Head		Middle		Tail		All Places	
		No.	%	No.	%	No.	%	No.	%
0	1	2	3	4	5	6	7	4	5
1.	Rabi 1986-87 (Oct-86 to April-87)	-	-	2	20	3	30	5	16.67
2	Kharif 1987 (May-Nov.87)	10	100	8	80	4	40	22	73.33
3.	Rabi 1987-88 (December 87)	-	-	-	-		-	-	
4.	Not cleared during last 12 month	-	-	-	-	-	-	-	
5.	No Response	-	-	-	-	3	30	3	10.00
6.	When the canal was dry	-	-	-	-	-	-	-	-
7.	All cases	10	100	10	100	10	100	29	100.00

Table-26

CANAL WATER PROBLEMS IN SAMPLE WATER COURSE RD.45000

Sr. No.	Problems	Location (water course)	Is this problems faced Yes No.	Yes %	No No.	No %	Total Farmers No(=100)
0	1	2	3	4	5	6	7
1.	A general shortage of water	Head	9	[illegible]	[illegible]	10	10
		Middle	5	90	1	10	10
		Tail	4	90	1	10	10
		All points	27	90	3	30	30
2.	Defective slope of the channel	Head	3	30	7	70	10
		Middle	6	60	4	70	10
		Tail	3	30	7	70	10
		All points	12	40	18	60	30
3.	Siltation of the channel	Head	1	10	9	90	10
		Middle	-	-	10	100	10
		Tail	1	10	9	90	10
		All points	6	7	28	93	30
4.	Warabandi defects (in convenient timing)	Head	3	30	10	100	10
		Middle	1	10	3	30	10
		Tail	6	60	7	70	10
		All points	10	33	20	67	30
5.	Theft of water	Head	-	-	10	100	10
		Middle	7	70	3	30	10
		Tail	3	30	7	70	10
		All points	10	33	20	67	30

Table-27

MANAGEMENT OF DE-SILTATION OF WATER COURSE: ARE THE FARMERS SATISFIED WITH THE EXISTING ARRANGEMENTS IN SAMPLE WATER COURSE RD.45800 ?

Sr. No.	Location	Are the farmers satisfied with existing arrangements ? Yes No.	Yes %	No No.	No %	Total Farmers No(=100)
0	1	2	3	4	5	6
1.	Head of W.C.	-	-	10	100	10
2.	Middle of W.C.	-	-	10	100	10
3.	Tail of W.C.	-	-	10	100	10
4.	All points	-	-	30	100	30

Table-28

INCIDENCE OF INDEBTEDNESS IN SAMPLE WATER COURSE RD.45800

Sr. No.	Location course on Water course	Farmers who have ever been indebt No.	%	Farmers in debt on inter-viewed date No.	%	Amount of debt (Rs) Total	Average per Borr-lower	Sample farmer	Total Farmers No(=100)
0	1	2	3	4	5	6	7	8	9
1.	Head of W.C.	1	10	1	10	-	-	-	10
2.	Middle of W.C.	2	20	2	20	306000	153000	30600	10
3.	Tail of W.C.	-	-	-	-	-	-	-	10
4.	All points	3	30	3	30	306000	153000	10200	30

Table-29

AMOUNT BORROWED BY SOURCE IN SAMPLE
WATER COURSE RD.45800

Sr. No.	Source	Amount: Head Rs	Head %	Middle Rs	Middle %	Tail Rs	Tail %	All Places Rs	All Places %
0	1	2	3	4	5	6	7	8	9
1.	Agri. Development Bank	-	-	306000	100	-	-	306000	100
2.	Commercial Bank	-	-	-	-	-	-	-	-
3.	Cooperatives Bank	-	-	-	-	-	-	-	-
4.	Traders	-	-	-	-	-	-	-	-
5.	Private money lender	-	-	-	-	-	-	-	-
6.	Relatives	-	-	-	-	-	-	-	-
7.	Friends	-	-	-	-	-	-	-	-
8.	Other	-	-	-	-	-	-	-	-
9.	All cases	-	-	306000	100	-	-	306000	100

Table - 30

UTILISATION OF LOAN IN SAMPLE WATER COURSE RD.45800

No.	Source	Amount							
		Head		Middle		Tail		All Places	
		Rs	%	Rs	%	Rs	%	Rs	%
0	1	2	3	4	5	6	7	8	9
1.	Purchase of Farm inputs	-	-	-	-	-	-	-	-
2.	Purchase of Farm Machinery	-	-	306000	100	-	-	306000	100
3.	Purchase of land	-	-	-	-	-	-	-	-
4.	Repayment of loan	-	-	-	-	-	-	-	-
5.	Business	-	-	-	-	-	-	-	-
6.	Domestic consumption	-	-	-	-	-	-	-	-
7.	Other purposes	-	-	-		-	-	-	-
8.	T o t a l :	-	-	306000	100	-	-	306000	100

Table-31

ANY IMPROVEMENT ON FARM CONTEMPLATED BY THE SAMPLE FARMERS IF THEY COULD GET ADEQUATE LOAN IN SAMPLE WATER COURSE RD.45800

Sr. No.	Location	Any Improvement contemplated?				Total Farmers
		Yes		No		
		No.	%	No.	%	No(=100)
0	1	2	3	4	5	6
1.	Head of W.C.	3	30	7	70	10
2.	Tail of W.C.	3	30	7	70	10
3.	Tail of W.C.	-	-	10	100	10
4.	All places	6	20	24	80	30

Table-32

USE OF SELECTED FARM INPUTS AND SOURCE OF SUPPLY IN SAMPLE WATER COURSE RD.45800

Sr. No.	Name of Inputs	Location points of farm as W.C	Farms who use is No.	%	Sources of Supply: Villages No.	%	Outside No.	%	Both No.	%	Total Farmers No=(10
0	1	2	3	4	5	6	7	8	9	10	11
1.	Urea	Head	[illegible]	[illegible]	2	20.00	8	80.00	-	-	10
		Middle	9	90.00	1	11.11	8	88.89	-	-	10
		Tail	[illegible]	[illegible]	2	22.22	7	77.78	-	-	10
		All Places	28	93.33	5	17.85	23	82.14	-	-	30
2.	DAP	Head	8	80.00	1	12.50	7	87.50	-	-	10
		Middle	6	60.00	-	-	6	100.00	-	-	10
		Tail	4	40.00	2	50.00	2	50.00	-	-	10
		All Places	18	60.00	3	16.67	15	83.33	-	-	30
3.	NPK	Head	1	10.00	-	-	1	100.00	-	-	10
		Middle	1	10.00	-	-	1	100.00	-		10
		Tail	-	-	-	-	0	-	-	-	10
		All Places	2	6.67	-	-	2	100.00	-	-	30
4.	NP	Head	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	30
5.	Ammonium Sulphate	Head	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	30
6.	Ammonium Nitrate	Head	1	10.00	-	-	1	100.00		-	10
		Middle	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	10
		All Places	1	3.33	-	-	1	100.00	-	-	30
7.	Insecticides/ Pesticides	Head	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	30
8.	Weedecides	Head	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	30

Table-33

USE OF IMPROVED SEED IN SAMPLE WATER COURSE RD.45800

Sr. No.	Seed	Location	Farmers who: Know about this		Use this		If used; where purchased: In the village		Own		Other places		Total Farmers (No.=100)
			No.	% of Col.13	No.	% of Col.13	No.	% of Col.5	No.	% of Col.5	No.	% of Col.5	
0	1	2	3	4	5	6	7	8	9	10	11	12	13
1.	WHEAT												
		Head	9	90.00	9	90.00	3	33.33	6	66.67	-	-	10
	i- Pak-81	Middle	6	60.00	6	60.00	1	16.67	4	66.67	1	16.67	10
		Tail	6	60.00	5	50.00	-	-	3	60.00	2	40.00	10
		All Places	21	70.00	20	66.67	4	20.00	13	65.00	3	15.00	30
	ii- L-73	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	1	10.00	-	-	-	-	-	-	-	-	10
		All Places	1	3.33	-	-	-	-	-	-	-	-	30
	iii- Sarhad-82	Head	3	30.00	3	30.00	1	33.33	2	66.67	-	-	10
		Middle	-	-	-	-	-		-	-		-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	3	10.00	3	10.00	1	33.33	2	66.67	-	-	30
	iv- Khyber-79	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	-	-	30
	v- Pirsabaq-85	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	2	20.00	2	20.00	-	-	-	-	2	100.00	10
		All Places	2	6.67	2	6.67	-	-	-	-	2	100.00	30
	vi- Manipak	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	2	20.00	2	20.00	-	-	2	50.00	-	-	10
		Tail	2	20.00	2	20.00	1	50.00	1	25.00	-	-	10
		All Places	4	13.33	4	13.33	1	25.00	3	85.71	-	-	30

(Contd....)

Table-33

USE OF IMPROVED SEED IN SAMPLE WATER COURSE RD.45800

Sr. No.	Seed	Location	Farmers who: Know about this		Use this		If used; where purchased: In the village		Own		Other places		Total Farmers No(=100
			No.	% of Col.13	No.	% of Col.13	No.	% of col.5	No.	% of col.5	No.	% of col.5	
0	1	2	3	4	5	6	7	8	9	10	11	12	13
	vii- Khushal	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	1	10.00	1	10.00	-	-	1	100.0	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	1	3.33	1	3.33	-	-	1	100.0	-	-	30
	viii- Chanab	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	-	-	30
2.	SUGARCANE												
		Head	-	-	-	-	-	-	-	-	-	-	10
	i- M-161	Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-		10
		All Places	-	-	-	-	-	-	-	-	-	-	30
	ii- CP-48	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	-	-	30
	iii- CO-310	Head	4	40.00	4	40.00	1	25.00	3	75.00	-	-	10
		Middle	7	70.00	7	70.00	1	14.29	6	85.71	-	-	10
		Tail	1	10.00	1	10.00	-	-	1	100.00	-	-	10
		All Places	12	40.00	12	40.00	2	16.67	10	83.33	-	-	30

(Contd.....)

Table-33

USE OF IMPROVED SEED IN SAMPLE WATER COURSE RD.45800

Sr. No.	Seed	Location	Farmers who: Know about this No.	% of Col.13	Use this No.	% of Col.13	If used; where purchased: In the village No.	% of Col.5	Own No.	% of Col.5	Other places No.	% of Col.5	Total Farmers (No=100)
0	1	2	3	4	5	6	7	8	9	10	11	12	13
3.	MAIZE	Head	10	100.00	10	100.00	3	30.00	6	60.00	1	10.00	10
		Middle	6	60.00	6	60.00	-	-	6	60.00	-	-	10
	i- Sarhad White	Tail	2	20.00	2	20.00	-	-	2	100.00	-	-	10
		All Places	18	60.00	18	60.00	3	16.67	14	77.78	1	5.56	30
	ii-Changaz	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	-	-	30
	iii- Zia	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	-	-	30
	iv- Shaheen	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	1	10.00	1	10.00	-	-	-	-	1	100.00	10
		All Places	1	3.33	1	3.33	-	-	-	-	1	100.00	30
	v- Hameshah	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	3	30.00	3	30.00	-	-	2	66.67	1	33.33	10
		Tail	2	20.00	2	20.00	-	-	2	100.00	-	-	10
		All Places	5	16.67	5	16.67	-	-	4	80.00	1	20.00	30
4.	RICE	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
	i- Irri-6	Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	-	-	30
	ii- Basmati	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	-	-	30

(Concluded)

Table-34

INPUTS IN THE SUPPLY OF WHICH PROBLEMS HAVE BEEN REPORTED BY FARMERS IN SAMPLE WATERCOURSE RD.45800

Sr. No.	Location	Total Farmers No(=100)	Farmers reporting problems in supply of: Farm Inputs		Improved Seeds		Farm Insecticides		Machinery	
			No	%	No	%	No	%	No	%
0	1	2	3	4	5	6	7	8	9	10
1.	Head	10	6	60.00	2	20.00	2	20.00	-	-
2.	Middle	10	6	60.00	3	30.00	1	10.00	-	-
3.	Tail	10	4	40.00	3	30.00	2	20.00	1	10.00
4.	All Places	30	16	53.33	8	26.66	5	16.66	1	3.33

-31-

SOURCE OF AGRICULTURAL INFORMATION [illegible] IN FD.4580

Sr No.	Source	Number of percentage* of farmers who took agri. information from the source: Head of W.C. No	%	Middle of W.C. No	%	Tail of W.C. No	%	All Places No	%	Number and percentage** of sample Farmer who took this: Head of W.C. No	%	Middle of W.C. No	%	Tail of W.C. No	%	All Places No	%
0	1	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1.	Agriculture Department	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.	Demonstration plots laid by insecticides/ pesticides firms	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.	Radio	4	40	4	40	2	20	10	31	3	75	3	75	2	100	8	80
4.	Television	-	-	1	10	1	10	2	7	-	-	1	100	-	-	1	50
5.	Newspaper	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	Landlord	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Other Farmers	1	10	2	20	1	10	4	13	1	100	2	100	1	100	4	100
8.	Input suppliers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Other sources specify)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Total Farmers = 30
Head = 10
Middle = 10
Tail = 10

* of total sample farmers in the section concerns

** of those who took information from a source given in col.1

Table-36

MEMBERSHIP OF SOCIETIES/ASSOCIATIONS ETC.
IN SAMPLE WATER COURSE RD.45800

Sr. No.	Institution	Locality	Are the sample farmers members of the societies/associations as in col.2						Total Farmers No =(100)
			Yes		No		Not applicable		
			No	%	No	%	No	%	
0	1	2	3	4	5	6	7	8	9
1.	Water Users Association	Head	-	-	2	20.00	8	88.00	10
		Middle	-	-	-	-	10	100.0	10
		Tail	-	-	1	10.00	9	90.00	10
		All Places	-	-	3	10.00	27	90.00	30
2.	Cooperative Society	Head	-	-	2	20.00	8	80.00	10
		Middle	1	10	2	20.00	7	70.00	10
		Tail	-	-	1	10.00	9	90.00	10
		All Places	1	3.33	5	16.67	24	80.00	30
3.	Union Council	Head	-	-	10	100.0	-	-	10
		Middle	-	-	10	100.0	-	-	10
		Tail	-	-	10	100.0	-	-	10
		All Places	-	-	30	100.0	-	-	30
4.	Other Societies/ Association	Head	-	-	6	60.00	4	40.00	10
		Middle	-	-	5	50.00	5	50.00	10
		Tail	1	10	6	60.00	3	30.00	10
		All Places	1	3.33	17	56.67	12	40.00	30

Table-37

USE OF TRACTORS BY SAMPLE FARMERS IN
SAMPLE WATER COURSE RD. 45800

Sr. No.	Section	Is tractor used ? Yes No.	Yes % of col.2	No No.	No % of col.4	Total No. (=100)	Ownership Status of tractor used: Own No.	Own % of col.2	Rented in No.	Rented in % of col.2	Source of supply of rented in tractor: Own Village No.	Own Village % of col.9	Other Places No.	Other Places % of col.9	Farmer reporting problems in tractor supply No.	% of col.6
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.	Head	9	90	1	10	10	1	11.11	8	88.89	8	100.00	-	-	3	30.00
2.	Middle	7	70	3	30	10	2	28.57	5	71.43	2	40.00	3	0.20	4	40.00
3.	Tail	10	100	-	-	10	-	-	10	100.00	6	60.00	4	40.00	5	50.00
4.	All Sections	26	87	4	13	30	3	11.54	23	88.46	16	69.57	7	30.43	12	40.00

Table-38

USE OF THRASHER BY SAMPLE FARMERS IN
SAMPLE WATER COURSE RD. 45800

Sr. No.	Section	Is Thrasher used ? Yes No.	Yes % of col.2	No No.	No % of col.2	Total No. (=100)	Ownership Status of Thrasher used: Own No.	Own % of col.2	Rented in No.	Rented in % of col.2	Source of supply of rented in thrasher: Own Village No.	Own Village % of col.9	Other Places No.	Other Places % of col.9	Farmer reporting problems in Thrasher supply No.	% of col.6
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.	Head	10	100	-	-	10	-	-	10	100.00	8	80.00	2	20.00	2	20.00
2.	Middle	10	100	-	-	10	1	10.00	9	90.00	7	77.78	2	22.22	5	50.00
3.	Tail	10	100	-	-	10	-	100.00	10	100.00	6	60.00	4	40.00	6	60.00
4.	All Sections	30	100	-	-	30	1	3.33	29	96.67	21	72.41	8	27.59	13	43.33

Table-1

AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS IN SAMPLE WATERCOURSE RD.45800

Sr. No.	Crops	Location	Area	Main Product			By Product		
				Unit	Total	Per Hectare	Unit	Total	Per Hecta
0	1	2	3	4	5	6	7	8	9
1.	Maize Grain	Head	1.01	Mds	6.15	6.09	Bundle	108	107
		Middle	2.98	Mds	11.50	3.86	Bundle	270	91
		Tail	1.72	Mds	25.00	14.53	Bundle	340	198
		Total	5.71	Mds	42.65	7.47	Bundle	718	126
2.	Maize Fodder	Head	1.32	Bundle	370.00	280.30		-	-
		Middle	0.81	Bundle	250.00	308.64		-	-
		Tail	0.71	Bundle	150.00	211.27		-	-
		Total	2.84	Bundle	770.00	271.13		-	-
3.	Sorghum (fodder)	Head	1.01	Rs.	1040.00	1029.70		-	-
		Middle	2.93	Rs.	3760.00	1283.28		-	-
		Tail	1.62	Rs.	900.00	555.56		-	-
		Total	5.56	Rs.	5700.00	1025.18		-	-
4.	Sugarcane Converted in to Gur	Head	1.01	Mds of Gur	40.00	39.60	C.T. Mds	9	90
							Bagg: Mds	60	59
		Middle	3.95	Mds of Gur	106.50	26.96	C.T. Mds	229	58
							Bagg: Mds	152	292
		Tail	-	Mds of Gur	-	-	C.T. Mds	-	-
							Bagg: Mds	-	-
		Total	4.96	Mds of Gur	146.50	29.54	C.T. Mds	320	65
							Bagg: Mds	212	244
5.	Sugarcane Sold in field	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	-	-	-	-	-	-	-
6.	Pigeon Pea	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	-	-	-	-	-	-	-

C.T.= Cane Tops Bagg:= Bagasse

Table-2

AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS OUTSIDE SAMPLE WATERCOURSE RD.45800

r. o.	C r o p s	Location	Area	Main Product			By Product		
				Unit	Total	Per Hectare	Unit	Total	Per Hectare
0	1	2	3	4	5	6	7	8	9
.	Maize Grain	Head	0.81	Mds	24.00	29.63	Bundle	259	308.64
		Middle	2.73	Mds	57.00	20.88	Bundle	580	212.45
		Tail	0.71	Mds	14.00	19.72	Bundle	160	225.35
		Total	4.25	Mds	95.00	22.35	Bundle	990	232.94
.	Maize Fodder	Head	0.40	Bundle	90.00	225.00		-	-
		Middle	-	Bundle	-	-		-	-
		Tail	-	Bundle	-	-		-	-
		Total	0.40	Bundle	90.00	225.00		-	-
.	Sorghum (fodder)	Head	0.81	Rs.	800.00	987.65		-	-
		Middle	1.42	Rs.	2000.00	1408.45		-	-
		Tail	0.20	Rs.	300.00	1500.00		-	-
		Total	2.43	Rs.	3100.00	1275.72		-	-
.	Sugarcane Converted into Gur	Head	-	Mds of Gur	-	-	C.T. Mds	-	-
							Bagg: Mds	-	-
		Middle	-	Mds of Gur	-	-	C.T. Mds	-	-
							Bagg: Mds	-	-
		Tail	-	Mds of Gur	-	-	C.T. Mds	-	-
							Bagg: Mds	-	-
		Total	-	Mds of Gur	-	-	C.T. Mds	-	-
							Bagg: Mds	-	-
.	Sugarcane Sold in field	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	-	-	-	-	-	-	-
.	Pigeon Pea	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	-	-	-	-	-	-	-

C.T.= Cane Tops Bagg:= Bagasse

Table-3

DISPOSAL OF MAIN PRODUCTS OTHER THAN SUGARCANE IN SAMPLE WATER COURSE RD.45800

Sr. No.	Crop wise of Disposal	Maize (Kharif)								Sugarcane Fe								Sugarcane (Wide)								Fodder Fe (Sugarcane)							
		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places	
		Qty	%	Qty.	%	Qty	%	Qty	%	Qty.	%	Qty.	%	Qty.	%	Qty.	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty.	%	Qty.	%	Qty	%	Qty	%
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
I	Total Output	30	100	69	100	39	100	138	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II.	Disposal																																
	1.Retained for H.use	10	33.0	14	20.29	13	33.33	37		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.Sold	20	66.67	47	68.90	14	35.90	81		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3.Landlord's Share	-	-	6	8.70	7	17.95	13	5.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4.Artisan's dues	-	-	-	-	1	2.56	1	5.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5.Sikar to Lacturers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6.Seed	-	-	1	1.45	2	5.13	3	15.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7.Other Charit	-	-	1	1.45	1	2.56	3	10.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8.Other Specif	-	-	-	-	1	2.56	1	5.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
III.	Total =All Uses	30	100	69	100	39	100	138	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-

DISPOSAL OF BY-PRODUCTS IN SAMPLE WATER COURSE RD. 4530

Sr. No.	Crop Mode of Disposal	Maize (Qty. in Bundles)								Sorghum (Rupees)							
		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places	
		Qty.	%	Qty.	%	Qty	%	Qty.	%	Rs.	%	Rs.	%	Rs.	%	Rs.	%
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
I. Total Output		568	100	520	100	490	100	1578	100	1840	100	5760	100	1200	100	8800	100
II. Disposal																	
1. Retained for House		[illegible]	[illegible]	205	39.42	380	77.55	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2. Sold		9	15.85	200	38.46	-	-	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3. Landlord's Share		-	-	115	22.12	110	22.45	[illegible]	[illegible]	-	-	[illegible]	[illegible]	-	-	[illegible]	[illegible]
4. Artisan's dues		-	-	-	-	-	-	-				-	-	-	-		
5. Given to Labourers		-	-	-	-	-	-		-	-	-	-	-	-	-		
6. Seed		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
7. Usher/Charity		-	-	-	-	-		-	-	-	-	-	-	-	-		
8. Other Specify		-	-	-	-	-	-	-	-	-	-	-	-	-		-	-
III. Total =All Uses		568	100	520	100	490	100	1578	100	1840	100	5760	100	1200	100	8300	100

Sugarcane (C.T. and Bagg: in Maunds)															
Head				Middle				Tail				All Places			
C.T.	Bagg:	Total	%	C.T.	Bagg:	Total	%	C.T.	Bagg:	Total	%	C.T.	Bagg:	Total	%
18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
91	60	151	100	229	152	381	100	-	-	-	-	320	212	532	100
91	60	151	100	157	104	261	100	-	-	-	-	248	164	412	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	72	48	120	-	-	-	-	-	72	48	120	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
91	60	151	100	229	229	381	100	-	-	-	-	-	-	-	-

C.T.= Cane Tops Bagg:= Bagasse

(Concluded)

Table-5

MODE OF SALE OF MAIZE IN SAMPLE WATER COURSE RD. 45800

Sr. No.	Mode of Sale	Head		Middle		Tail		All Places	
		Qty	%	Qty	%	Qty	%	Qty	%
0	1	2	3	4	5	6	7	8	9
I.	In Village	20	100	47	100	14	100	67	100
	1. To Beoparis	-	-	-	-	-	-	-	-
	2. To Shop Keepers	-	-	-	-	-	-	-	-
	3. To others	20	100	47	100	14	100	67	100
II.	In other village	-	-	-	-	-	-	-	-
	1. To Beoparis	-	-	-	-	-	-	-	-
	2. To Shop Keepers	-	-	-	-	-	-	-	-
	3. To others	-	-	-	-	-	-	-	-
III.	In Peshawar	-	-	-	-	-	-	-	-
	1. Through Commission Agents	-	-	-	-	-	-	-	-
	2. To whole sellers	-	-	-	-	-	-	-	-
	3. To others	-	-	-	-	-	-	-	-
IV.	In Other urban centres	-	-	-	-	-	-	-	-
V.	Total Sales	20	100	47	100	14	100	67	100

Table-6

MODE OF SALE OF SORGHUM IN SAMPLE WATER COURSE RD. 45000

Sr. No.	Mode of Sale	Head		Middle		Tail		All Places	
		Qty	%	Qty	%	Qty	%	Qty	%
0	1	2	3	4	5	6	7	8	9
I.	In Village	800	100	3960	100	300	100	5060	100
	1. To Beoparis	-	-	-	-	-	-	-	-
	2. To Shop Keepers	-	-	-	-	-	-	-	-
	3. To others	800	100	3960	100	300	100	5060	100
II.	In other Villages	-	-	-	-	-	-	-	-
	1. To Beoparis	-	-	-	-	-	-	-	-
	2. To Shop Keepers	-	-	-	-	-	-	-	-
	3. To others	-	-	-	-	-	-	-	-
III.	In Peshawar	-	-	-	-	-	-	-	-
	1. Through Commission Agents	-	-	-	-	-	-	-	-
	2. To whole sellers	-	-	-	-	-	-	-	-
	3. To others	-	-	-	-	-	-	-	-
IV.	In other urban centres	-	-	-	-	-	-	-	-
V.	Total Sales	800	100	3960	100	300	100	5060	100

Table-7

MODE OF SALE OF PIGEON PEA IN SAMPLE WATER COURSE RD. 45800

Sr. No.	Mode of Sale	Head		Middle		Tail		All Places	
		Qty	%	Qty	%	Qty	%	Qty	%
0	1	2	3	4	5	6	7	8	9
I.	In Village	-	-	-	-	-	-	-	-
	1. To Beoparis	-	-	-	-	-	-	-	-
	2. To Shop Keepers	-	-	-	-	-	-	-	-
	3. To others	-	-	-	-	-	-	-	-
II.	In other Villages	-	-	-	-	-	-	-	-
	1. To Beoparis	-	-	-	-	-	-	-	-
	2. To Shop Keepers	-	-	-	-	-	-	-	-
	3. To others	-	-	-	-	-	-	-	-
III.	In Peshawar	-	-	-	-	-	-	-	-
	1. Trough Commission Agents	-	-	-	-	-	-	-	-
	2. To whole sellers	-	-	-	-	-	-	-	-
	3. To Other	-	-	-	-	-	-	-	-
IV.	In other urban centres	-	-	-	-	-	-	-	-
V.	Total Sales	-	-	-	-	-	-	-	-

Table-8

UTILIZATION OF SUGARCANE IN SAMPLE WATER COURSE RD.45800

Sr. No.	Particulars	Unit	Head	Middle	Tail	All places
0	1	2	3	4	5	6
1.	Sugarcane produced	Mds	455	1146	-	1601
2.	Sold to sugarmills	Mds	-	-	-	-
3.	Sold to Gur manufactures	Mds	-	-	-	-
4.	Converted into Gur	Mds	455	1146	-	1601
5.	Used as seed	Mds	-	-	-	-

Table-9

UTILIZATION OF GUR PRODUCED BY SAMPLE FARMERS
IN SAMPLE WATER COURSE RD. 45800

Sr. No.	Utilization	Head		Middle		Tail		All Places	
		Mds	%	Mds	%	Mds	%	Mds	%
0	1	2	3	4	5	6	7	8	9
1.	Sold	26	65.00	43.00	28.67	-	-	69.00	36.32
2.	Self consumed	11	27.50	35.00	23.33	-	-	46.00	24.21
3.	Landlord's Share	-	-	33.50	22.33	-	-	33.50	17.63
4.	Other uses	3	7.50	5.00	25.67	-	-	8.00	21.84
5.	T o t a l:	40	100	116.50	100	-	-	156.50	100

Table-10

NUMBER OF FARMERS REPORTING CONSUMPTION OF CHEMICAL FERTILIZERS IN SAMPLE WATER COURSE RD. 45800

Sr. No.	Location of farm	Total farmers growing this crop No(=100)	Farmers using fertilizers													
			Urea		D A P		N P K		N P		Ammonium Sulphate		Ammonium Nitrate		P.Sulphate	
			No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
I.	MAIZE															
	a.Head of W.C.	8	7	87.50	-	-	-	-	2	25.00	-	-	-	-	-	-
	b.Middle of W.C.	6	4	67.67	-	-	2	33.33	-	-	-	-	-	-	-	-
	c.Tail of W.C.	5	1	20.00	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	19	12	63.16	-	-	2	10.53	2	10.53	-	-	-	-	-	-
II.	SORGHUM															
	a.Head of W.C.	4	3	75.00	-	-	-	-	1	25.00	-	-	-	-	-	-
	b.Middle of W.C.	5	3	60.00	1	20.00	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	4	3	75.00	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	13	9	69.23	1	7.69	-	-	1	7.69	-	-	-	-	-	-
III.	SUGARCANE															
	a.Head of W.C.	2	2	100.00	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	5	5	100.00	1	20.00	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	7	7	100.00	1	14.29	-	-	-	-	-	-	-	-	-	-
IV.	PIGEON PEA															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-11

QUANTITY OF CHEMICAL FERTILIZERS USED BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD. 45000

Sr. No.	Location of farm	Area sown (Hectare)	Quantity of fertilizer used (KG)													
			Urea		D A P		N P K		N P		Ammonium Sulphate		Ammonium Nitrate		P.Sulphate	
			Total	Per Hect-are	Total	Per Hect-are	Total	Per Hect-are	Total	Per Hect-are	Total	Per Hect-are	Total	Per Hect-are	Total	Per Hect-are
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
I.	MAIZE															
	a.Head of W.C.	2.23	180	81	-	-	-	-	100	43	-	-	-	-	-	-
	b.Middle of W.C.	2.79	2[illegible]	56	-	-	100	14	-	-	-	-	-	-	-	-
	c.Tail of W.C.	2.43	13	5	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	8.55	414	48	-	-	100	12	100	12	-	-	-	-	-	-
II.	SORGHUM															
	a.Head of W.C.	1.01	125	124	75	74	50	50	-	-	-	-	-	-	-	-
	b.Middle of W.C.	2.93	175	60	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	1.62	175	108	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	5.56	475	85	75	13	50	50	-	-	-	-	-	-	-	-
III.	SUGARCANE															
	a.Head of W.C.	1.01	200	198	-	-	-	-	100	99	-	-	-	-	-	-
	b.Middle of W.C.	3.95	450	114	50	13	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	4.96	650	131	50	10	-	-	100	20	-	-	-	-	-	-
IV.	PIGEON PEA															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-12

CONSUMPTION OF FARM YARD MANURE IN SAMPLE WATER COURSE NO. 45300

Sr. No.	Location of farm	No. of farms growing this crop	Farms using FYM		Area covered by FYM (Acres)	Quantity used (KG)	
			No.	%		Total	Per Hectare
0	1	2	3	4	5	6	7
I.	MAIZE						
	a.Head of W.C.	8	5	62.50	2.33	2239	961
	b.Middle of W.C.	6	3	50.00	3.77	2687	709
	c.Tail of W.C.	5	2	40.00	2.43	2612	1075
	d.All Places	19	10	52.63	8.53	7538	882
II.	SORGHUM						
	a.Head of W.C.	4	1	25.00	1.01	746	739
	b.Middle of W.C.	3	-	-	2.93	-	-
	c.Tail of W.C.	4	-	-	1.62	-	-
	d.All Places	13	1	7.69	5.56	746	134
III.	SUGARCANE						
	a.Head of W.C.	2	1	50.00	[illegible]	2139	2217
	b.Middle of W.C.	3	2	40.00	[illegible]	7702	2436
	c.Tail of W.C.	-	-	-	-	-	-
	d.All Places	7	3	42.86	4.96	11942	2408
IV.	FODDER						
	a.Head of W.C.	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-

Table-13

NUMBER OF SAMPLE FARMERS WHO USED INSECTICIDES/ PESTICIDES/WEEDICIDES IN SAMPLE WATERCOURSE RD.45800

Sr. No.	Location of farms	Total Farmer Growing this crops No(=100)	Farmers who used:Insects/ Pesticides		Farmers who used: Weedicides	
			No.	%	No.	%
0	1	2	3	4	5	6
I.	MAIZE					
	a. Head of W.C.					
	b. Middle of W.C.		---- N.A. ----			
	c. Tail of W.C.					
	d. All places					
II.	SORGHUM					
	a. Head of W.C.					
	b. Middle of W.C.		---- N.A. ----			
	c. Tail of W.C.					
	d. All places					
III.	SUGARCANE					
	a. Head of W.C.					
	b. Middle of W.C.		---- N.A. ----			
	c. Tail of W.C.					
	d. All places					
IV.	PIGEON PEA					
	a. Head of W.C.					
	b. Middle of W.C.		---- N.A. ----			
	c. Tail of W.C.					
	d. All places					

N.A. = Not Applicable

Table-14

QUANTITY OF SEED USED BY SAMPLE FARMERS
IN SAMPLE WATERCOURSE RD.45900

(Kg)

Sr. No.	Crop	Total Area (Hectare)	Head Quantity used			Middle Quantity used			Tail Quantity used			All Places Quantity used		
			Improved	Local	Total	Improved	Local	Total	Improved	Local	Total	Improved	Local	Total
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Maize	8.55	-	94	94	-	134	134	-	100	100	-	328	328
2.	Sorghum	5.56	-	66	66	-	240	240	-	111	111	-	417	417
3.	Sugarcane	4.96	2239	1493	3732	-	12129	12129	-	-	-	14368	1493	15861
4.	Pigeon Pea	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-15

PHYSICAL INPUT COST TO SAMPLE [illegible] COLUMST RS.45800

Crop: Maize Area: 8.96 ha. Head : [illegible] ha ii) Middle: 4.20 ha iii) Tail: 2.43 ha

Sr. No.	Physical Input	Head: Purchased Total	Head: Purchased Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (2+4) Total	Head: Total (2+4) Per Hect.	Middle: Purchased Total	Middle: Purchased Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total Total	Middle: Total Per Hect.	Tail: Purchased Total	Tail: Purchased Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (14+16) Total	Tail: Total (14+16) Per Hect.	All Places: Purchased (2+6+14) Total	All Places: Purchased (2+6+14) Per Hect.	All Places: Self Supplied (4+8+16) Total	All Places: Self Supplied (4+8+16) Per Hect.	All Places: Total Total	All Places: Total Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Seed	167	72	159	68	326	140	152	36	166	[illegible]	318	76	114	47	138	57	252	104	433	48	463	52	896	100
2.	Farm Yard Manure	-	-	300	129	300	129	-	-	276	[illegible]	276	66	50	21	150	62	200	82	50	6	276	81	326	87
3.	Chemical Fertilizer	702	301	-	-	702	301	787	187	-	-	787	187	30	12	-	-	30	12	1519	170	-	-	1519	170
4.	Insecticide/ Pesticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Water Charges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	Dues of Artisans	100	43	-	-	100	43	210	50	-	-	210	50	100	41	-	-	100	41	410	46	-	-	410	46
7.	Total	969	416	459	197	1428	613	1149	274	442	105	1591	379	294	121	288	119	582	240	2412	269	1189	133	3601	402

Table-16

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.45800

Crop: Maize — Area: 9.96 ha. — i) Head : 2.33 ha — ii) Middle: 4.20 ha — iii) Tail: 2.43 ha

Sr. No.	Operations	Labour Inputs	Head: Paid Total	Head: Paid Per Hect:	Head: Self Supplied Total	Head: Self Supplied Per Hect:	Head: Total (3+5) Total	Head: Total (3+5) Per Hect:	Middle: Paid Total	Middle: Paid Per Hect:	Middle: Self Supplied Total	Middle: Self Supplied Per Hect:	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect:	Tail: Paid Total	Tail: Paid Per Hect:	Tail: Self Supplied Total	Tail: Self Supplied Per Hect:	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect:	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect:	All Places: Self Supp: (5+11+17) Total	All Places: Self Supp: (5+11+17) Per Hect:	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Ploughing	i.Manual		-	-	356	153	356	153	-	-	606	237	900	237	-	-	83	34	83	34	-	-	1339	157	1339	157
	ii.Animal		-	-	510	219	510	219	-	-	1665	439	1665	439	-	-	-	-	-	-	-	-	2175	254	2175	254
	iii.Machine		880	378	-	-	880	378	720	190	-	-	720	190	1260	519	-	-	1260	519	2860	335	-	-	2860	335
	iv.Total		880	378	866	372	1746	749	720	190	1565	676	3285	867	1260	519	83	34	1343	553	2860	335	3514	411	6374	745
2. Levelling	i.Manual		-	-	-	-	-	-	-	-	221	58	221	58	-	-	-	-	-	-	-	-	221	26	221	26
	ii.Animal		-	-	-	-	-	-	-	-	422	111	422	111	-	-	-	-	-	-	-	-	422	49	422	49
	iii.Machine		-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total		-	-	-	-	-	-	-	-	643	170	643	170	-	-	-	-	-	-	-	-	643	75	643	75
3. Planking	i.Manual		-	-	19	8	19	8	-	-	205	54	206	54	-	-	-	-	-	-	-	-	225	26	225	26
	ii.Animal		-	-	31	13	31	13	-	-	407	107	407	107	-	-	-	-	-	-	-	-	438	51	438	51
	iii.Machine		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total		-	-	50	21	50	21	-	-	613	162	613	162	-	-	-	-	-	-	-	-	663	78	663	78
4. Sowing	i.Manual		-	-	107	46	107	46	-	-	428	113	428	113	-	-	53	22	53	22	-	-	583	69	588	69
	ii.Animal		-	-	138	59	138	59	-	-	675	178	675	178	-	-	-	-	-	-	-	-	813	95	813	95
	iii.Machine		385	165	-	-	385	165	255	67	-	-	255	67	690	284	-	-	690	284	1330	156	-	-	1330	156
	iv.Total		385	165	245	105	630	270	255	67	1103	291	1358	358	690	284	53	22	743	306	1330	156	1401	164	2731	319
5. Watering	i.Manual		-	-	117	50	117	50	-	-	150	40	150	40	-	-	107	44	107	44	-	-	374	44	374	44
6. F.Y.Manure	i.Manual		-	-	24	10	24	10	-	-	26	7	26	7	-	-	30	12	30	12	-	-	80	9	80	9

(Contd....)

Table-16

LABOUR INPUT COST IN SAMPLE WATER COURSE SD.45800

Crop: Maize Area: 8.96 ha. i) Head : 2 33 ha ii) Middle: 4.20 ha iii) Tail: 2.43 ha

Sr. No.	Operations	Labour Inputs	Head: Paid Total	Head: Paid Per Hect:	Head: Self Supplied Total	Head: Self Supplied Per Hect:	Head: Total (3+5) Total	Head: Total (3+5) Per Hect:	Middle: Paid Total	Middle: Paid Per Hect:	Middle: Self Supplied Total	Middle: Self Supplied Per Hect:	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect:	Tail: Paid Total	Tail: Paid Per Hect:	Tail: Self Supplied Total	Tail: Self Supplied Per Hect:	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect:	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect:	All Places: Self Supp: (5+11+ 7) Total	All Places: Self Supp: (5+11+ 7) Per Hect:	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
7. Chemical		i.Manual	-	-	14	6	14	6	-	-	13	3	13	3	-	-	1	-	1	-	-	-	28	3	28	3
8. Hoeing/Weed		i.Manual	-	-	-	-	-	-	-	-	330	87	330	87	-	-	-	-	-	-	-	-	330	39	330	39
9. Harvesting		i.Manual	-	-	390	167	390	167	-	-	188	50	188	50	-	-	960	395	960	395	-	-	1538	180	1538	180
10.Carriage to Threshing Yard		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	180	74	180	74	-	-	180	21	180	21
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23	9	23	9	-	-	23	3	23	3
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	203	84	203	84	-	-	203	24	203	24
11.Threshing/ Winnowing		i.Manual	-	-	105	45	105	45	-	-	195	51	195	51	-	-	390	160	390	160	-	-	690	81	690	81
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	105	45	105	45	-	-	195	51	195	51	-	-	390	160	390	160	-	-	690	81	690	81
12.Total		i.Manual	-	-	1132	486	1132	486	-	-	2657	701	2657	701	-	-	1804	742	1804	742	-	-	5593	654	5593	654
		ii.Animal	-	-	679	291	679	291	-	-	3169	836	3169	836	-	-	23	9	23	9	-	-	3871	453	3871	453
		iii.Machine	1265	543	-	-	1265	543	975	257	-	-	975	257	1950	802	-	-	1950	802	4190	490	-	-	4190	490
		iv.Total	1265	543	1811	777	3076	1320	975	257	5826	1537	6801	1794	1950	802	1827	752	3777	1554	4190	490	9464	1107	13654	1397

(Concluded)

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD.45800

Crop: Sorghum Area: 5.56 ha. i) Head : 1.01 ha ii) Middle: 2.93 ha iii) Tail: 1.62 ha

Sr. No.	Physical Input	Head						Middle						Tail						All Places					
		Purchased		Self Supplied		Total (2+4)		Purchased		Self Supplied		Total (8+10)		Purchased		Self Supplied		Total (14+16)		Purchased (2+8+14)		Self Supplied (14+10+16)		Total	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Seed	261	258	-	-	261	258	1056	360	-	-	1056	360	487	301	-	-	487	301	1804	324	-	-	1804	324
2.	Farm Yard Manure	-	-	40	40	40	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40	7	40	7
3.	Chemical Fertilizer	646	640	-	-	646	640	455	155	-	-	455	155	395	244	-	-	395	244	1496	269	-	-	1496	269
4.	Insecticide/ Pesticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Water Charges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	Dues of Artisans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Total	907	898	40	40	947	938	1511	516	-	-	1511	516	882	544	-	-	882	544	3300	594	40	7	3340	601

Table-18

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.45800

Crop: Sorghum Area: 5.56 ha. i) Head: 1.01 ha ii) Middle: 2.93 ha iii) Tail: 1.62 ha

Sr. No.	Operations	Labour Inputs	Head: Paid Total	Head: Paid Per Hect:	Head: Self Supplied Total	Head: Self Supplied Per Hect:	Head: Total (3+5) Total	Head: Total (3+5) Per Hect:	Middle: Paid Total	Middle: Paid Per Hect:	Middle: Self Supplied Total	Middle: Self Supplied Per Hect:	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect:	Tail: Paid Total	Tail: Paid Per Hect:	Tail: Self Supplied Total	Tail: Self Supplied Per Hect:	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect:	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect:	All Places: Self Supp: (5+11+17) Total	All Places: Self Supp: (5+11+17) Per Hect:	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Ploughing	i.Manual		-	-	56	55	56	55	-	-	399	[illegible]	399	135	-	-	[illegible]	37	60	37	-	-	514	92	514	92
	ii.Animal		-	-	50	50	50	50	-	-	600	2.5	600	205	-	-	-	-	-	-	-	-	650	117	650	117
	iii.Machine		240	238	-	-	240	238	630	215	-	-	630	215	540	333	-	-	540	333	1410	254	-	-	1410	254
	iv.Total		240	238	106	105	346	343	630	215	998	341	1628	556	540	333	[illegible]	37	600	370	1410	254	1164	209	2574	463
2. Leveling	i.Manual		-	-	-	-	-	-	-	-	90	31	90	31	-	-	-	-	-	-	-	-	90	16	90	16
	ii.Animal		-	-	-	-	-	-	-	-	150	51	150	51	-	-	-	-	-	-	-	-	150	27	150	27
	iii.Machine		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total		-	-	-	-	-	-	-	-	240	82	240	82	-	-	-	-	-	-	-	-	240	43	240	43
3. Planking	i.Manual		-	-	8	8	8	8	-	-	101	34	101	34	-	-	-	-	-	-	-	-	109	20	109	20
	ii.Animal		-	-	15	15	15	15	-	-	150	51	150	51	-	-	-	-	-	-	-	-	165	30	165	30
	iii.Machine		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total		-	-	23	23	23	23	-	-	251	86	251	86	-	-	-	-	-	-	-	-	274	49	274	49
4. Sowing	i.Manual		-	-	22	22	22	22	-	-	199	68	199	68	-	-	23	14	23	14	-	-	244	44	244	44
	ii.Animal		-	-	30	30	30	30	-	-	180	61	180	61	-	-	-	-	-	-	-	-	210	38	210	38
	iii.Machine		120	119	-	-	120	119	300	102	-	-	300	102	300	185	-	-	300	185	720	129	-	-	720	129
	iv.Total		120	119	52	51	172	170	300	102	379	129	679	232	300	185	23	14	323	199	720	129	454	82	1174	211
5. Watering	i.Manual		-	-	60	59	60	59	-	-	281	96	281	96	-	-	98	60	98	60	-	-	439	79	439	79
6. F.Y.Manure	i.Manual		-	-	15	15	15	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15	3	15	3

(Contd.)

Crops: Sorghum Area: 5.56 ha. i) Head : 1.71 ha ii) Middle: 2.93 ha iii) Tail: 1.62 ha

Sr. No.	Operations	Labour Inputs	Head: Paid Total	Head: Paid Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (3+5) Total	Head: Total (3+5) Per Hect.	Middle: Paid Total	Middle: Paid Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect.	Tail: Paid Total	Tail: Paid Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect.	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect.	All Places: Self Supp. (5+11+17) Total	All Places: Self Supp. (5+11+17) Per Hect.	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
7. Chemical		i. Manual	-	-	9	9	9	9	-	-	5	-	13	4	-	-	12	8	13	8	-	-	35	6	35	6
8. Hoeing/Weeding		i. Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9. Harvesting		i. Manual	-	-	90	89	90	89	-	-	360	123	360	123	-	-	121	74	120	74	-	-	570	103	570	103
10. Carriage to Threshing yard		i. Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii. Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii. Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv. Total	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11. Threshing/ Winnowing		i. Manual	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii. Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii. Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv. Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12. Total		i. Manual	-	-	260	257	260	257	-	-	1442	492	1442	492	-	-	314	194	314	194	-	-	2016	363	2016	363
		ii. Animal	-	-	95	94	95	94	-	-	1080	369	1080	369	-	-	-	-	-	-	-	-	1175	211	1175	211
		iii. Machine	360	356	-	-	360	356	930	317	-	-	930	317	840	519	-	-	840	519	2130	383	-	-	2130	383
		iv. Total	360	356	95	94	715	351	930	317	2522	861	3452	1178	840	519	314	194	1154	712	2130	383	3191	574	5321	957

(Concluded.)

Table-19

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD.45800

Crop: Sugarcane Area: 4.96 ha. i) Head : 1.01 ha ii) Middle: 3.95 ha iii) Tail: 0.00 ha

Sr. No.	Physical Input	Head						Middle						Tail						All Places					
		Purchased		Self Supplied		Total (2+4)		Purchased		Self Supplied		Total (8+10)		Purchased		Self Supplied		Total (14+16)		Purchased (2+8+14)		Self Supplied (14+10+16)		Total	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Seed	660	653	960	950	1620	1604	3900	987	1215	308	5115	1295	-	-	-	-	-	-	4560	919	2175	439	6735	1358
2.	Farm Yard Manure	-	-	180	178	180	178	-	-	780	197	780	198	-	-	-	-	-	-	-	-	960	194	960	194
3.	Chemical Fertilizer	740	733	-	-	740	733	1290	327	-	-	1290	327	-	-	-	-	-	-	2030	409	-	-	2030	409
4.	Insecticide/ Pesticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Water Rate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	Dues of Artisans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Fuel Charges	480	475	400	396	880	871	-	-	2920	739	2920	739	-	-	-	-	-	-	480	97	3320	669	3800	766
8.	Rent of crushing Machine	192	190	192	190	384	380	652	165	195	49	847	214	-	-	-	-	-	-	844	170	387	78	1231	248
	Total	2072	2051	1732	1715	3804	3766	5842	1479	5110	1294	10952	2773	-	-	-	-	-	-	7914	1596	6842	1379	14756	2975

Table-5

LABOUR INPUT COST IN SAMPLE - FR COURSE RS.45800

Crop: Sugarcane Area: 4.96 ha i) Head : [illegible] ha ii) Middle: 3.95 ha iii) Tail: 0.00 ha

Sr. No.	Operations	Labour Inputs	Head: Paid Total	Head: Paid Per Hect:	Head: Self Supplied Total	Head: Self Supplied Per Hect:	Head: Total (3+5) Total	Head: Total (3+5) Per Hect:	Middle: Paid Total	Middle: Paid Per Hect:	Middle: Self Supplied Total	Middle: Self Supplied Per Hect:	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect:	Tail: Paid Total	Tail: Paid Per Hect:	Tail: Self Supplied Total	Tail: Self Supplied Per Hect:	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect:	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect:	All Places: Self Supp: (5+11+17) Total	All Places: Self Supp: (5+11+17) Per Hect:	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Ploughing		i.Manual	-	-	210	208	210	208	-	-	393	226	393	226	-	-	-	-	-	-	-	-	1103	222	1103	222
		ii.Animal	-	-	290	287	290	287	-	-	1400	354	1400	354	-	-	-	-	-	-	-	-	1690	341	1690	341
		iii.Machine	-	-	-	-	-	-	660	167	-	-	660	167	-	-	-	-	-	-	660	133	-	-	660	133
		iv.Total	-	-	500	495	500	495	660	167	2793	581	3453	748	-	-	-	-	-	-	660	167	2793	563	3453	696
2. Levelling		i.Manual	-	-	30	30	30	30	-	-	195	49	195	49	-	-	-	-	-	-	-	-	225	45	225	45
		ii.Animal	-	-	40	40	40	40	-	-	300	67	300	67	-	-	-	-	-	-	-	-	340	69	340	69
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	70	69	70	69	-	-	495	125	495	125	-	-	-	-	-	-	-	-	565	114	565	114
3. Planking		i.Manual	-	-	34	34	34	34	-	-	195	49	195	49	-	-	-	-	-	-	-	-	229	46	229	46
		ii.Animal	-	-	44	44	44	44	-	-	325	82	325	82	-	-	-	-	-	-	-	-	369	74	369	74
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	78	77	78	77	-	-	520	132	520	132	-	-	-	-	-	-	-	-	598	121	598	121
4. Sowing		i.Manual	-	-	420	416	420	416	-	-	2400	608	2400	608	-	-	-	-	-	-	-	-	2820	569	2820	569
		ii.Animal	-	-	105	104	105	104	-	-	390	99	390	99	-	-	-	-	-	-	-	-	495	100	595	100
		iii.Machine	-	-	-	-	-	-	195	49	-	-	195	49	-	-	-	-	-	-	195	39	-	-	195	39
		iv.Total	-	-	525	520	525	520	195	49	2790	706	2985	756	-	-	-	-	-	-	195	39	3315	668	3510	708
5. Watering		i.Manual	-	-	105	104	105	104	-	-	683	173	683	173	-	-	-	-	-	-	-	-	788	159	788	159
6. F.Y.Manure		i.Manual	-	-	30	30	30	30	-	-	150	38	150	38	-	-	-	-	-	-	-	-	180	36	180	36

(Contd..)

Table-2[illegible]

LABOUR [illegible] COST IN [illegible] WATER [illegible] [illegible]

Crop: [illegible] Area: 4.96 ha; i) Head: 1.01 ha; ii) Middle: 3.95 ha; iii) Tail: 0.00 ha

Sr. No.	Operations	Labour Inputs	Head Paid Total	Head Paid Per Hect:	Head Self Supplied Total	Head Self Supplied Per Hect:	Head Total (3+5) Total	Head Total (3+5) Per Hect:	Middle Paid Total	Middle Paid Per Hect:	Middle Self Supplied Total	Middle Self Supplied Per Hect:	Middle Total (9+11) Total	Middle Total (9+11) Per Hect:	Tail Paid Total	Tail Paid Per Hect:	Tail Self Supplied Total	Tail Self Supplied Per Hect:	Tail Total (15+17) Total	Tail Total (15+17) Per Hect:	All Places Paid (3+9+15) Total	All Places Paid (3+9+15) Per Hect:	All Places Self Supp: (5+11+17) Total	All Places Self Supp: (5+11+17) Per Hect:	All Places Total (21+23) Total	All Places Total (21+23) Per Hect:
0	1	2	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
7.	Chemical	i. Manual	-	-	8	8	8	8	-	-	34	[illegible]	34	[illegible]	-	-	-	-	-	-	-	-	42	8	42	8
8.	Hoeing/Weeding	i. Manual	-	-	-	-	-	-	-	-	240	[illegible]	240	61	-	-	-	-	-	-	-	-	240	48	240	48
9.	Harvesting	i. Manual	300	297	300	297	600	594	[illegible]	[illegible]	2160	[illegible]	2220	562	-	-	-	-	-	-	420	85	2400	484	2820	569
10.	Carriage to Threshing yard/Gan:	i. Manual	240	238	121	119	360	356	51	127	650	167	1170	296	-	-	-	-	-	-	750	151	780	157	1530	308
		ii. Animal	[illegible]	296	200	198	600	594	900	225	1050	[illegible]	1950	494	-	-	-	-	-	-	1300	262	1250	252	2550	514
		iii. Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv. Total	640	634	321	317	960	952	1410	357	1710	433	3120	790	-	-	-	-	-	-	2050	413	2030	409	4080	823
11.	Threshing/ Winnowing/ Cane Crushing	i. Manual	160	158	100	99	260	257	-	-	1110	281	1110	281	-	-	-	-	-	-	160	32	1210	244	1370	276
		ii. Animal	480	475	480	475	960	950	-	-	2690	651	2690	651	-	-	-	-	-	-	480	97	3170	639	3650	736
		iii. Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv. Total	640	634	580	574	1220	1208	-	-	3800	962	3800	962	-	-	-	-	-	-	640	129	4380	883	5020	1012
12.	Gur Making	i. Manual	[illegible]	[illegible]	-	-	1920	1901	4470	1132	-	-	4470	1132	-	-	-	-	-	-	6390	1288	-	-	6390	1288
13.	Total	i. Manual	2620	2594	1357	1344	3977	3938	630	1291	8660	2192	13760	3484	-	-	-	-	-	-	7720	1556	10017	2020	17737	3576
		ii. Animal	880	871	1159	1148	2039	2019	900	228	6155	1558	7055	1786	-	-	-	-	-	-	1780	359	7314	1475	9094	1833
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	855	172	-	-	855	172

Table-21

PHYSICAL INPUT COST IN SAMPLE WATER COURSE ID.45800
(PIGEON PEA)

(NOT APPLICABLE)

Table-22

LABOUR INPUTS COST IN SAMPLE WATER COURSE ID.45800
(PIGEON PEA)

(NOT APPLICABLE)

Table-23

PRODUCTION COST AND PROFIT IN [illegible] [illegible] COURSE RI - 100

Sr. No.	Crops	Location	Area (Hectare)	Total Output: Main Product (Mds)	Total Output: By-product Unit	Total Output: By-product Total Output	Market Price per unit (ex-farm): MP (Rs)	Market Price per unit (ex-farm): BP (Rs)	Total value of output: MP	Total value of output: BP	Total value of output: Total	Value per hectare: MP	Value per hectare: BP	Value per hectare: Total	Total Farm cost: Total expenditure	Total Farm cost: Labour	Total Farm cost: Total	Cost per hectare	Profit/loss (%): Total	Profit/loss (%): Per hectare	Total Imputed costs: Rent	Total Imputed costs: Labour	Total Imputed costs: Total	Farm Home Income: Total	Farm Home Income: Per Hectare
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1. Maize		Head	2.33	5.15	Bundles	478	110	2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1933	[illegible]	-1238	-	[illegible]	[illegible]	[illegible]	-55
		Middle	2.79	11.50	Bundles	520	110	2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2215	[illegible]	-1606	-	[illegible]	[illegible]	-262	-69
		Tail	2.43	25.00	Bundles	490	114	2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1794	[illegible]	-218	-	[illegible]	[illegible]	1298	534
		A.Places	8.55	42.65	Bundles	1485			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2013	[illegible]	-1110	-	[illegible]	[illegible]	-24	-3
2. Sorghum		Head	1.01	Hect:	Rs.	-	1030	-	[illegible]	-	[illegible]	[illegible]	-	[illegible]	[illegible]	[illegible]	[illegible]	1646	[illegible]	-515	-	[illegible]	[illegible]	-267	-264
		Middle	2.93	Hect:	Rs.	-	1283	-	[illegible]	-	[illegible]	[illegible]	-	[illegible]	[illegible]	[illegible]	[illegible]	1694	-1204	-411	-	2522	2522	1318	450
		Tail	1.62	Hect:	Rs.	-	556	-	[illegible]	-	[illegible]	556	-	[illegible]	[illegible]	[illegible]	3036	1257	-1135	[illegible]	-	314	314	-821	-507
		A.Places	5.56	Hect:	Rs.	-	1025	-	[illegible]	-	[illegible]	[illegible]	-	[illegible]	[illegible]	[illegible]	[illegible]	1558	-2961	-533	-	3191	3191	230	41
3. Sugar-cane (Gur)		Head	1.01	40.00	Mds. C.T.	91	400	5	16000	4551	17175	[illegible]	4551	[illegible]	3844	6016	9820	9722	7355	7282	-	2516	2516	9871	9773
					Mds Bagg:	60	-	12	-	7201	-	-	718												
		Middle	3.95	106.50	Mds C.T.	229	400	5	42600	11451	45569	10785	2911	11556	10952	21670	32622	8259	12947	3278	-	14815	14815	27762	7028
					Mds Bagg:	152	-	12	-	18241	-	-	462												
		Tail	-	-	Mds C.T.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					Mds Bagg:																				
		A.Places	4.96	146.50	Mds C.T.	320	-	5	58600	16001	62744	11815	3231	12650	14756	27686	42442	8557	20308	4093	-	17331	17331	37633	7587
					Mds Bagg:	212	-	12		25441			5131												
4. Pigeon Pea		Head	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		A.Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

C.T.= Cane Tops Bagg: Bagasse

Table-24

CROPPING PATTERN ON SAMPLE FARMS IN SAMPLE WATER COURSE RD.45800

Sr. No.	Crops	Area											
		Head			Middle			Tail			All Places		
		Hect-are	% of season	% of year	Hect-are	% of season	% of year	Hect-are	% of season	% of year	Hect-are	% of season	% of year
0	1	2	3	4	5	6	7	8	9	10	11	12	13
I.	Kharif 1987												
	1. Maize	2.33	53.56	13.63	3.79	35.52	18.60	2.43	60.00	27.74	8.55	44.83	18.49
	2. Sorghum	1.01	23.22	5.91	2.93	27.46	14.38	1.62	40.00	18.49	5.56	29.16	12.02
	3. Sugarcane	1.01	23.22	5.90	3.95	37.02	19.38	-	-	-	4.96	26.01	10.73
	4. Pigeon Pea	-	-	-	-	-	-	-	-	-	-	-	-
	5. All Kharif Crops	4.35	100.00	25.44	10.67	100.00	52.36	4.05	100.00	46.23	19.07	100.00	41.24
II.	Rabi 1987-88												
	1. Wheat	9.36	73.41	51.74	7.28	74.97	35.72	3.69	78.34	42.12	20.33	74.83	43.97
	2. Barley	0.51	4.00	2.98	0.61	6.28	2.99	0.41	8.70	4.68	1.53	5.63	3.31
	3. Berseem	2.88	22.59	16.84	1.82	18.74	3.93	0.61	12.95	6.96	5.31	19.54	11.48
	4. Spinach	-	-	-	-	-	-	-	-	-	-	-	-
	5. All Rabi Crops	12.75	100.00	74.56	9.71	100.00	47.64	4.71	100.00	53.77	27.17	100.00	58.76
III.	Kharif + Rabi	17.10	-	100.00	20.38	-	100.00	8.76	-	100.00	46.24	-	100.00

Table-[illegible]

[illegible]

Sr. No.	Operations	Land (Area grown: 2.32 ha) Manpower Total	Manpower Per hectare	Animal Pairs Total	Animal Pairs Per hectare	Machine Total	Machine Per hectare	[illegible] Total	[illegible] Per hectare	[illegible] Total	[illegible] Per hectare	[illegible] Total	[illegible] Per hectare	[illegible] Total	[illegible] Per hectare	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Ploughing	11.85	5.10	10.00	4.29	15.00	6.44	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.15	[illegible]	43.13	[illegible]	8.64	44.63	5.32	[illegible]	13.93	43.00	5.61
2.	Levelling	-	-	-	-	-	-	[illegible]	1.94	[illegible]	1.94	-	-	[illegible]	[illegible]	[illegible]	[illegible]	-	-	22.65	2.67	[illegible]	8.67	-	-
3.	Planking	0.63	0.27	0.63	0.27	-	-	[illegible]	[illegible]	[illegible]	1.8	-	-	[illegible]	[illegible]	[illegible]	[illegible]	-	-	33.24	2.72	33.24	2.72	-	-
4.	Sowing	3.56	1.53	2.75	1.18	6.50	2.79	14.25	[illegible]	[illegible]	2.53	[illegible]	1.19	[illegible]	[illegible]	[illegible]	4.05	12.03	6.94	19.56	2.27	50.38	5.89	22.00	2.69
5.	Watering	5.91	2.54	-	-	-	-	[illegible]	[illegible]	-	-	-	-	[illegible]	[illegible]	-	-	-	-	14.49	1.69	-	-	-	-
6.	F.Y.Manure	2.89	1.20	2.50	1.07	-	-	3.87	[illegible]	2.10	0.79	-	-	[illegible]	1.65	[illegible]	1.44	-	-	10.67	1.25	9.00	1.05	-	-
7.	Chem.Fertilizer	0.45	0.19	-	-	-	-	0.45	[illegible]	-	-	-	-	[illegible]	[illegible]	-	-	-	-	0.93	0.11	-	-	-	-
8.	Hoeing/weeding	-	-	-	-	-	-	11.10	[illegible]	-	-	-	-	[illegible]	9.51	-	-	-	-	34.20	4.00	-	-	-	-
9.	Harvesting	[illegible]	6.01	-	-	-	-	26.25	6.53	-	-	-	-	33.60	15.64	-	-	-	-	78.25	9.15	-	-	-	-
10.	Carriage to Threshing yard Bari	0.25	0.11	0.25	0.11	-	-	0.68	0.18	0.68	0.18	-	-	[illegible]	2.47	0.75	2.47	-	-	6.93	0.81	1.61	0.20	-	-
11.	Threshing/winnowing [illegible]	3.50	1.50	-	-	-	-	6.50	1.72	-	-	-	-	13.00	5.35	-	-	-	-	23.00	2.69	-	-	-	-
12.	Bur fetching	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13.	Total	43.95	18.45	16.13	6.92	21.50	9.23	112.34	29.64	59.92	15.81	16.50	4.35	123.43	50.79	150.10	61.77	33.00	13.58	278.75	32.60	226.15	26.45	71.00	8.30

MANUAL ANIMAL - [illegible] TIME CONSUMED IN CULTIVATION
OF SORGHUM SAMPLE - [illegible] STUDY [illegible]

S. No.	Operations	Head (Area sown: 1.01)						Middle (Area sown: 2.[illegible])						Tail (Area sown: 1.62)						All Places (Area sown: 5.5[illegible])					
		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours	
		Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.
0	1	2	3	4	5	3	7	8	9	1[illegible]	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Ploughing	1.88	1.86	1.00	0.99	4.00	3.96	13.25	4.52	12.00	4.10	10.50	3.58	1.25	0.77	-	-	9.00	5.56	16.38	2.95	13.00	2.34	23.50	4.23
2.	Levelling	-	-	-	-	-	-	3.00	1.02	3.00	1.02	-	-	-	-	-	-	-	-	3.00	0.54	3.00	0.54	-	-
3.	Planking	0.25	0.25	0.25	0.25	-	-	3.00	1.02	3.00	1.02	-	-	-	-	-	-	-	-	3.25	0.58	3.25	0.58	-	-
4.	Sowing	0.75	0.74	0.50	0.50	2.00	1.98	6.63	2.26	6.00	2.05	5.00	1.71	0.75	0.46	-	-	6.00	3.70	8.13	1.46	6.50	1.17	13.00	2.34
5.	Watering	2.00	1.98	-	-	-	-	9.37	3.20	-	-	-	-	3.25	2.01	-	-	-	-	14.62	2.63	-	-	-	-
6.	F.Y.Manure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Che:Fertilizer	0.30	0.30	-	-	-	-	0.43	0.15	-	-	-	-	0.42	0.26	-	-	-	-	1.15	0.21	-	-	-	-
8.	Hoeing/Weeding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Harvesting	3.00	2.97	-	-	-	-	12.00	4.10	-	-	-	-	4.00	2.47	-	-	-	-	19.00	3.42	-	-	-	-
10.	Carriage to threshing/yard Gani	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11.	Threshing/Winnowing/cane crushing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12.	Gur Making	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13.	Total	8.18	8.10	1.75	1.73	6.00	5.94	47.68	16.27	24.00	8.19	15.50	5.29	9.67	5.97	-	-	15.00	9.26	65.53	11.79	25.75	4.63	36.50	6.56

Table-27

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF SUGARCANE IN SAMPLE WATER COURSE 9T.45800

Sr. No.	Operations	Head (Area sown: 1.01)						Middle (Area sown: 3.95)						Tail (Area sown: 0.00)						All Places (Area sown: 4.96)					
		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours	
		Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.
0	1	2	3	4	5	3	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Ploughing	7.00	6.93	6.00	5.94	-	-	29.75	7.53	28.00	7.09	11.00	2.78	-	-	-	-	-	-	36.75	7.41	34.00	6.85	11.00	2.22
2.	Levelling	1.00	0.99	1.00	0.99	-	-	6.50	1.65	6.00	1.52	-	-	-	-	-	-	-	-	7.50	1.51	7.00	1.41	-	-
3.	Planking	1.13	1.12	1.13	1.12	-	-	6.50	1.65	6.50	1.65	-	-	-	-	-	-	-	-	7.63	1.54	7.63	1.54	-	-
4.	Sowing	14.00	13.86	3.50	3.47	-	-	80.00	20.25	13.00	3.29	3.25	3.25	-	-	-	-	-	-	94.00	18.95	16.50	3.33	3.25	0.66
5.	Watering	3.50	3.47	-	-	-	-	21.83	5.53	-	-	-	-	-	-	-	-	-	-	25.33	5.11	-	-	-	-
6.	F.Y.Manure	1.00	0.99	-	-	-	-	5.00	1.27	-	-	-	-	-	-	-	-	-	-	6.00	1.21	-	-	-	-
7.	Chem.Fertilizer	0.25	0.25	-	-	-	-	1.13	0.29	-	-	-	-	-	-	-	-	-	-	1.38	0.28	-	-	-	-
8.	Hoeing/Weeding	-	-	-	-	-	-	8.00	2.03	-	-	-	-	-	-	-	-	-	-	8.00	1.61	-	-	-	-
9.	Harvesting	20.00	19.80	-	-	-	-	78.00	19.75	-	-	-	-	-	-	-	-	-	-	98.00	19.76	-	-	-	-
10.	Carriage to Threshing/Yard Gani	12.00	11.88	12.00	11.88	-	-	39.00	9.87	39.00	9.87	-	-	-	-	-	-	-	-	51.00	10.28	51.00	10.28	-	-
11.	Threshing/Winowing/cane crushing	16.00	15.84	16.00	15.84	-	-	37.00	9.37	37.00	9.37	-	-	-	-	-	-	-	-	53.00	10.69	53.00	10.69	-	-
12.	Gur Making	64.00	63.37	-	-	-	-	149.00	37.72	-	-	-	-	-	-	-	-	-	-	213.00	42.96	-	-	-	-

Table-28

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF PIGEON PEA IN SAMPLE WATER COURSE RD.45800

(NOT APPLICABLE)

Table-29

NUMBER OF FRUIT PLANTS,TREES & FRUIT
PRODUCTION IN SAMPLE WATER
COURSE RD. 45800

(NOT APPLICABLE)

Table-30

LIVESTOCK HOLDINGS OF SAMPLE HOUSEHOLDS IN
SAMPLE WATER COURSE RD.45800

Sr. No.	Kind of Livestock	No. of H.hold who possess these:	Number of livestock possessed Head											
			Minor			Adult			Total			In-milk		
			a	b	c	a	b	c	a	b	c	a	b	c
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Buffalo	3	4	1.33	0.40	6	2.00	0.60	10	3.33	1.00	6	2.00	0.60
2.	Cow	8	13	1.63	1.30	19	2.38	1.90	32	4.00	3.20	8	1.00	0.80
3.	Goat	-	-	-	-	-	-	-	-	-	-	-	-	-
4.	Sheep	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Bullock	2	-	-	-	4	2.00	0.40	4	2.00	0.40	-	-	-
6.	He Buffalo	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Horse/Male	1	-	-	-	1	1.00	0.10	1	1.00	0.10	-	-	-
8.	Donkey	1	-	-	-	1	1.00	0.10	1	1.00	0.10	-	-	-
9.	Camel	-	-	-	-	-	-	-	-	-	-	-	-	-
10.	Total	15	17	1.13	1.70	31	2.07	3.10	48	3.20	4.80	14	0.93	1.40
11.	Poultry	10	64	6.40	6.40	132	13.20	13.20	196	19.60	19.60	-	-	-

(Contd.....)

Total Household: 30
Head: 10
Middle: 10
Tail: 10

a. Total animal
b. Number per owner
c. Number per sample household in general

Table-30

LIVESTOCK HOLDINGS OF SAMPLE HOUSEHOLDS IN
SAMPLE WATER COURSE RD.45800

Sr. No.	Kind of Livestock	No. of t.hold who possess these:	Number of livestock possessed											
			Middle											
			Minor			Adult			Total			Ig-mill		
			a	b	c	a	b	c	a	b	c	a	b	c
0	0	15	16	17	18	19	20	21	22	23	24	25	26	27
1.	Buffalo	6	8	1.33	0.80	10	1.67	1.00	18	3.00	1.80	7	1.17	0.70
2.	Cow	3	4	1.33	0.40	4	1.33	0.40	8	2.67	0.90	3	1.00	0.30
3.	Goat	1	-	-	-	1	1.00	0.10	1	1.00	0.10	-	-	-
4.	Sheep	2	-	-	-	3	1.50	0.30	3	1.50	0.30	-	-	-
5.	Bullock	2	-		-	4	2.00	0.40	4	2.00	0.40	-	-	-
6.	He Buffalo	1	-	-	-	1	1.00	0.10	1	1.00	0.10	-	-	-
7.	Horse/Mule	-	-	-	-	-	-	-	-	-	-	-	-	-
8.	Donkey	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Camel	-	-	-	-	-	-	-	-	-	-	-	-	-
10.	Total	15	12	0.80	1.20	23	1.53	2.30	35	2.33	3.50	10	0.67	1.00
11.	Poultry	9	79	8.78	7.90	125	13.89	12.50	204	22.67	20.40	-	-	-

(Contd....)

Total Household:30
Head:10
Middle:10
Tail:10

a. Total animal
b. Number per owner
c. Number per sample household in general

Table-30

LIVESTOCK HOLDINGS OF SAMPLE HOUSEHOLDS
IN SAMPLE WATER COURSE RD.45800

Sr. No.	Kind of Livestock	No. of H.hold who possess these:	Number of livestock possessed											
			Tail											
			Minor			Adult			Total			In-milk		
			a	b	c	a	b	c	a	b	c	a	b	c
0	0	28	29	30	31	32	33	34	35	36	37	38	39	40
1.	Buffalo	4	3	0.75	0.30	5	1.25	0.50	8	2.00	0.80	5	1.25	0.50
2.	Cow	8	15	1.88	1.50	16	2.00	1.60	31	3.88	3.10	7	0.88	0.70
3.	Goat	4	3	0.75	0.30	10	2.50	1.00	13	3.25	1.30	6	1.50	0.60
4.	Sheep	1	1	1.00	0.10	2	2.00	0.20	3	3.00	0.30	2	2.00	0.20
5.	Bullock	1	1	1.00	0.10	-	-	-	1	1.00	0.10	-	-	-
6.	He Buffalo	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Horse/Mule	-	-	-	-	-	-	-	-	-	-	-	-	-
8.	Donkey	3	-	-	-	3	1.00	0.30	3	1.00	0.30	-	-	-
9.	Camel	-	-	-	-	-	-	-	-	-	-	-	-	-
10.	Total	21	23	1.10	2.30	36	1.71	3.60	59	2.81	5.90	20	0.95	2.00
11.	Poultry	8	58	7.25	5.80	44	5.50	4.40	102	12.75	10.20	-	-	-

(Contd....)

Total Household:30
Head:10
Middle:10
Tail:10

a. Total animal
b. Number per owner
c. number per sample household in general

Table-30

LIVESTOCK HOLDING OF SAMPLE HOUSEHOLDS
IN SAMPLE WATER COURSE RD.45800

Sr. No.	Kind of Livestock	No. of household who possess these:				Number of livestock possessed All places											
						Minor			Adult			Total			In-milk		
		Head	Middle	Tail	All Places	a	b	c	a	b	c	a	b	c	a	b	c
0	0	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
1.	Buffalo	3	6	4	13	15	1.15	0.50	21	1.62	0.70	36	2.77	1.20	18	1.38	0.60
2.	Cow	8	3	8	19	32	1.68	1.07	39	2.05	1.30	71	3.74	2.37	18	0.95	0.60
3.	Goat	-	1	4	5	3	0.60	0.10	11	2.20	0.37	14	2.80	0.47	6	1.20	0.20
4.	Sheep	-	2	1	3	1	0.33	0.03	5	1.67	0.17	6	2.00	0.20	2	0.67	0.07
5.	Bullock	2	2	1	5	1	0.20	0.03	8	1.60	0.27	9	1.80	0.30		-	-
6.	He Buffalo	-	1	-	1	-	-	-	1	1.00	0.03	1	1.00	0.03	-	-	-
7.	Horse/Mule	1	-	-	1	-	-	-	1	1.00	0.03	1	1.00	0.03	-	-	-
8.	Donkey	1	-	3	4	-	-	-	4	1.00	0.13	4	1.00	0.13	-	-	-
9.	Camel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.	Total	15	15	21	51	52	1.02	1.73	90	1.76	3.00	142	2.78	4.73	44	0.86	1.47
11.	Poultry	10	9	8	27	201	7.44	6.70	301	11.15	10.03	502	18.59	16.73	-	-	-

Total Household:30
Head:10
Middle:10
Tail:10

a. Total animal (Concluded)
b. Number per owner
c. Number per sample household in general

Table-31

MILK PRODUCTION AND UTILIZATION IN SAMPLE
WATER COURSE RD. 45,000

Sr. No.	Particulars	Unit	Head (Total sample farmers = 10.00)					Middle (Total sample farmers= 10)				
			Buffalo	Cow	Goat	Sheep	Total	Buffalo	Cow	Goat	Sheep	Total
0	1	2	3	4	5	6	7	8	9	10	11	12
1.	In milk animals	Number	6.00	8.00	-	-	14	7	3	-	-	
2.	Number of owners	Number	3.00	8.00	-	-	11	4	2	-	-	
3.	Avg.Daily milk production	Litre	3.70	2.50	-	-		4.88	3	-	-	
4.	Avg.Monthly milk Production (1 x 3 x 30)	Litre	666.00	600.00	-	-		1025	270	-	-	
5.	Avg.Monthly sale (in normal in-milk state)	Litre	480.00	-	-	-		240	-	-	-	
6.	5 as %age of 4 (5÷4x100)	%age	72.07	-	-	-		23.41	-	-	-	
7.	Lactation period	Day	[illegible]	200.00		-		303		-	-	
8.	Total Production per lactation period (1x3x7)	Litre	6771.00	4000.00	-	-		10419	-	-	-	
9.	Estimated sale per lactation period(6x8÷100)		4808.00	-	-	-		2437	-	-	-	
10.	Price per litre	Rs.	5.00	-	-	-		6	-	-	-	
11.	Estimated receipt from sales per lactation period (9x10)	Rs.	24040.00	-	-	-		14634	-	-	-	
12.	Avg. annual sale proceeds:											
	a. per owner household 11 ÷ 2	Rs.	8133.00	-	-	-		3659	-	-	-	
	b. per sample household in general	Rs.	2440.00	-	-	-		1463	-	-	-	

td....)

Table-31

MILK PRODUCTION AND UTILIZATION IN SAMPLE
WATER COURSE RD. 45,800

Sr. No.	Particulars	Unit	Tail (Total sample farmers = 10.00)					A.Places(Total Sample Farmers= 30)				
			Buffalo	Cow	Goat	Sheep	Total	Buffalo	Cow	Goat	Sheep	Total
0		0	14	15	16	17	18	19	20	21	22	23
1.	In Milk Animals	Number	5	7	6	2	-	18	18	6	2	-
2.	Number of owners	Number	4	4	3	1	-	11	14	-	-	-
3.	Avg.Daily Milk Production	Litre	5	3	0.50	0.50	-	4.50	2.75	-	-	-
4.	Avg. Monthly Milk Production (1 x 3 30)	Litre	750	-	-	-	-	2430	1485	-	-	-
5.	Avg. Monthly sale (in normal in-milk state)	Litre	510	-	-	-	-	1230	-	-	-	-
6.	5 as %age if 4(5÷4x100)	%age	68	-	-	-	-	50.62	-	-	-	-
7.	Lactation Period	Day	305	-	-	-	-	305	-	-	-	-
8.	Total Production per lactation period (1x3x7)	Litre	7625	-	-	-	-	24705	-	-	-	-
9.	Estimated sale per lactation period(6x8÷100)		5185	-	-	-	-	12506	-	-	-	-
10.	Price per litre	Rs.	6	-	-	-	-	5.75	-	-	-	-
11.	Estimated receipt from sales per lactation period (9x10)	Rs.	31110	-	-	-	-	71910	-	-	-	-
12.	Avg. Annual sale Proceed:											
	a: per owner household (11 ÷ 2)	Rs.	7776	-	-	-	-	5537	-	-	-	-
	b: per sample household in general	Rs.	3111	-	-	-	-	2397	-	-	-	-

(Concluded)

Table-32

INCOME FROM SALE OF DAIRY PRODUCTS (OTHER THAN MILK)
DURING SIX MONTHS PRECEDING INTERVIEW OF SAMPLE HOUSEHOLDS
IN KHARIF 1987 IN SAMPLE WATER COURSE RD.45800

Sr. No.	I t e m	Household Reporting sales				Gross Income (Rs)	Average Income:	
		Head	Middle	Tail	All Places		Per selling H.hold (Rs)	Per sample Household in general (Rs)
0	1	2	3	4	5	6	7	8
1.	Butter	-	-	-	-	-	-	-
2.	Ghee	-	-	-	-	-	-	-
3.	Eggs	-	-	-	-	-	-	-
4.	Poultry	-	-	-	-	-	-	-
5.	Animals	-	-	-	-	-	-	-
6.	Hides	-	-	2	2	520	-	-
7.	Skins	2	-	3	5	770	-	-
8.	Wool	-	-	-	-	-	-	-
9.	Hair	-	-	-	-	-	-	-
10	Manure	-	-	-	-	-	-	-
11.	Total	2	-	5	7	1290	-	-

Households:

1. Head : 10
2. Middle : 10
3. Tail : 10
4. A.Places: 30

Table-33

INCOME FROM HIRING OUT OF LIVESTOCK
IN SAMPLE WATER COURSE RD. 45800

(NOT APPLICABLE)

Table-34

INCOME FROM SELECTED SOURCES DURING SIX MONTHS BEFORE INTERVIEW IN KHARIF 1987 IN SAMPLE WATER COURSE RD. 45800

Sr. No.	Particulars	Unit	Sources: Rent of Land	Rent of other property	Trade	Industry	Foreign remittances	Home remittances	Other	Total
0	1	2	3	4	5	6	7	8	9	10
1.	H.holds reporting income:	No								
	Head		-	-	2	1	2	-	1	6
	Middle		-	-	1	1	-	1	-	3
	Tail		-	-	4	-	-	1	-	5
	All Places		-	-	7	2	2	2	1	14
2.	Total Income:	Rs.								
	Head		-	-	4000	5000	78000	-	18000	105000
	Middle		-	-	18000	3000	-	2000	-	23000
	Tail		-	-	36200	-	-	12000	-	48200
	All Places	Rs.	-	-	58200	8000	78000	14000	18000	176200
3.	Avg. Income of Recipients:	Rs.								
	Head		-	-	2000	5000	39000	-	18000	17500
	Middle		-	-	18000	3000	-	2000	-	7667
	Tail		-	-	9050	-	-	12000	-	9640
	All Places	Rs.	-	-	8314	4000	39000	7000	18000	12586
4.	Avg.Income of sample households in General:	Rs.								
	Head		-	-	400	500	7800	-	1800	10500
	Middle		-	-	1800	300	-	200	-	2300
	Tail		-	-	3620	-	-	1200	-	4820
	All Places	Rs.	-	-	1940	267	2600	467	600	5873

Household:

1. Head 10
2. Middle 10
3. Tail 10
4. Total 30

Table-35

PERMANENT LABOUR ON FARM IN SAMPLE WATER COURSE RD.45800

Sr. No.	PARTICULARS	UNIT	HEAD	MIDDLE	TAIL	ALL PLACES
0	1	2	3	4	5	6
1.	Total sample H.holds	No	10	10	10	30
2.	H.holds who have permanent labour	No	-	2	-	2
3.	2 as % of 1	No	-	20	-	6.67
4.	Total labourers	No	-	2	-	2
5.	Labourers per:					
	a) Employing H.holds	No	-	1	-	1
	b) Sample H.hold in General	Rs.	-	0.2	-	0.07
6.	Wages paid in Kharif in cash	Rs.	-	2700	-	2700
7.	Value of other payments made in Kharif	Rs.	-	1500	-	1500
8.	Total payments (6 + 7)	Rs.	-	4200	-	4200
9.	Avg. payment per paying household	Rs.	-	2100	-	2100
10.	Avg. payment per sample household	Rs.	-	420	-	140

Table-1

AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS IN SAMPLE WATERCOURSE RD.45800

Sr. No.	Crops	Location	Area	Main Product			By Product		
				Unit	Total	Per Hectare	Unit	Total	Per Hectare
0	1	2	3	4	5	6	7	8	9
1.	Wheat	Head	7.35	Mds	[illegible]	27.67	Bundle	[illegible]	[illegible]
		Middle	7.28	Mds	243.00	33.38	Bundle	491.00	67.4[illegible]
		Tail	3.69	Mds	120.80	32.74	Bundle	239.53	64.9
		Total	20.33	Mds	622.80	30.63	Bundle	1245.53	61.8
2.	Barley Grain	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	
		Tail	-	-	-	-	-	-	-
		Total	-	-	-	-	-		-
3.	Barley Fodder	Head	0.51	-	-	-	Rs.	[illegible]	4[illegible]15.6[illegible]
		Middle	0.61	-	-	-	Rs.	[illegible]	[illegible]
		Tail	0.41	-	-	-	Rs.	[illegible]	[illegible]
		Total	1.53	-	-	-	Rs.	[illegible]	3856.2[illegible]
4.	Berseem	Head	2.88	Rs.	15420.00	5348.60	-	-	-
		Middle	1.82	Rs.	12300.00	6754.53	-	-	-
		Tail	0.60	Rs.	3000.00	4942.34	-	-	
		Total	5.31	Rs.	30720.00	5784.22	-	-	-
5.	Pea	Head	-	-	-		-	-	-
		Middle	-	-	-	-	-		-
		Tail	-	-	-	-	-	-	-
		Total	-	-	-	-	-	-	-
6.	Spinach	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	-	-	-	-	-	-	-

Table-2

AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS OUTSIDE SAMPLE WATERCOURSE RD.45800

Sr. No.	Crops	Location	Area	Main Product			By Product		
				Unit	Total	Per Hectare	Unit	Total	Per Hectare
0	1	2				6	7	8	9
1.	Wheat	Head	1.62	Mds	125.00	77.21	Bundle	252	155.65
		Middle	10.78	Mds	244.00	22.65	Bundle	498	46.22
		Tail	1.82	Mds	48.00	26.36	Bundle	95	52.17
		Total	14.22	Mds	417.00	29.34	Bundle	845	59.44
2.	Barley Grain	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-		-
		Tail	-	-	-				
		Total	-	-	-	-			
3.	Barley Fodder	Head	0.20	-	-	-	Rs.	[illegible]	[illegible]
		Middle	0.81	-	-	-	Rs.	400	494.44
		Tail	-	-	-	-	-	-	-
		Total	1.01	-	-	-	Rs.	[illegible]	[illegible]
4.	Berseem	Head	-	-	-	-	-	-	-
		Middle	1.87	Rs.	10500.00	5611.97	-	-	-
		Tail	0.30	Rs.	3000.00	594.93	-	-	
		Total	2.18	Rs.	13500.00	6206.90	-	-	-
5.	Pea	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	-	-	-	-	-	-	-
6.	Spinach	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	-	-	-	-	-	-	-

Table-3

DISPOSAL OF MAIN PRODUCTS OF CROPS IN SAMPLE WATER COURSE RD. 45800

Sr. No.	Crop Mode of Disposal	Wheat (Mds) Head Qty.	Wheat Head %	Wheat Middle Qty.	Wheat Middle %	Wheat Tail Qty.	Wheat Tail %	Wheat All Places Qty.	Wheat All Places %	Barley (Mds) Head Qty.	Barley Head %	Barley Middle Qty	Barley Middle %	Barley Tail Qty	Barley Tail %	Barley All Places Qty.	Barley All Places %
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
I	Total Output	384	100	487	100	168	100	1039	100	-	-	-	-	-	-	-	-
II.	Disposal																
	1.Retained for H.use	268	69.70	270.4	55.52	132.12	78.61	670.5	64.53	-	-	-	-	-	-	-	-
	2.Sold	1	0.26	4	0.82	-	-	5	0.48	-	-	-	-	-	-	-	-
	3.Landlord's Share	67	17.45	180	36.96	9.96	5.93	256.9	24.73	-	-	-	-	-	-	-	-
	4.Artisan's dues	4	1.04	5.8	1.19	1.5	0.89	11.3	1.09	-	-	-	-	-	-	-	-
	5.Given to Labourers	9	2.34	3	0.62	6.3	3.75	18.3	1.76	-	-	-	-	-	-	-	-
	6.Seed	17	4.43	3	0.62	0	-	20	1.92	-	-	-	-	-	-	-	-
	7.Usher/Charity	11	2.86	11.7	2.40	17.5	10.41	40.2	3.87	-	-	-	-	-	-	-	-
	8.Other Specify	7	1.82	9.1	1.87	0.7	0.42	16.8	1.62	-	-	-	-	-	-	-	-
III.	Total =All Uses	384	100	487	100	168	100	1039	100	-	-	-	-	-	-	-	-

(Contd...)

DISPOSAL OF MAIN [illegible] IN SAM[illegible] COURSE [illegible]

Sr. No.	Crop Mode of Disposal	[illegible]								[illegible]															
		Head		Middle		Tail		Total		Head		Middle		Tail		Total		Head		Middle		Tail		Total	
		Rs.	%	Rs.	%	Rs.	%	Rs.	%	Rs.	%	Rs.	%	Rs.	%	Rs.	%	Rs.	%	Rs.	%	Rs.	%	Rs.	%
0	1	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
I	Total Output	15420	100	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II.	Disposal																								
	1.Retained for House	12820	83.14	6150	26.97	3000	50.00	21[illegible]	49.69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.Sold	-	-	10500	46.05	3000	50.00	13[illegible]	31.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3.Landlord's Share	2600	16.86	1650	26.97	-	-	8[illegible]	19.79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4.Artisan's dues	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5.Given to Labourers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6.Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7.Usher-Charity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8.Other Specify	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
III.	Total all Uses	15420	100	22800	100	6000	100	44220	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-4

DISPOSAL OF BY-PRODUCTS OF CROPS IN SAMPLE WATER COURSE RD.45300

Sr. No.	Crop Mode of Disposal	Wheat (Mds)								Barley (Rs)							
		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places	
		Qty.	%	Qty.	%	Qty.	%	Qty.	%	Rs.	%	Rs.	%	Rs.	%	Rs.	%
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
I	Total Output	778	100	989	100	334.53	100	2101.53	100	2950	100	2600	100	1550	100	7100	100
II.	Disposal																
	1.Retained for H.use	778	100.00	989	100.00	334.53	100	2101.53	100	1075	36.44	1100	42.31	775	50.00	2950	41.55
	2.Sold	-	-	-	-	-	-	-	-	800	27.12	400	15.38	-	-	1200	16.90
	3.Landlord's Share	-	-	-	-	-	-	-	-	1075	36.44	1100	42.31	775	50.00	2950	41.55
	4.Artisan's dues	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5.Given to Labourers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6.Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7.Usher/Charity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8.Other Specify	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
III.	Total =All Uses	778	100	989	100	334.53	100	2101.53	100	2950	100	2600	100	1550	100	7100	100

(Contd....)

Table-4

DISPOSAL OF BY-PRODUCTS OF CROPS IN SAMPLE WATER COURSE RD.45800

Sr. No.	Crop Mode of Disposal	Berseem (Rs)								Pea (Mds)								Spinach (Mds)							
		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places	
		Rs.	%	Rs.	%	Rs.	%	Rs.	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%
0	1	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
I	Total Output	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II.	Disposal																								
	1.Retained for H.use	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.Sold	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3.Landlord's Share	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4.Artisan's dues	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5.Given to Labourers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6.Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7.Usher/Charity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8.Other Specify	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II.	Total =All Uses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(Concluded)

Table-5

MODE OF SALE OF WHEAT IN SAMPLE WATER COURSE RD.45800

Sr. No.	Mode of Sale	Head		Middle		Tail		All Places	
		Qty	%	Qty	%	Qty	%	Qty	%
0	1	2	3	4	5	6	7	8	9
I.	In Village	1	100	4	100	-	-	5	100
	1. To Beoparis	-	-	-	-	-	-	-	-
	2. To Shop Keepers	-	-	-	-	-	-	-	-
	3. To others	1	100	4	100	-	-	5	100
II.	In other villages	-	-	-	-	-	-	-	-
	1. To Beoparis	-	-	-	-	-	-	-	-
	2. To Shop Keepers	-	-	-	-	-	-	-	-
	3. To others	-	-	-	-	-	-	-	-
III.	In Peshawar	-	-	-	-	-	-	-	-
	1. Through Commission Agents	-	-	-	-	-	-	-	-
	2. To whole sellers	-	-	-	-	-	-	-	-
	3. To others	-	-	-	-	-	-	-	-
IV.	In other urban centres	-	-	-	-	-	-	-	-
V.	Total Sales	1	100	4	100	-	-	5	100

Table-6

MODE OF SALE OF BARLEY IN SAMPLE WATER COURSE RD.45800

(NOT APPLICABLE)

Table-7

MODE OF SALE OF BERSEEM IN SAMPLE WATER COURSE RD.45800

Sr. No.	Mode of Sale	Head		Middle		Tail		All Places	
		Qty	%	Qty	%	Qty	%	Qty	%
0	1	2	3	4	5	6	7	8	9
I.	In Village	-	-	10500	100	3000	100	13500	100
	1. To Beoparis	-	-	-	-	-	-	-	-
	2. To Shop Keepers	-	-	-	-	-	-	-	-
	3. To others	-	-	10500	100	3000	100	13500	100
II.	In other villages	-	-	-	-	-	-	-	-
	1. To Beoparis	-	-	-	-	-	-	-	-
	2. To Shop Keepers	-	-	-	-	-	-	-	-
	3. To others	-	-	-	-	-	-	-	-
III.	In Peshawar	-	-	-	-	-	-	-	-
	1. Through Commission Agents	-	-	-	-	-	-	-	-
	2. To whole sellers	-	-	-	-	-	-	-	-
	3. To others	-	-	-	-	-	-	-	-
IV.	In other urban centres	-	-	-	-	-	-	-	-
V.	Total Sales	-	-	10500	100	3000	100	13500	100

Table-8

MODE OF SALE OF PEA IN SAMPLE WATER COURSE RD.45800

(NOT APPLICABLE)

Table-9

MODE OF SALE OF SPINACH IN SAMPLE WATER COURSE RD.45800

(NOT APPLICABLE)

Table-10

NUMBER OF FARMERS REPORTING CONSUMPTION OF CHEMICAL FERTILIZERS IN SAMPLE WATER COURSE RD.45800

Sr. No.	Location of farm	Total farmers growing this crop No(=100)	Farmers using fertilizers: Urea No.	Urea %	D A P No.	D A P %	N P K No.	N P K %	N P No.	N P %	Ammonium Sulphate No.	Ammonium Sulphate %	Ammonium Nitrate No.	Ammonium Nitrate %	P.Sulphate No.	P.Sulphate %
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
I.	WHEAT															
	a.Head of W.C.	9	22.5	40.00	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	7	16.5	42.42	0.5	3.03	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	6	9.45	63.49	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	22	46.45	45.41	0.5	1.03	-	-	-	-	-	-	-	-	-	-
II.	BARLEY															
	a.Head of W.C.	4	2	200.00	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	2	1.5	133.33	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	2	2	100.00	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	8	5.5	145.45	-	-	-	-	-	-	-	-	-	-	-	-
III.	BERSEEM															
	a.Head of W.C.	7	5.5	127.27	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	5	2.5	200.00	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	3	1	300.00	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	15	9	166.67	-	-	-	-	-	-	-	-	-	-	-	-
IV.	P E A															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V.	SPINACH															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-11

QUANTITY OF CHEMICAL FERTILIZERS USED BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD.45800

Sr. No.	Location of farm	Area sown (Hectare)	Quantity of fertilizer used (KG)													
			Urea		D A P		N P K		N P		Ammonium Sulphate		Ammonium Nitrate		F.Sulphate	
			Total	Per Hectare	Total	Per Hectare	Total	Per Hectare	Total	Per Hectare	Total	Per Hectare	Total	Per Hectare	Total	Per Hectare
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
I.	WHEAT															
	a.Head of W.C.	9.36	1125	120.19	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	7.28	825	113.32	25	3.43	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	3.69	473	128.18	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	20.33	2423	119.18	25	3.43	-	-	-	-	-	-	-	-	-	-
II.	BARLEY															
	a.Head of W.C.	0.51	100	196.08	-	-	-	-	-	-		-				
	b.Middle of W.C.	0.61	75	122.95		-	-	-	-	-						-
	c.Tail of W.C.	0.41	100	243.90	-	-	-	-	-	-		-		-	-	
	d.All Places	1.53	275	179.74	-	-	-	-	-	-	-	-	-	-		
III.	PERSEEM															
	a.Head of W.C.	2.88	275	95.49	-	-	-	-	-	-	-	-	-		-	-
	b.Middle of W.C.	1.82	125	68.68	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	0.61	450	737.70	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	5.31	850	160.80	-	-	-	-	-	-	-	-	-	-	-	-
IV.	P E A															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V.	SPINACH															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-12

CONSUMPTION OF FARM YARD MANURE IN SAMPLE WATER COURSE RD.45800

Sr. No.	Location of farm	Total farmers growing this crop	Farmers using Farm Yard Manure No.	%	Area Sown (Hectare)	Quantity used (KG) Total	Per Hectare
0	1	2	3	4	5	6	7
I.	WHEAT						
	a.Head of W.C.	9	4	44.44	9.36	9702	1037
	b.Middle of W.C.	7	-	-	7.28	-	-
	c.Tail of W.C.	6	1	-	16.67	2612	708
	d.All Places	22	5	22.73	20.33	12315	606
II.	BARLEY						
	a.Head of W.C.	4	2	50.00	0.51	5599	10976
	b.Middle of W.C.	2	-	-	0.61	-	-
	c.Tail of W.C.	2	-	-	0.41	-	-
	d.All Places	8	2	50.00	1.[illegible]	[illegible]	36[illegible]
III.	BERSEEM						
	a.Head of W.C.	7	1	14.[illegible]	2.88	2[illegible]	[illegible]
	b.Middle of W.C.	5	2	40.00	1.82	[illegible]	1[illegible]
	c.Tail of W.C.	3	1	33.33	0.61	2732	6118
	d.All Places	15	4	26.67	5.31	9733	1[illegible]
IV.	PEA						
	a.Head of W.C.	-	-	-	-	-	
	b.Middle of W.C.	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-
	d.All Places	-	-	-	-		-
V.	SPINACH						
	a.Head of W.C.	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-

Table-13

NUMBER OF SAMPLE FARMERS WHO USED INSECTICIDES/ PESTICIDES/WEEDICIDES IN SAMPLE WATER COURSE RD.45800

(NOT APPLICABLE)

Table-14

QUANTITY OF SEED USED BY SAMPLE FARMERS
IN SAMPLE WATER COURSE RD.45800

Sr. No.	Crop	Total Area (Hectare)	Head Quantity used			Middle Quantity used			Tail Quantity used			All Places Quantity used		
			Improved	Local	Total	Improved	Local	Total	Improved	Local	Total	Improved	Local	Total
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Wheat	20.33	-	874	874	-	710	710	-	334	334	-	1918	1918
2.	Barley	1.53	-	58	58	-	75	75	-	88	88	-	220	220
3.	Berseem	5.31	-	56	56	-	49	49	-	10	10	-	115	115
4.	Pea	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Spinach	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-15

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD.45800

Crop: Wheat Area: 20.93 ha. (i) Head : 9.35 ha (ii) Middle: 7.28 ha. (iii) Tail: 3.69 ha.

Sr. No.	Physical Input	Head						Middle						Tail						All Places					
		Purchased		Self Supplied		Total (2+4)		Purchased		Self Supplied		Total (8+10)		Purchased		Self Supplied		Total (14+16)		Purchased (3+9+15)		Self Supplied (4+10+16)		Total	
		Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.
2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Seed	112	13	763	81	874	93	458	63	252	35	710	97	212	58	122	33	234	91	781	-	1137	-	1918	-
2.	Farm Yard Manure	-	-	540	58	540	58	-	-	-	-	-	-	-	-	105	28	105	28	-	-	645	-	645	-
3.	Chemical Fertilizer	2105	232	-	-	3105	332	2308	317	-	-	2308	317	1341	363	-	-	1341	363	6754	-	-	-	6754	-
4.	Insecticide/ Pesticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Water Charges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	Dues of Artisans	800	85	-	-	800	85	1000	137	-	-	1000	137	140	38	-	-	140	38	1940	-	-	-	1940	-
7.	Total	4017	429	1303	139	5319	568	3766	517	252	35	4018	552	1693	459	227	62	1920	520	9475	-	1782	-	11257	-

Table [illegible]

LABOUR INPUT [illegible] PER [illegible] [illegible]

Crop: Wheat — Area: [illegible].33 ha. — i) Head: [illegible] ha. — ii) Middle: [illegible] ha. — iii) Tail: [illegible] ha. — All Plots

Sr. No.	Operations	Labour inputs	Head: Paid Total	Head: Paid Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (3+5) Total	Head: Total (3+5) Per Hect.	Middle: Paid Total	Middle: Paid Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect.	Tail: Paid Total	Tail: Paid Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect.	All Plots: Paid (3+9+15) Total	All Plots: Paid (3+9+15) Per Hect.	All Plots: Self Supp. (5+11+17) Total	All Plots: Self Supp. (5+11+17) Per Hect.	All Plots: Total (21+23) Total	All Plots: Total (21+23) Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Ploughing	i.Manual	1080	115	454	49	1534	164	-	-	201	22	201	22	-	-	22	22	22	22	1080	52	737	36	1817	87
	ii.Animal	-	-	2025	216	2025	216	-	-	1560	214	1560	214	-	-	2585	972	2585	972	-	-	3170	333	3170	333
	iii.Machine	3150	337	-	-	3150	337	2025	278	-	-	2025	278	1334	361	-	-	1334	361	6509	326	-	-	6509	326
	iv.Total	4230	452	2479	265	6709	717	2025	278	1761	242	3786	520	1334	361	3667	994	5001	1355	7589	373	3907	389	15496	762
2. Levelling	i.Manual	270	29	68	7	338	36	-	-	15	2	15	2	-	-	-	-	-	-	270	13	83	4	353	17
	ii.Animal	-	-	653	70	653	70	-	-	30	4	30	4	-	-	-	-	-	-	-	-	653	34	683	34
	iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total	270	29	720	77	990	106	-	-	45	6	45	6	-	-	-	-	-	-	270	13	765	38	1036	51
3. Planking	i.Manual	169	18	-	-	169	18	-	-	8	1	34	5	-	-	-	-	-	-	169	8	8	-	176	9
	ii.Animal	-	-	326	35	326	35	113	15	96	10	65	10	-	-	-	-	-	-	112	6	422	21	535	26
	iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total	169	18	326	35	495	53	113	15	104	15	99	15	-	-	-	-	-	-	281	14	430	21	711	35
4. Sowing	i.Manual	540	58	315	34	855	91	-	-	258	35	258	35	-	-	71	19	71	19	540	27	644	32	1184	58
	ii.Animal	-	-	1440	154	1440	154	-	-	50	7	50	7	-	-	-	-	-	-	-	-	1490	73	1490	73
	iii.Machine	660	71	-	-	660	71	935	128	-	-	935	128	540	146	-	-	540	146	2135	105	-	-	2135	105
	iv.Total	1200	128	1755	188	2955	316	935	128	308	42	1243	171	540	146	71	19	611	166	2675	132	2134	105	4809	237
5. Watering	i.Manual	135	14	279	30	414	44	-	-	212	29	212	29	-	-	129	35	129	35	135	7	620	31	755	37
6. Farm Manure	i.Manual	-	-	133	14	133	14	-	-	-	-	-	-	-	-	45	12	45	12	-	-	178	9	178	9

(Contd....)

Table-16

LABOUR INPUT COST IN RS.22000

Crop: Wheat — Area: 20.33 ha. — i) Head: 9.36 ha. — ii) Middle: 7.28 ha. — iii) Tail: 3.69 ha.

Sr. No.	Operations	Labour inputs	Head: Paid Total	Head: Paid Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (3+5) Total	Head: Total (3+5) Per Hect.	Middle: Paid Total	Middle: Paid Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect.	Tail: Paid Total	Tail: Paid Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect.	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect.	All Places: Self Supp. (5+11+17) Total	All Places: Self Supp. (5+11+17) Per Hect.	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
7. Chemical	i.Manual	30	3	110	16	140	15	-	-	96	13	96	13	-	-	67	18	67	18	30	1	272	13	302	15
8. Hoeing/Weed:	i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9. Harvesting	i.Manual	-	-	4.38	501	4383	501	-	-	3930	540	3930	540	-	-	2890	783	2890	783	-	-	11508	566	11508	566
10. Carriage to Threshing Yard	i.Manual	-	-	1510	161	1510	161	-	-	1920	264	1920	264	-	-	495	134	495	134	-	-	3925	193	3925	193
	ii.Animal	-	-	720	98	920	98	-	-	240	33	240	33	-	-	-	-	-	-	-	-	1160	57	1160	57
	iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total	-	-	2430	260	2430	260	-	-	2160	297	2160	297	-	-	495	134	495	134	-	-	5085	250	5085	250
11. Threshing/ Winnowing	i.Manual	-	-	296	32	296	32	-	-	443	61	443	61	-	-	143	39	143	39	-	-	881	43	881	43
	ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iii.Machine	2462	263	-	-	2462	263	2495	343	-	-	2495	343	750	203	-	-	750	203	5707	281	-	-	5707	281
	iv.Total	2462	263	296	32	2758	295	2495	343	443	61	2938	404	750	203	143	39	893	242	5707	281	881	43	6588	250
12. Total	i.Manual	2224	239	51	839	10075	1076	-	-	7038	973	7082	973	-	-	3921	1063	3921	1063	2224	109	18854	927	21078	1037
	ii.Animal	-	-	5364	573	5364	573	113	15	1976	271	2089	287	-	-	3585	972	3585	972	113	6	10925	537	11038	543
	iii.Machine	6272	670	-	-	6272	670	5455	749	-	-	5455	749	2624	711	-	-	2624	711	14351	706	-	-	14351	706
	iv.Total	8496	908	13215	1412	21711	2320	5568	765	9058	1244	14626	2009	2624	711	7506	2034	10130	2745	16688	821	29779	1465	46467	2286

(Concluded)

"Table-1"

PHYSICAL INPUT COST IN SAMPLE WATER CHARGE FIELDS

Crop: Barley. Area: 1.53 ha. Head : [illegible] Middle : 0.61 ha (iii) Tail 0.41 ha

Sr. No.	Physical Input	Head						Middle						Tail						All Places					
		Purchased		Self Supplied		Total (2+4)		Purchased		Self Supplied		Total (8+10)		Purchased		Self Supplied		Total (14+16)		Purchased (2+8+14)		Self Supplied (4+10+16)		Total	
		Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Seed	48	92	10	21	58	113	50	82	25	41	75	123	88	213	-	-	88	213	185	121	35	23	220	144
2.	Farm Yard Manure	-	-	150	294	150	294	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150	98	150	98
3.	Chemical Fertilizer	265	520	-	-	265	520	210	244	-	-	210	244	265	646	-	-	265	646	470	484	-	-	740	484
4.	Insecticide/ Pesticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Water Charges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	Dues of Artisans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Total	313	613	160	314	473	926	260	426	25	41	285	467	353	860	-	-	353	860	925	605	185	121	1110	725

Table [illegible]

LABOUR INPUT [illegible] IN SAMPLE [illegible] OF [illegible]

Crop: Barley Area: 1.53 ha. i) Head: 0.51 ha ii) Middle: [illegible] ha iii) Tail: [illegible] ha

Sr. No.	Operations	Labour Inputs	Head: Paid Total	Head: Paid Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (3+5) Total	Head: Total (3+5) Per Hect.	Middle: Paid Total	Middle: Paid Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect.	Tail: Paid Total	Tail: Paid Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect.	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect.	All Places: Self Supp. (5+11+17) Total	All Places: Self Supp. (5+11+17) Per Hect.	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Ploughing		i.Manual	-	-	75	147	75	147	-	-	156	246	156	246	-	-	30	73	30	73	-	-	255	167	255	167
		ii.Animal	-	-	50	98	50	98	-	-	60	98	60	98	-	-	-	-	-	-	-	-	110	72	110	72
		iii.Machine	330	647	-	-	330	647	120	197	-	-	120	197	210	512	-	-	210	512	660	431	-	-	660	431
		iv.Total	330	647	125	245	455	892	120	197	210	344	330	541	210	512	30	73	240	585	660	431	365	239	1025	670
2. Leveling		i.Manual	-	-	8	15	8	15	-	-	30	49	30	49	-	-	-	-	-	-	-	-	38	25	38	25
		ii.Animal	-	-	13	25	13	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	8	13	8
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		vi.Total	-	-	20	39	20	39	-	-	30	49	30	49	-	-	-	-	-	-	-	-	50	33	50	33
3. Planking		i.Manual	-	-	4	7	4	7	-	-	68	111	68	111	-	-	-	-	-	-	-	-	71	47	71	47
		ii.Animal	-	-	6	12	6	12	-	-	15	25	15	25	-	-	-	-	-	-	-	-	21	14	21	14
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	10	20	10	20	-	-	83	135	83	135	-	-	-	-	-	-	-	-	93	60	93	60
4. Sowing		i.Manual	-	-	60	118	60	118	-	-	90	148	90	148	-	-	19	46	19	46	-	-	169	110	169	110
		ii.Animal	-	-	25	49	25	49	-	-	50	82	50	83	-	-	-	-	-	-	-	-	75	49	75	49
		iii.Machine	135	265	-	-	135	265	60	98	-	-	60	98	105	256	-	-	105	256	300	196	-	-	300	196
		iv.Total	135	265	85	167	220	431	60	98	140	230	200	328	105	256	19	46	124	302	300	196	244	159	544	355
5. Watering		i.Manual	-	-	60	118	60	118	-	-	30	49	30	49	-	-	37	91	37	91	-	-	127	83	127	83
6. F.Y.Manure		i.Manual	-	-	90	176	90	176	-	-	-	-	-	-	-	-	-	-	-	-	-	-	[illegible]	59	90	59

(Contd...)

Table-15

LABOUR INPUT COST : SAMPLE [illegible] OF COURSE 80-81

Sl. No.	Operations	Labour inputs	Hired Paid Total		Hired Self Supplied Total		Hired Total (3+5) Total		Hired Paid Per Hect.		Hired Self Supplied Per Hect.		Hired Total (9+11) Per Hect.		Family Paid Total		Family Self Supplied Total		Family Total (15+17) Total		Family Paid Per Hect.		Family Self Supplied Per Hect.		Family Total (19+21) Per Hect.	
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
7. Chemical	i.Manual	-	-	8	15	8	15	-	-	5	5	5	5	-	-	8	15	8	15	-	-	21	14	21	14
8. Hoeing/Weed:	i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9. Harvesting	i.Manual	-	-	472	925	472	925	-	-	420	689	420	689	-	-	420	1024	420	1024	-	-	1312	858	1312	858
10.Carriage to Threshing/ yard	i.Manual	-	-	480	941	480	941	-	-	420	689	420	689	-	-	420	1024	420	1024	-	-	1320	863	1320	863
	ii.Animal	-	-	320	627	320	627	-	-	200	325	200	325	-	-	280	683	280	683	-	-	1019	666	1019	666
	iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total	-	-	800	1569	800	1569	-	-	620	1016	620	1016	-	-	700	1707	700	1707	-	-	2120	1386	2120	1386
11.Threshing/ Winnowing	i.Manual	-	-	31	61	31	61	-	-	8	12	8	12	-	-	30	73	30	73	-	-	69	45	69	45
	ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total	-	-	31	61	31	61	-	-	8	12	8	12	-	-	30	73	30	73	-	-	69	45	69	45
12. Total	i.Manual	-	-	1237	2524	1287	2524	-	-	1221	2001	1221	2001	-	-	964	2350	964	2350	-	-	3472	2269	3472	2269
	ii.Animal	-	-	414	811	414	811	-	-	325	533	325	533	-	-	280	683	280	683	-	-	1019	666	1019	666
	iii.Machine	465	912	-	-	465	912	180	295	-	-	180	295	315	768	-	-	315	768	960	627	-	-	960	627
	iv.Total	465	912	1701	3335	2166	4247	180	295	1546	2534	1726	2829	315	768	1244	3033	1559	3801	960	627	4490	2935	5450	3562

(Concluded)

Table-19

PHYSICAL INPUT COST IN SAMPLE WATER COLPSE RD.45300

Crop: Berseem Area: 5.31 ha. (i) Head : 2.68 ha (ii) Middle: 1.82 ha (iii) Tail: 0.81 ha

Sr. No.	Physical Input	Head: Purchased Total	Head: Purchased Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (2+4) Total	Head: Total (2+4) Per Hect.	Middle: Purchased Total	Middle: Purchased Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (8+10) Total	Middle: Total (8+10) Per Hect.	Tail: Purchased Total	Tail: Purchased Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (14+16) Total	Tail: Total (14+16) Per Hect.	All Places: Purchased (2+8+14) Total	All Places: Purchased (2+8+14) Per Hect.	All Places: Self Supplied (4+10+16) Total	All Places: Self Supplied (4+10+16) Per Hect.	All Places: Total Total	All Places: Total Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Seed	609	211	270	64	879	305	720	396	60	33	780	429	200	-	-	-	200	-	1529	288	330	62	1859	350
2.	Farm Yard Manure	-	-	180	63	180	63	-	-	208	114	208	114	-	-	100	-	100	-	-	-	488	92	488	92
3.	Chemical Fertilizer	766	266	-	-	766	266	346	190	-	-	346	190	132	-	-	-	132	-	1244	234	-	-	1244	234
4.	Insecticide/ Pesticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Water Rate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	Dues of Artisans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Total	1374	477	450	156	1824	633	1066	586	268	147	1334	733	332	-	100	-	432	-	2772	522	818	154	3590	676

Table-20

LABOUR INPUT [illegible]

Crop: Berseem Area: 5.31 ha. [illegible] ii) Middle: 1.82 ha. iii) Tail: 0.61 ha.

Sr. No.	Operations	Labour Inputs	Head: Paid Total	Head: Paid Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (3+5) Total	Head: Total (3+5) Per Hect.	Middle: Paid Total	Middle: Paid Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect.	Tail: Paid Total	Tail: Paid Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect.	All Places: Paid Total (3+9+15)	All Places: Paid Per Hect.	All Places: Self Supp. Total (5+11+17)	All Places: Self Supp. Per Hect.	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Ploughing	i.Manual	-	-	273	95	273	95	-	-	136	75	136	75	-	-	138	226	138	226	-	-	546	103	546	103
	ii.Animal	-	-	330	115	330	115	400	220	60	33	460	253	360	590	-	-	360	590	760	143	390	73	1150	217
	iii.Machine	895	311	-	-	895	311	250	137	-	-	250	137	120	197	-	-	120	197	1265	238	-	-	1265	238
	iv.Total	895	311	603	209	1498	520	650	357	196	108	846	465	480	787	138	226	618	1013	2025	381	936	176	2961	558
2. Leveling	i.Manual	-	-	23	9	23	9	-	-	-	-	-	-	-	-	45	74	45	74	-	-	68	13	68	13
	ii.Animal	-	-	38	13	38	13	-	-	-	-	-	-	60	98	-	-	60	98	60	11	38	7	98	18
	iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total	-	-	60	13	60	21	-	-	-	-	-	-	60	98	45	74	105	172	60	11	105	20	165	31
3. Planking	i.Manual	-	-	34	12	34	12	-	-	15	8	15	8	-	-	45	74	45	74	-	-	94	18	94	18
	ii.Animal	-	-	64	22	64	22	-	-	75	41	75	41	30	49	-	-	30	49	30	6	139	26	169	34
	iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total	-	-	60	21	60	21	-	-	90	49	90	49	30	49	45	74	75	123	30	6	234	44	263	49
4. Sowing	i.Manual	-	-	176	61	176	61	-	-	75	41	75	41	-	-	63	103	63	103	-	-	314	59	314	59
	ii.Animal	-	-	135	47	135	47	-	-	150	82	150	82	-	-	60	98	60	98	-	-	195	37	195	37
	iii.Machine	405	141	-	-	405	141	220	121	-	-	220	121	60	98	-	-	60	98	685	129	-	-	685	129
	iv.Total	405	141	311	108	716	249	220	121	225	124	445	245	60	98	123	202	183	300	686	129	509	96	1194	225
5. Watering	i.Manual	-	-	88	30	88	30	-	-	83	45	83	45	-	-	67	109	67	109	-	-	237	45	237	45
6. F.Y.Manure	i.Manual	-	-	45	16	45	16	-	-	66	36	66	36	-	-	30	49	30	49	-	-	141	27	141	27

(Contd...)

Table-3

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.45800

Crop: Berseem Area 5.31 ha. i) Head : 2.88 ha. ii) Middle : 1.82 ha. iii) Tail: 0.61 ha.

Sr. No.	Operations	Labour Inputs	Head: Paid Total	Head: Paid Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (3+5) Total	Head: Total (3+5) Per Hect.	Middle: Paid Total	Middle: Paid Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect.	Tail: Paid Total	Tail: Paid Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect.	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect.	All Places: Self Supp. (5+11+17) Total	All Places: Self Supp. (5+11+17) Per Hect.	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
7. Chemical	i.Manual	-	-	41	14	41	14	-	-	13	10	13	10	-	-	7	11	7	11	-	-	65	12	65	12
8. Hoeing Weed:	i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9. Harvesting	i.Manual	6045	2099	-	-	6045	2099	3480	1912	-	-	3480	1912	1560	2557	-	-	1560	2557	11085	2088	-	-	11085	2088
10.Carriage to Threshing yard	i.Manual	-	-	2230	774	2230	774	-	-	1620	894	1620	390	-	-	510	836	510	836	-	-	4360	821	4360	821
	ii.Animal	1662	577	-	-	1662	577	1080	593	-	-	1080	593	360	590	-	-	360	590	3102	584	-	-	3102	584
	iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total	1662	577	2230	774	3892	1351	1080	593	1620	390	2700	1494	360	590	510	836	870	1426	3102	584	4360	821	7462	1405
11.Threshing/ Winnowing	i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12. Total	i.Manual	6045	2099	2408	1010	8953	3109	3480	1912	2012	1106	5492	3018	1560	2557	905	1483	2465	4040	11085	2088	5825	1097	16910	3185
	ii.Animal	1662	577	566	197	2228	774	1480	813	285	157	1765	970	810	1328	60	98	870	1426	3952	744	911	172	4863	916
	iii.Machine	1300	451	-	-	1300	451	470	258	-	-	470	258	180	295	-	-	180	295	1950	367	-	-	1950	367
	iv.Total	9007	3127	3474	1206	12481	4334	5430	2984	2297	1262	7727	4246	2550	4180	965	1581	3515	5762	16987	3199	6737	1269	23724	4468

(Concluded)

Table-21

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD.45800
(P E A)

(NOT APPLICABLE)

Table-22

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.45800
(P E A)

(NOT APPLICABLE)

Table-23

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD.45900
(SPINACH)

(NOT APPLICABLE)

Table-24

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.45800
(SPINACH)

(NOT APPLICABLE)

Table 25

PRODUCTION COST AND PROFIT IN SAMPLE WATER COURSE RD.4580C

Sr. No.	Crops	Location	Area (Hectare)	Total Output: Year Production (Mds)	Total Output: By-product Unit	Total Output: By-product Total Outturn	Market Price per unit at farm: MP	Market Price per unit at farm: BP	Total value of output: MP	Total value of output: BP	Total value of output: Total	Value per hectare: MP	Value per hectare: BP	Value per hectare: Total	Total Farming cost: Physical inputs	Total Farming cost: Labour cost	Total Farming cost: Total	Cost per hectare	Profit/loss (+) (-): Total	Profit/loss (+) (-): Per hectare	Total Imputed costs: Physical input	Total Imputed costs: Labour	Total Imputed costs: Total	Carry Forward Income excl. 19+23: Total	Carry Forward Income excl. 19+23: Per hectare
1	2	3	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1. Wheat	Head		9.38	255.[illegible]	Mds	526	170	31	25700	[illegible]	[illegible]	[illegible]	1748	4519	5319	19840	24559	7524	17047	1885	-	1149	1149	18796	2006
	Middle		7.29	242.0[illegible]	Mds	491	170	31	24300	15341	39641	3335	2131	5467	4018	14620	18633	2560	20823	2869	-	[illegible]	72799	93671	12867
	Tail		3.69	18.[illegible]	Mds	240	100	31	18180	7125	25313	5274	2418	5692	723	7480	14213	[illegible]	[illegible]	2518	-	[illegible]	7011	16203	4419
	A.Places		20.23	622.8[illegible]	Mds	1257	170	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	53[illegible]1	[illegible]	[illegible]	3352	-	[illegible]	[illegible]	128776	6334
2. Barley	Head		0.51	Hect:	Rs	-	4216	-	[illegible]	-	[illegible]	[illegible]	-	4216	473	[illegible]	[illegible]	5175	-499	-659	-	1701	1701	212	[illegible]
	Middle		0.61	Hect:	Rs	-	3507	-	[illegible]	-	[illegible]	[illegible]	-	3507	495	[illegible]	[illegible]	3297	129	210	-	4566	4566	4755	795
	Tail		0.41	Hect:	Rs	-	2780	-	[illegible]	-	[illegible]	[illegible]	-	2781	353	1333	1918	4663	-362	-883	-	1244	1244	889	2151
	A.Places		1.53	Hect:	Rs	-	3356	-	[illegible]	-	[illegible]	[illegible]	-	3356	1111	5451	6562	4233	-663	-433	-	2511	2511	5849	4276
3. Berseem	Head		2.88	Hect:	Rs.	-	5354	-	15[illegible]2	-	15[illegible]	5354	-	5354	1403	12419	3417	4556	2010	699	-	3474	2474	5484	1904
	Middle		1.82	Hect:	Rs.	-	6758	-	12300	-	12300	6758	-	6758	503	7277	8780	4530	4000	2199	-	3367	3367	6267	3443
	Tail		0.61	Hect:	Rs.	-	4918	-	3000	-	3000	4918	-	4918	248	3618	3866	6329	-2610	-1410	-	965	965	135	172
	A.Places		5.31	Hect:	Rs.	-	5785	-	30720	-	30720	5785	-	5785	1247	8105	9352	4815	5170	970	-	6706	6706	1.356	2233
4. Pea	Head		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Middle		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tail		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	A.Places		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5. Brinjal	Head		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Middle		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tail		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	A.Places		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-25

MANUAL-ANIMAL-MACHINE TIME CONSUMED IN CULTIVATION
WHEAT IN SAMPLE WATER COURSE RD.45850

Sr. No.	Operations	Head (Area sown: 5.35) Mandays Total	Mandays Per Hect.	Animal Days Total	Animal Days Per Hect.	Machine Hours Total	Machine Hours Per Hect.	Middle (Area sown: [illegible]) Mandays Total	Mandays Per Hect.	Animal Days Total	Animal Days Per Hect.	Machine Hours Total	Machine Hours Per Hect.	Tail (Area sown: 3.69) Mandays Total	Mandays Per Hect.	Animal Days Total	Animal Days Per Hect.	Machine Hours Total	Machine Hours Per Hect.	All Places (Area sown: 20.33) Mandays Total	Mandays Per Hect.	Animal Days Total	Animal Days Per Hect.	Machine Hours Total	Machine Hours Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Ploughing	51.34	5.47	43.50	4.33	54.00	5.77	2.70	0.92	[illegible]	[illegible]	46.00	5.46	5.90	0.79	-	-	22.23	6.02	60.84	2.99	72.50	3.57	116.23	5.72
2.	Levelling	11.25	1.20	11.25	1.20	-	-	0.50	0.07	[illegible]	[illegible]	-	-	-	-	-	-	-	-	11.75	0.58	11.75	0.58	-	-
3.	Planking	5.62	0.60	5.63	0.60	-	-	0.25	0.03	[illegible]	[illegible]	-	-	-	-	-	-	-	-	5.87	0.29	9.63	0.47	-	-
4.	Sowing	128.53	3.05	25.00	2.67	11.00	1.18	5.83	1.27	1.00	[illegible]	17.50	2.42	2.50	0.68	-	-	9.00	2.44	40.33	1.98	36.00	1.28	37.50	1.84
5.	Watering	13.80	1.47	-	-	-	-	7.66	1.[illegible]	-	-	-	-	[illegible]	1.31	-	-	-	-	26.29	1.29	-	-	-	-
6.	F.Y.Manure	4.50	0.48	-	-	-	-	-	-	-	-	-	-	1.50	0.41	-	-	-	-	6.00	0.30	-	-	-	-
7.	Che:Fertilizer	4.71	0.50	-	-	-	-	3.62	0.50	-	-	-	-	2.37	0.64	-	-	-	-	10.70	0.53	-	-	-	-
8.	Hoeing/Weeding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Harvesting	148.50	15.87	-	-	-	-	127.00	17.45	-	-	-	-	87.00	23.58	-	-	-	-	362.50	17.83	-	-	-	-
10.	Carriage to Threshing	50.40	5.38	23.00	2.46	-	-	70.00	9.62	5.50	[illegible]	25.25	3.47	16.50	4.47	6.00	1.63	-	-	136.90	6.73	34.50	1.70	25.25	1.24
11.	Threshing/ Winnowing	9.99	1.06	-	-	24.60	2.62	14.75	2.03	-	-	-	-	4.76	1.29	-	-	7.50	2.03	29.39	1.45	-	-	32.10	1.58
12.	Total	328.43	35.09	105.38	11.24	89.60	9.57	239.72	32.93	43.00	5.91	82.75	11.37	122.36	33.16	6.00	1.63	38.73	10.50	690.50	33.96	134.38	7.59	211.08	10.38

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF BARLEY IN SAMPLE WATER COURSE NO.458W

Sr. No.	Operations	Head (Area sown: 0.51)						Middle (Area sown: 0.61)						Tail (Area sown: 0.41)						All Places (Area sown: 1.53)					
		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours	
		Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Ploughing	2.50	4.90	1.00	1.95	2.00	3.92	5.00	8.20	1.00	1.64	2.00	3.28	1.00	2.44	-	-	3.50	8.54	8.50	5.56	3.00	1.31	11.50	7.52
2.	Levelling	0.25	0.49	0.25	0.49	-	-	1.00	1.64	-	-	-	-	-	-	-	-	-	-	1.25	0.82	0.25	0.16	-	-
3.	Planking	0.13	0.25	0.13	0.25	-	-	2.25	3.69	0.25	[illegible]	-	-	-	-	-	-	-	-	2.38	1.56	0.38	0.25	-	-
4.	Sowing	2.00	3.92	0.50	0.98	1.25	2.45	3.00	4.92	1.00	1.64	1.00	1.64	0.63	1.54	-	-	1.75	4.27	5.63	3.68	1.50	0.98	4.00	2.61
5.	Watering	2.00	3.92	-	-	-	-	1.00	1.64	-	-	-	-	1.24	3.02	-	-	-	-	4.24	2.77	-	-	-	-
6.	F.Y.Manure	3.00	5.88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	1.96	-	-	-	-
7.	Che:Fertilizer	0.26	0.51	-	-	-	-	0.19	0.31	-	-	-	-	0.26	0.63	-	-	-	-	0.71	0.46	-	-	-	-
8.	Hoeing/Weeding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Harvesting	16.00	31.37	-	-	-	-	14.00	22.95	-	-	-	-	14.00	34.15	-	-	-	-	44.00	28.76	-	-	-	-
10.	Carriage to threshing	16.00	31.37	16.00	31.37	-	-	10.00	16.39	10.00	16.39	-	-	14.00	34.15	-	-	-	-	40.00	26.14	40.00	26.14	-	-
11.	Threshing/ Winnowing	9.44	18.51	-	-	-	-	0.25	0.41	-	-	-	-	1.00	2.44	-	-	2.00	4.88	10.69	6.99	-	-	2.00	1.31
12.	Total	15.04	24.66	-	-	4.00	6.56	-	-	-	-	-	-	9.20	23.00	-	-	3.00	7.50	24.24	24.00	-	-	7.00	6.93

Table-28

MANUAL/ANIMAL-MACHINE TIME CONSUMED IN CULTIVATION
OF BERSEEM IN SAMPLE WATER COURSE RD.45800

Sr. No.	Operations	Head (Area sown: 2.88)						Middle (Area sown: 1.82)						Tail (Area sown: 0.61)						All Places (Area sown: 5.31)					
		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours	
		Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Ploughing	8.75	3.04	6.00	2.08	16.50	5.73	10.86	5.97	9.00	4.95	4.50	2.47	4.63	[illegible]	[illegible]	[illegible]	3.00	3.28	24.24	4.65	21.00	3.95	23.00	4.33
2.	Levelling	0.75	0.26	0.75	0.26	-	-	-	-	-	-	-	-	1.50	2.46	1.00	1.64			2.25	0.42	1.75	0.33		-
3.	Planking	0.58	0.20	1.13	0.39	-	-	0.50	0.27	1.25	0.69	-	-	1.50	2.46	0.50	0.82	-	-	2.58	0.49	2.88	0.54	-	-
4.	Sowing	5.91	2.05	4.50	1.56	7.50	2.60	2.70	1.48	5.00	2.75	4.00	2.20	2.13	3.49	2.00	3.28	1.00	1.64	10.74	2.02	11.50	2.17	12.50	2.35
5.	Watering	2.92	1.01	-	-	-	-	3.03	1.66	-	-	-	-	2.40	3.93	-	-	-	-	8.35	1.57	-	-	-	-
6.	F.Y.Manure	1.50	0.52	-	-	-	-	2.25	1.24	-	-	-	-	1.00	1.64		-	-	-	4.75	0.89	-	-	-	-
7.	ChemFertilizer	1.40	0.49	-	-	-	-	0.63	0.35			-	-	0.25	0.41	-	-	-	-	2.28	0.43	-	-	-	
8.	Hoeing/Weeding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Harvesting	206.00	71.53	-	-	-	-	116.00	63.74	-	-	-	-	52.00	85.25	-	-	-	-	374.00	70.43	-	-	-	-
10.	Carriage to threshing	78.00	27.08	78.00	27.08	-	-	54.00	29.67	54.00	29.67	-	-	18.00	29.51	18.00	29.51	-	-	150.00	28.25	150.00	28.25	-	-
11.	Threshing/ Winnowing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12.	Total	305.81	106.18	90.38	31.38	24.00	8.33	189.97	104.38	69.25	38.05	8.50	4.67	83.41	136.74	22.50	45.08	3.00	4.92	579.19	109.08	187.13	35.24	35.50	6.69

Table-29

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF PEA IN SAMPLE WATER COURSE RD.70800

(NOT APPLICABLE)

Table-30

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF SPINACH IN SAMPLE WATER COURSE RD.70800

(NOT APPLICABLE)

STATISTICAL TABLES OF SAMPLE WATER COURSE RD. 53700

513a

APPENDICES OF SCHEDULE-I

NO.	TITLE	PAGE NO
1.	TENURE STATUS OF SAMPLE FARMERS IN SAMPLE WATER COURSE RD. 53700	521
2.	LITERACY STATUS OF SAMPLE FARMERS IN SAMPLE WATER COURSE RD.53700	521
3.	LEVEL OF EDUCATION OF THE SAMPLE FARMERS IN RD. 53700	522
4.	HOUSEHOLD SIZE IN SAMPLE WATER COURSE RD.53700	523
5.	HOUSEHOLD SIZE AND COMPOSITION IN SAMPLE WATER COURSE RD.53700	523
6.	LITERACY AND ACTIVITY STATUS OF THE SAMPLE POPULATION IN SAMPLE WATER COURSE RD.53700	524
7.	DISTRIBUTION OF WORKING MEMBERS BY OCCUPATION IN SAMPLE WATER COURSE RD.53700	525
8.	PLACE OF WORK IN SAMPLE WATER COURSE RD.53700	525
9.	MONTHLY INCOME (OTHER THAN FARMING) IN SAMPLE WATER COURSE RD.53700	526
10.	LAND HOLDINGS OF SAMPLE HOUSEHOLDS OF SAMPLE WATER COURSE RD. 53700	527
11.	AREA RENTED IN/OUT ON CASH/BATAI IN SAMPLE WATER COURSE RD.53700	528
12.	LAND USE IN SAMPLE WATER COURSE RD.53700	528
13.	IRRIGATED AREA BY MEAN OF IRRIGATION IN SAMPLE WATER COURSE RD.53700	529
14.	NUMBER OF TUBEWELLS IN SAMPLE WATER COURSE RD.53700	529
15.	SOURCES OF FINANCE OF TUBEWELL IN SAMPLE WATER COURSE RD.53700	529

NO.	TITLE	PAGE NO
16.	NUMBER OF WATER TURNS (WARABANDI) PER FIELD IN SAMPLE WATER COURSE RD.53700	530
17.	TIME PER TURN OF WATER SUPPLY (WARABANDI) IN SAMPLE WATER COURSE RD.53700	530
18.	NUMBER OF WARABANDI LOST DURING KHARIF 1987 IN SAMPLE WATER COURSE RD.53700	531
19.	REASON FOR LOSS OF WATER TURN IN SAMPLE WATER COURSE RD.53700	531
20.	INCIDENCE OF EXCHANGE OF WATER WITH OTHER FARMERS IN SAMPLE WATER COURSE RD. 53700	531
21.	NUMBER OF TIMES WATER WAS EXCHANGED DURING KHARIF 1987 IN SAMPLE WATER COURSE RD.53700	532
22.	FREE WATER FOR IRRIGATION OTHER THAN ON EXCHANGE IN SAMPLE WATER COURSE RD.53700	532
23.	TAMPERING OF WATER IN SAMPLE WATER COURSE RD.53700	533
24.	DE-SILTING OF WATER COURSE IN A YEAR IN SAMPLE WATER COURSE RD.53700 ?	533
25.	WHEN WAS THE WATER COURSE DE-SILTED LAST IN SAMPLE WATER COURSE RD.53700 ?	534
26.	CANAL WATER PROBLEMS IN SAMPLE WATER COURSE RD.53700	535
27.	MANAGEMENT OF DE-SILTATION OF WATER COURSE: ARE THE FARMERS SATISFIED WITH THE EXISTING ARRANGEMENTS IN SAMPLE WATER COURSE RD.53700?	536
28.	INCIDENCE OF INDEBTEDNESS IN SAMPLE WATER COURSE RD.53700	536
29.	AMOUNT BORROWED BY SOURCE DURING THE TWELVE MONTH IN SAMPLE WATER COURSE RD.53700	537
30.	UTILIZATION OF LOAN IN SAMPLE WATER COURSE RD.53700	538
31.	ANY IMPROVEMENT ON FARM CONTEMPLATED BY THE SAMPLE FARMERS IF THEY COULD GET ADEQUATE LOAN IN SAMPLE WATER COURSE RD.53700	538

NO.	TITLE	PAGE NO
32.	USE OF SELECTED FARM INPUTS AND SOURCE OF SUPPLY IN SAMPLE WATER COURSE RD.53700	539
33.	USE OF IMPROVED SEED IN SAMPLE WATER COURSE RD.53700	540
34.	INPUTS IN THE SUPPLY OF WHICH PROBLEMS HAVE BEEN REPORTED BY FARMERS IN SAMPLE WATER COURSE RD.53700	543
35.	SOURCE OF AGRICULTURAL INFORMATION OF SAMPLE FARMERS IN RD.53700	544
36.	MEMBERSHIP OF SOCIETIES/ASSOCIATION ETC. IN SAMPLE WATER COURSE RD.53700	545
37.	USE OF TRACTORS BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD. 53700	546
38.	USE OF THRASHER BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD. 53700	547

APPENDICES OF SCHEDULE-II (KHARIF)

1.	AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS IN SAMPLE WATER COURSE RD.53700	548
2.	AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS OUTSIDE SAMPLE WATER COURSE RD.53700	549
3.	DISPOSAL OF MAIN PRODUCTS OTHER THAN SUGARCANE IN SAMPLE WATER COURSE RD.53700	550
4.	DISPOSAL OF BY-PRODUCTS IN SAMPLE WATER COURSE RD. 53700	551
5.	MODE OF SALE OF MAIZE IN SAMPLE WATER COURSE RD. 53700	552
6.	MODE OF SALE OF SORGHUM IN SAMPLE WATER COURSE RD. 53700	553
7.	MODE OF SALE OF PIGEON PEA IN SAMPLE WATER COURSE RD. 53700	553

NO.	T I T L E	PAGE NO
8.	UTILIZATION OF SUGARCANE IN SAMPLE WATER COURSE RD.53700	554
9.	UTILIZATION OF GUR PRODUCED BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD. 53700	554
10.	NUMBER OF FARMERS REPORTING CONSUMPTION OF CHEMICAL FERTILIZERS IN SAMPLE WATER COURSE RD. 53700	555
11.	QUANTITY OF CHEMICAL FERTILIZERS USED BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD. 53700	556
12.	CONSUMPTION OF FARM YARD MANURE IN SAMPLE WATER COURSE RD. 53700	557
13.	NUMBER OF SAMPLE FARMERS WHO USED INSECTICIDES/PESTICIDES/WEEDICIDES IN SAMPLE WATER COURSE RD.53700	558
14.	QUANTITY OF SEED USED BY SAMPLE FARMERS IN SAMPLE WATERCOURSE RD.53700	559
15.	PHYSICAL INPUT COST OF MAIZE IN SAMPLE WATER COURSE RD.53700	560
16.	LABOUR INPUT COST OF MAIZE IN SAMPLE WATER COURSE RD.53700	561
17.	PHYSICAL INPUT COST OF SORGHUM IN SAMPLE WATER RD.53700	563
18.	LABOUR INPUT COST OF SORGHUM IN SAMPLE WATER COURSE RD.53700	564
19.	PHYSICAL INPUT COST OF SUGARCANE IN SAMPLE WATER COURSE RD.53700	566
20.	LABOUR INPUT COST OF SUGARCANE IN SAMPLE WATER COURSE RD.53700	567
21.	PHYSICAL INPUT COST OF PIGEON PEA IN SAMPLE WATER COURSE RD.53700	569
22.	LABOUR INPUT COST OF PIGEON PEA IN SAMPLE WATER COURSE RD.53700	569

NO.	T I T L E	PAGE NO
23.	PRODUCTION COST AND PROFIT IN SAMPLE WATER COURSE RD.53700	570
24.	CROPPING PATTERN ON SAMPLE FARMS IN SAMPLE WATER COURSE RD.53700	571
25.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF MAIZE IN SAMPLE WATER COURSE RD.53700	572
26.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF SORGHUM IN SAMPLE WATER COURSE RD.53700	573
27.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF SUGARCANE IN SAMPLE WATER COURSE RD.53700	574
28.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN IN CULTIVATION OF PIGEON PEA IN SAMPLE WATER COURSE RD.53700	575
29.	NUMBER OF FRUIT PLANTS, TREES AND FRUIT PRODUCTION IN SAMPLE WATER COURSE RD.53700	575
30.	LIVESTOCK HOLDINGS OF SAMPLE HOUSEHOLDS IN SAMPLE WATER COURSE RD.53700	576
31.	MILK PRODUCTION AND UTILIZATION IN SAMPLE WATER COURSE RD. 53700	580
32.	INCOME FROM SALE OF DAIRY PRODUCTS (OTHER THAN MILK) DURING SIX MONTHS PROCEEDING INTERVIEW OF SAMPLE HOUSEHOLDS IN KHARIF 1987 IN SAMPLE WATER COURSE RD.53700	582
33.	INCOME FROM HIRING OUT OF LIVESTOCK IN SAMPLE WATER COURSE RD. 53700	582
34.	INCOME FROM SELECTED SOURCES DURING SIX MONTHS BEFORE INTERVIEW IN KHARIF 1987 IN SAMPLE WATER COURSE RD. 53700	583
35.	PERMANENT LABOUR ON FARM IN SAMPLE WATER COURSE RD.53700	584

APPENDICES OF SCHEDULE-II (RABI)

NO.	TITLE	PAGE NO
1.	AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS IN SAMPLE WATERCOURSE RD.53700	585
2.	AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS OUTSIDE SAMPLE WATERCOURSE RD.53700	586
3.	DISPOSAL OF MAIN PRODUCTS IN SAMPLE WATER COURSE RD.53700	587
4.	DISPOSAL OF BY-PRODUCTS IN SAMPLE WATER COURSE RD.53700	589
5.	MODE OF SALE OF WHEAT IN SAMPLE WATER COURSE RD.53700	591
6.	MODE OF SALE OF BARLEY IN SAMPLE WATER COURSE RD.53700	591
7.	MODE OF SALE OF BERSEEM IN SAMPLE WATER COURSE RD.53700	592
8.	MODE OF SALE OF PEA IN SAMPLE WATER COURSE RD.53700	592
9.	MODE OF SALE OF SPINACH IN SAMPLE WATER COURSE RD.53700	592
10.	NUMBER OF FARMERS REPORTING CONSUMPTION OF CHEMICAL FERTILIZERS IN SAMPLE WATER COURSE RD.53700	593
11.	QUANTITY OF CHEMICAL FERTILIZERS USED BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD.53700	594
12.	CONSUMPTION OF FARM YARD MANURE IN SAMPLE WATER COURSE RD.53700	595
13.	NUMBER OF SAMPLE FARMERS WHO USED INSECTICIDES/PESTICIDES/WEEDICIDES IN SAMPLE WATER COURSE RD.53700	596
14.	QUANTITY OF SEED USED BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD.53700	597

NO.	T I T L E	PAGE NO
15.	PHYSICAL INPUT COST OF WHEAT IN SAMPLE WATER COURSE RD.53700	598
16.	LABOUR INPUT COST OF WHEAT IN SAMPLE WATER COURSE RD.53700	599
17.	PHYSICAL INPUT COST OF BARLEY IN SAMPLE WATER COURSE RD.53700	601
18.	LABOUR INPUT COST OF BARLEY IN SAMPLE WATER COURSE RD.53700	602
19.	PHYSICAL INPUT COST OF BERSEEM IN SAMPLE WATER COURSE RD.53700	604
20.	LABOUR INPUT COST OF BERSEEM IN SAMPLE WATER COURSE RD.53700	605
21.	PHYSICAL INPUT COST OF PEA IN SAMPLE WATER COURSE RD.53700	607
22.	LABOUR INPUT COST OF PEA IN SAMPLE WATER COURSE RD. 53700	607
23.	PHYSICAL INPUT COST OF SPINACH IN SAMPLE WATER COURSE RD.53700	607
24.	LABOUR INPUT COST OF SPINACH IN SAMPLE WATER COURSE RD. 53700	607
25.	PRODUCTION COST AND PROFIT IN SAMPLE WATER COURSE RD.53700	608
26.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF WHEAT IN SAMPLE WATER COURSE RD. 53700	609
27.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF BARLEY IN SAMPLE WATER COURSE RD. 53700	610
28.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF BERSEEM IN SAMPLE WATER COURSE RD. 53700	611
29.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF PEA IN SAMPLE WATER COURSE RD. 53700	612
30.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF SPINACH IN SAMPLE WATER COURSE RD. 53700	612

Table-1

TENURE STATUS OF SAMPLE FARMERS IN
SAMPLE WATER COURSE RD. 53700

Sr. No.	Location	Tenure Status: Owner No.	Owner %	Owner cum tenant No	Owner cum tenant %	Tenant No.	Tenant %	Total Farmers No=100
0	1	2	3	4	5	6	7	8
1.	Head of W.C.	8	80.00	2	20.00	-	-	10
2.	Middle of W.C.	10	100.00	-	-	-	-	10
3.	Tail of W.C.	9	90.00	1	10.00	-	-	10
4.	Total	27	90.00	3	10.00	-	-	30

W.C.= Water Course

Table-2

LITERACY STATUS OF SAMPLE FARMERS
IN SAMPLE WATER COURSE RD.53700

Sr. No.	Location	Literate No.	Literate %	Illiterate No.	Illiterate %	Total No (=100)
0	1	2	3	4	5	6
1.	Head of Water Course	7	70	3	30	10
2.	Middle of Water Course	6	60	4	40	10
3.	Tail of Water Course	9	90	1	10	10
4.	T o t a l :-	22	73	8	27	30

Table-3

LEVEL OF EDUCATION OF THE SAMPLE FARMERS IN RD. 53700

Sr. No.	Level of Education	Location: Head of W.C		Middle of W.C		Tail of W.C		Total No(=100)
		No.	%	No.	%	No.	%	
0.	1	2	3	4	5	6	7	8
1.	Class 1-5	1	16.67	1	14.29	-	-	2
2.	Class 6-9	1	16.67	2	28.57	1	11.11	4
3.	Matric	2	33.33	4	-	5	55.56	11
4.	Intermediate	1	16.67	-	57.14	2	22.22	3
5.	Graduate	-	-	-	-	1	11.11	1
6.	MA/M.Sc	1	16.67	-	-	-	-	1
7.	MBBS	-	-	-	-	-	-	-
8.	B.Sc (Eng)	-	-	-	-	-	-	-
9.	B.Sc (Agri)	-	-	-	-	-	-	-
10.	B.Com/BBA	-	-	-	-	-	-	-
11.	M.Com/MBA	-	-	-	-	-	-	-
12.	Other professional Diploma/Degree	-	-	-	-	-	-	-
13.	Other	-	-	-	-	-	-	-
14.	T o t a l	6	100	7	100	9	100	22

Table-4

HOUSEHOLD SIZE IN SAMPLE WATER COURSE RD.53700

Sr. No.	Location	Sample Household	Total Population	Average size of household
0	1	2	3	4
1.	Head of Watercourse	10	113	11.30
2.	Middle of Watercourse	10	83	8.30
3.	Tail of Watercourse	10	131	13.10
4.	Total	30	327	10.90

Table-5

HOUSEHOLD SIZE AND COMPOSITION IN SAMPLE WATER COURSE RD.53700

Sr. No.	Age Group (Years)	Sex	Total Members							
			Head		Middle		Tail		All Places	
			No.	%	No.	%	No.	%	No.	%
0	1	2	3	4	5	6	7	8	9	10
1.	Below 5	Male	17	29.31	16	29.09	16	26.23	49	28.16
		Female	10	18.18	5	17.86	10	14.29	25	16.34
		Both	27	23.89	21	25.30	26	19.85	74	22.63
2.	5 and above	Male	41	70.69	39	70.91	45	73.77	125	71.84
		Female	45	81.82	39	82.14	60	85.71	128	83.66
		Both	86	76.11	23	74.70	105	80.15	253	77.37
3.	All Ages	Male	58	100.00	55	100.00	61	100.00	174	100.00
		Female	55	100.00	28	100.00	70	100.00	153	100.00
		Both	113	100.00	83	100.00	131	100.00	327	100.00

Table-6

LITERACY AND ACTIVITY STATUS OF THE SAMPLE POPULATION IN SAMPLE WATER COURSE RD.53700

Sr. No.	Location	Total Respondents	Sex	Total Members	Literate (excluding students)		At School		Total literates at school	
					No	%	No.	%	No	%
0	1	2	3	4	5	6	7	8	9	10
1.	Head of watercourse	10	Male	41	18	43.90	19	46.34	37	90.24
			Female	45	3	6.67	8	17.78	11	24.44
			Both	86	21	24.42	27	31.40	48	55.81
2.	Middle of water course	10	Male	39	14	35.90	16	41.03	30	76.92
			Female	23	-	-	1	4.35	1	4.35
			Both	62	14	22.58	17	27.42	31	50.00
3.	Tail of Watercourse	10	Male	45	18	40.00	19	42.22	37	82.22
			Female	60	3	5.00	11	18.33	14	23.33
			Both	105	21	20.00	30	28.57	51	48.57
4.	All places	30	Male	125	50	40.00	54	43.20	104	83.20
			Female	128	6	4.69	20	15.63	26	20.31
			Both	253	56	22.13	74	29.25	130	51.38

Table-7

DISTRIBUTION OF WORKING MEMBERS BY OCCUPATIONS
IN SAMPLE WATER COURSE RD.53700

Sr. No.	Occupation	Location			
		Head	Middle	Tail	Total
0	1	2	3	4	5
1.	Paid employment	12	10	9	31
	a. On Farm	-	-	-	-
	b. Off Farm	12	10	9	31
2.	Self employed	11	10	10	31
	a. Farming	10	10	10	30
	b. Trade/Industry Transport	1	-	-	1
	c. Artisans	-	-	-	-
	d. Other	-	-	-	-
3.	Grand Total	23	20	19	62

Table-8

PLACE OF WORK IN SAMPLE WATER COURSE RD.53700

Sr. No.	Place of Work	Head	Middle	Tail	Total
0	1	2	3	4	5
1.	Sample W.C and other places in Peshawar Distt.	10	8	7	25
2.	Elsewhere in NWFP	1	-	1	2
3.	Other Province	1	2	1	4
4.	Other Countries	-	-	-	-
5.	All Places	12	10	9	31

Table-9

MONTHLY INCOME (OTHER THAN FARMING)
IN SAMPLE WATER COURSE RD.53700

Sr. No.	Income Group (Rs. per month)	Location	Number	Total Income(Rs)	Average Income(Rs)
0	1	2	3	4	5
1.	Upto Rs. 500	Head	-	-	-
		Middle	-	-	-
		Tail	-	-	-
2.	501 to 1000	Head	4	3150	787.50
		Middle	3	2600	866.67
		Tail	2	1700	850.00
3.	1001 to 1500	Head	4	4600	1150.00
		Middle	5	6100	1220.00
		Tail	3	3700	1233.33
4.	1501 to 2000	Head	2	3600	1800.00
		Middle	-	-	-
		Tail	1	1800	1800.00
5.	2001 to 2500	Head	1	2400	2400.00
		Middle	2	5000	2500.00
		Tail	-	-	-
6.	2501 to 3000	Head	-	-	-
		Middle	-	-	-
		Tail	1	3000	3000.00
7.	3001 to 400	Head	1	3200	3200.00
		Middle	-	-	-
		Tail	2	7500	3750.00
8.	4001 to 5000	Head	-	-	-
		Middle	-	-	-
		Tail	-	-	-
9.	Above 5000	Head	-	-	-
		Middle	-	-	-
		Tail	-	-	-

Table-10

LAND HOLDINGS OF SAMPLE HOUSEHOLDS OF SAMPLE WATER COURSE RD. 5370[illegible]

Sr. No.	Locality	Total respondent	Location of Land	Area Owned Total	Area Owned Average	Area Rented in Total	Area Rented in Average	Area Rented Out Total	Area Rented Out Average	Operated Holding Total	Operated Holding Average
0	1	2	3	4	5	6	7	8	9	10	11
1.	Head of W.C	10	a. This water-course	11.63	1.16	2.43	0.24	7.38	[illegible]	[illegible]	[illegible]
			b. Other places	4.45	0.45	-	-	0.61	0.06	3.84	0.38
			c. Total	16.08	1.61	2.43	0.24	7.99	0.80	10.52	1.05
2.	Middle of W.C.	10	a. This water-course	18.82	1.89	-	-	13.96	1.40	4.86	0.49
			b. Other places	2.43	0.24	-	-	0.81	0.08	1.62	[illegible]
			c. Total	21.25	2.12	-	-	14.77	1.48	[illegible]	3.65
3.	Tail of W.C.	10	a. This water-course	25.29	2.53	2.83	0.28	21.25	2.12	6.97	0.69
			b. Other places	21.04	2.10	-	-	21.04	2.10	-	-
			c. Total	46.33	4.63	2.83	0.28	42.29	4.23	6.87	0.61
4.	All Places	30	a. This water-course	55.74	1.86	5.26	0.18	42.59	1.42	18.41	0.18
			b. Other places	27.92	0.93	-	-	22.46	0.75	5.46	0.80
			c. Total	83.66	2.79	5.26	0.18	65.05	2.17	23.87	1.99

Table-11

AREA RENTED IN/OUT ON CASH/BATAI IN
SAMPLE WATER COURSE RD.53700

Sr. No.	Location	Area Rented In			Area Rented Out		
		Batai	Cash Rent	Total	Batai	Cash Rent	Total
0	1	2	3	4	5	6	7
1.	Head of W.C.	2.43	-	2.43	7.38	-	7.38
2.	Middle of W.C.	-	-	-	13.96	-	13.96
3.	Tail of W.C.	2.83	-	2.83	21.35	-	21.35
4.	All Places	5.26	-	5.26	42.59	-	42.59

Table-12

LAND USE IN SAMPLE WATER COURSE RD.53700

Sr. No.	Land Use	Head		Middle		Tail		All Places	
		Hec-tare	%	Hec-tare	%	Hec-tare	%	Hec-tare	%
0	1	2	3	4	5	6	7	8	9
1.	Crops	14.06	100	17.60	100	27.31	100	58.97	100
2.	Orchard	-	-	-	-	-	-	-	-
3.	Not available for cultivation	-	-	-	-	-	-	-	-
4.	Total Area	14.06	100	17.60	100	27.31	100	58.97	100

Table-13

IRRIGATED AREA BY MEANS OF IRRIGATION
IN SAMPLE WATER COURSE RD.53700

Sr. No.	Means of Irrigation	Head of W.C. Jareeb	%	Middle of W.C Jareeb	%	Tail of W.C Jareeb	%	Total Jareeb	%
0	1	2	3	4	5	6	7	8	9
1.	Canal Only	81	100	82.50	100	239	100	402.50	100
2.	Open well only	-	-	-	-	-	-	-	-
3.	Tube-well only	-	-	-	-	-	-	-	-
4.	Mixed	-	-	-	-	-	-	-	-
5.	Total (All types)	81	100	82.50	100	239	100	402.50	100

Table-14

NUMBER OF TUBEWELLS IN SAMPLE WATER COURSE RD.53700

(NO TUBEWELL HERE)

Table-15

SOURCES OF FINANCE OF TUBEWELL IN
SAMPLE WATER COURSE RD.53700

(NOT APPLICABLE; NO TUBEWELL HERE)

Table-16

NUMBER OF WATER TURNS (WARABANDI) PER FIELD
IN SAMPLE WATER COURSE RD.53700

Sr. No.	Particulars	Location: Head No.	Head %	Middle No.	Middle %	Tail No.	Tail %	All places No.	All places %
0	1	2	3	4	5	6	7	8	9
1.	Total Farmers	10	100	10	100	10	100	30	100
2.	One turn per week	10	1[illegible]	10	100	10	100	30	100
3.	One turn per two weeks.	-	-	-	-	-	-	-	-
4.	Water not yet allotted but drawing once per week.	-	-	-	-	-	-	-	-

Table-17

TIME PER TURN OF WATER SUPPLY (WARABANDI)
IN SAMPLE WATER COURSE RD.53700

Sr. No.	Location	Water drawal once every	Distribution of water users by number of hours of water supply: Upto one No.	%	1 - 2 No.	%	2 - 4 No.	%	4 - 6 No.	%	6 - 8 No.	%	More than 8 No.	%	All cases No.
1.	Head Section	7th day	1	10.00	3	30.00	4	40.00	1	10.00	-	-	1	10.00	10
2.	Middle Section	7th day	-	-	2	20.00	6	60.00	2	20.00	-	-	-	-	10
3.	Tail Section	7th day	1	10.00	3	30.00	2	20.00	3	30.00	-	-	1	10.00	10
4.	All Places	7th day	2	6.67	8	26.67	12	40.00	6	20.00	-	-	2	6.67	30

Table-18

NUMBER OF WATER TURNS LOST DURING THE PERIOD
APRIL - DECEMBER 1988 IN SAMPLE WATER COURSE RD.53700

No.	Number of turns lost	Head		Middle		Tail		All Places
		No.	%	No.	%	No.	%	No (=100)
0	1	2	3	4	5	6	7	8
1.	None	-	-	-	-	-	-	-
2.	One	-	-	-	-	-	-	-
3.	Two	-	-	-	-	-	-	-
4.	Three	2	100.00	-	-	-	-	2
5.	Four	-	-	2	100.00	-	-	2
6.	Five	4	40.00	2	20.00	4	40.00	10
7.	More than 5	4	25.00	6	37.50	6	37.50	16
8.	All	10	33.33	10	33.33	10	33.33	30

Note: The canal is closed in January every year. In 1988 it was closed also during February and March for repair.

Table-19

REASON FOR LOSS OF WATER TURN IN SAMPLE WATER COURSE RD.53700

(NOT APPLICABLE; NO TURN LOST ANY WHERE)

Table-20

INCIDENCE OF EXCHANGE OF WATER WITH OTHER
FARMERS IN SAMPLE WATER COURSE RD.53700

Sr. No.	Location	Is Water exchanged				Total Farmers
		Yes		No		
		No.	%	No.	%	No(=100)
0	1	2	3	4	5	6
1.	Head of W.C.	1	10.00	9	90.00	10
2.	Tail of W.C.	-	-	10	100.00	10
3.	Tail of W.C.	1	10.00	9	90.00	10
4.	All places	2	6.67	28	93.33	30

Table-21

NUMBER OF TIMES WATER WAS EXCHANGED DURING KHARIF 1987
IN SAMPLE WATER COURSE RD.53700

No.	Number of Times	Borrowed								Lent							
		Head		Middle		Tail		Total		Head		Middle		Tail		Total	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1.	None	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.	One	2	100					2	100	2	100	-	-	-		2	100
3.	Two	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4.	Three	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Four	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	Five and above	-	-	-	-	-	-	-	-	-	-	-	-		-		-
7.	All cases	2	100	-	-	-	-	2	100	2	100	-	-	-	-	2	100

Table-22

FREE WATER FOR IRRIGATION OTHER THAN ON
EXCHANGE IN SAMPLE WATER COURSE RD.53700

No.	Location	Is free water ever taken ?				Is free water ever given ?				Total No(=100)
		Yes		No		Yes		No		
		No	%	No.	%	No	%	No	%	
0	1	2	3	4	5	6	7	8	9	10
1.	Head of W.C.	1	10	9	90.0	1	10	9	90	10
2.	Tail of W.C.	-	-	10	100.0	1	10	9	90	10
3.	Tail of W.C.	-	-	10	100.0	1	10	9	90	10
4.	All places	1	3.33	29	96.67	3	10	27	90	30

Table-23

TAMPERING OF WATER IN SAMPLE WATER COURSE RD.53700

Sr. No.	Location	Is sample farmer's share of water tampered ? Yes No.	Yes %	No No.	No %	Total Farmers No(=100)
0	1	2	3	4	5	10
1.	Head of W.C.	4	40.00	6	60.00	10
2.	Middle of W.C.	3	30.00	7	70.00	10
3.	Tail of W.C.	5	50.00	5	50.00	10
4.	All places	12	40.00	18	60.00	30

Table-24

DE-SILTING OF WATER COURSE IN A YEAR IN SAMPLE WATER COURSE RD.53700 ?

Sr. No.	Number of De-silting in a year	Head of W.C. No.	Head of W.C. %	Middle of WC No.	Middle of WC %	Tail of W.C No.	Tail of W.C %	All Places No.	All Places %
0	1	2	3	4	5	6	7	14	15
1.	One	3	30	4	40	3	30	10	33.33
2.	Two	2	20	2	20	4	40	8	26.67
3.	Three	-	-	1	10	-	-	1	3.33
4.	Four	-	-	-	-	-	-	-	-
5.	Five or More	-	-	-	-	-	-	-	-
6.	Not reported	4	40	3	30	3	30	10	33.33
7.	When need	1	10	-	-	-	-	1	3.33
8.	All cases	10	100	10	100	10	100	30	100.00

Table-25

WHEN WAS THE WATER COURSE DE-SILTED LAST
IN SAMPLE WATER COURSE RD.53700 ?

Sr. No.	Number of De-silting in a year	Head		Middle		Tail		All Places	
		No.	%	No.	%	No.	%	No.	%
0	1	2	3	4	5	6	7	4	5
1.	Rabi 1986-87 (Oct-86 to April-87)	2	20	-	-	-	-	2	6.67
2	Kharif 1987 (May-Nov.87)	4	40	7	70	7	70	18	60.00
3.	Rabi 1987-88 (December 87)	-	-	-	-	-	-	-	-
4.	Not cleared during last 12 month	-	-	-	-	-	-	-	-
5.	No Response	4	40	3	30	3	30	10	33.33
6.	When the canal was dry	-	-	-	-	-	-	-	-
7.	All cases	10	100	10	100	10	100	30	100.00

Table-26

CANAL WATER PROBLEMS IN SAMPLE WATER COURSE RD.53700

Sr. No.	Problems	Location water course	Is this problems faced Yes No.	Yes %	No No.	No %	Total Farmers No(=100)
0	1	2	3	4	5	6	7
1.	A general shortage of water	Head	7	70	3	30	10
		Middle	9	90	1	10	10
		Tail	9	90	1	10	10
		All points	25	83	5	17	30
2.	Defective slope of the channel	Head	1	10	9	90	10
		Middle	-	-	10	100	10
		Tail	-	-	10	100	10
		All points	1	3	29	97	30
3.	Siltation of the channel	Head	3	30	7	70	10
		Middle	1	10	8	80	10
		Tail	2	20	9	90	10
		All points	6	20	24	80	30
4.	Warabandi defects (in convenient timing)	Head	1	10	9	90	10
		Middle	1	10	9	90	10
		Tail	-	-	10	100	10
		All points	2	7	28	67	30
5.	Theft of water	Head	5	50	5	50	10
		Middle	5	50	5	50	10
		Tail	7	70	3	30	10
		All points	17	57	13	43	30

Table-27

MANAGEMENT OF DE-SILTATION OF WATER COURSE: ARE THE FARMERS SATISFIED WITH THE EXISTING ARRANGEMENTS IN SAMPLE WATER COURSE RD.53700 ?

Sr. No.	Location	Are the farmers satisfied with existing arrangements ? Yes No.	Yes %	No No.	No %	Total Farmers No(=100)
0	1	2	3	4	5	6
1.	Head of W.C.	7	70	3	30	10
2.	Middle of W.C.	7	70	3	30	10
3.	Tail of W.C.	6	60	4	40	10
4.	All points	20	66.67	10	33.33	30

Table-28

INCIDENCE OF INDEBTEDNESS IN SAMPLE WATER COURSE RD.53700

Location course on Water course	Farmers who have ever been indebt No.	%	Farmers in debt on interviewed date No.	%	Amount of debt (Rs) Total	Average per Borrower	Average per Sample farmer	Total Farmers No(=100)
1	2	3	4	5	6	7	8	9
Head of W.C.	-	-	-	-	-	-	-	10
Middle of W.C.	-	-	-	-	-	-	-	10
Tail of W.C.	1	10.00	1	10.00	70,000	70,000	7000	10
All points	1	3.33	1	3.33	70,000	153000	2333	30

Table-29

AMOUNT BORROWED BY SOURCE IN SAMPLE
WATER COURSE RD.53700

Sr. No.	Source	Amount							
		Head		Middle		Tail		All Places	
		Rs	%	Rs	%	Rs	%	Rs	%
0	1	2	3	4	5	6	7	8	9
1.	Agri. Development Bank	-	-	-	-	70,000	100	70,000	100
2.	Commercial Bank	-	-	-	-	-	-	-	-
3.	Cooperatives Bank	-	-	-	-	-	-	-	-
4.	Traders	-	-	-	-		-	-	-
5.	Private money lender	-	-	-	-	-	-	-	-
6.	Relatives	-	-	-	-	-	-	-	-
7.	Friends	-	-	-	-	-	-	-	-
8.	Other	-	-	-	-	-	-	-	-
9.	All cases	-	-	-	-	70,000	100	70,000	100

Table - 30

UTILIZATION OF LOAN IN SAMPLE WATER COURSE RD.53700

No.	Source	Amount							
		Head		Middle		Tail		All Places	
		Rs	%	Rs	%	Rs	%	Rs	%
0	1	2	3	4	5	6	7	8	9
1.	Purchase of Farm inputs	-	-	-	-		-	-	-
2.	Purchase of Farm Machinery		-	-	-	70,000	100	70,000	100
3.	Purchase of land	-	-						
4.	Repayment of loan	-	-	-	-	-	-		
5.	Business	-	-	-	-	-	-	-	-
6.	Domestic consumption	-	-	-	-	-	-	-	-
7.	Other purposes	-	-	-	-	-	-	-	-
8.	Total :	-	-	-	-	70,000	100	70,000	100

Table-31

ANY IMPROVEMENT ON FARM CONTEMPLATED BY THE SAMPLE FARMERS IF THEY COULD GET ADEQUATE LOAN IN SAMPLE WATER COURSE RD.53700

(NONE ANYWHERE)

Table-32

USE OF SELECTED FARM INPUTS AND SOURCE OF SUPPLY IN SAMPLE WATER COURSE RD.53700

Sr. No.	Name of Inputs	Location points of farm as W.C	Farms who use is No.	%	Sources of Supply: Villages No.	%	Outside No.	%	Both No.	%	Total Farmers No=(100)
0	1	2	3	4	5	6	7	8	9	10	11
1.	Urea	Head	8	80.00	1	12.50	6	75.00	1	12.50	10
		Middle	10	100.00	-	10.00	10	100.00	-	-	10
		Tail	10	100.00	1	10.00	9	90.00	-		10
		All Places	28	93.33	2	7.14	25	89.29	1	3.57	30
2.	DAP	Head	2	20.00	-	-	2	100.00	-	-	10
		Middle	4	40.00	-	-	4	100.00	-		10
		Tail	3	30.00	1	33.33	2	66.67	-	-	10
		All Places	9	30.00	1	11.11	8	88.89	-	-	30
3.	NPK	Head	-	-	-	-	-	-	-	-	10
		Middle	2	20.00	-	-	2	100.00	-	-	10
		Tail	-	-	-	-	-	-		-	10
		All Places	2	6.67	-	-	2	100.00			30
4.	NP	Head	-	-	-	-	-	-	-	-	10
		Middle	1	10.00	-	-	1	100.00	-		10
		Tail	-	-	-	-	-	-	-	-	10
		All Places	1	3.33	-	-	1	00.00	-	-	30
5.	Ammonium Sulphate	Head	1	10.00	-	-	1	100.00	-	-	10
		Middle	-	-	-	-	-	-	-	-	10
		Tail	1	10.00	-	-	1	100.00	-	-	10
		All Places	2	6.67	-	-	2	100.00	-	-	30
6.	Ammonium Nitrate	Head	1	10.00	-	-	1	100.00	-	-	10
		Middle	-	-	-	-	-	-	-		10
		Tail	-	-	-	-	-	-	-	-	10
		All Places	1	3.33	-	-	1	100.00	-	-	30
7.	Insec-ticides/ Pesticides	Head	1	10.00	-	-	1	100.00	-	-	10
		Middle	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	1	100.00	-	-	10
		All Places	1	3.33	-	-	2	100.00	-	-	30
8.	Weedecides	Head	1	10.00	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	10
		Tail	1	10.00	-	-	-	-	-	-	10
		All Places	2	6.67	-	-	-	-	-	-	30

Table-33

USE OF IMPROVED SEED IN SAMPLE WATER COURSE RD.53700

Sr. No.	Seed	Location	Farmers who: Know about this		Use this		If used; where purchased: In the village		Own		Other places		Total Farmers No(=100)
			No.	% of Col.13	No.	% of Col.13	No.	% of Col.5	No.	% of Col.5	No.	% of Col.5	
0	1	2	3	4	5	6	7	8	9	10	11	12	13
1.	WHEAT												
		Head	1	10.00	1	10.00	-	-	-	-	1	100.00	10
	i- Pak-81	Middle	3	30.00	3	30.00	-	-	3	100.00	-	-	10
		Tail	4	40.00	3	30.00	-	-	3	100.00	-	-	10
		All Places	8	26.67	7	23.33	-	-	6	85.71	1	14.29	30
	ii- L-73	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	1	10.00	-	-	-	-	-	-	-	-	10
		All Places	1	3.33	-	-	-	-	-	-	-	-	30
	iii- Sarhad-82	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	1	10.00	-	-	-	-	-	-	-	-	10
		All Places	1	3.33	-	-	-	-	-	-	-	-	30
	iv- Khyber-79	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	-	-	30
	v- Pirsabaq-85	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	1	10.00	-	-	-	-	-	-	-	-	10
		All Places	1	3.33	-	-	-	-	-	-	-	-	30
	vi- Maxipak	Head	3	30.00	3	30.00	1	33.33	2	66.67	-	-	10
		Middle	3	30.00	3	30.00	-	-	3	100.00	-	-	10
		Tail	7	70.00	7	70.00	-	-	6	85.71	1	14.29	10
		All Places	13	43.33	13	43.33	1	7.69	11	84.62	1	7.69	30

(Contd....)

Table-33

USE OF IMPROVED SEED IN SAMPLE WATER COURSE RD.53700

Sr. No.	Seed	Location	Farmers who: Know about this		Use this		If used: where purchased In the village		Own		Other places		Total Farmers No.(=100)
			No.	% of Col.13	No.	% of Col.13	No.	% of Col.5	No.	% of Col.5	No.	% of Col.5	
0	1	2	3	4	5	6	7	8	9	10	11	12	13
	vii- Khushal	Head			-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	-	-	30
	viii- Chanab	Head	1	10.00	1	10.00	-	-	1	100.00	-	-	10
		Middle	1	10.00	1	10.00	-	-	1	100.00	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	2	6.67	2	6.67	-	-	2	100.00	-	-	30
2.	SUGARCANE												
		Head	-	-	-	-	-	-	-	-	-	-	10
	i- M-161	Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	-	-	30
	ii- CP-48	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	-	-	30
	iii- CO-310	Head	3	30.00	3	30.00	-	-	3	100.00	-	-	10
		Middle	3	30.00	3	30.00	-	-	3	100.00	-	-	10
		Tail	1	10.00	1	10.00	-	-	1	100.00	-	-	10
		All Places	7	23.33	7	23.33	-	-	7	100.00	-	-	30

(Contd.....)

Table-33

USE OF IMPROVED SEED IN SAMPLE WATER COURSE RD.53700

Sr. No.	Seed	Location	Farmers who: Know about this No.	% of Col.13	Use this No.	% of Col.13	If used: where purchased In the village No.	% of Col.5	Own No.	% of Col.5	Other places No.	% of Col.5	Total Farmers (No'=100)
0	1	2	3	4	5	6	7	8	9	10	11	12	13
3.	MAIZE	Head	2	20.00	2	100.00	-	-	2	100	-	-	10
		Middle	6	[illegible]	5	[illegible]		-	6	100	-	-	10
	i- Sarhad White	Tail	7	70.00	7	20.00	-	-	7	100	-	-	10
		All Places	15	50.00	15	60.00	-	-	15	100	-	-	30
	ii-Changaz	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	-	-	30
	iii- Zia	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	-	-	30
	iv- Shaheen	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	-	-	30
	v- Hameshah	Head	1	10.00	1	10.00	-	-	1	100	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	1	3.33	1	3.33	-	-	1	100	-	-	30
	RICE	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
	i- Irri-6	Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	-	-	30
	ii- Basmati	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	-	-	30

(Concluded)

Table-34

INPUTS IN THE SUPPLY OF WHICH PROBLEMS HAVE BEEN REPORTED BY FARMERS IN SAMPLE WATERCOURSE RD.53700

Sr. No.	Location	Total Farmers No(=100)	Farmers reporting problems in supply of: Fertilizer		Improved seed		Farm Insecticides		Machinery	
			No	%	No	%	No	%	No	%
0	1	2	3	4	5	6	7	8	9	10
1.	Head	10	3	30.00	3	30.00	1	10.00	-	-
2.	Middle	10	6	60.00	5	50.00	-	-	-	-
3.	Tail	10	3	30.00	4	40.00	-	-	-	-
4.	All Places	30	12	40.00	12	40.00	1	3.33	-	-

Table-35

SOURCE OF AGRICULTURAL INFORMATION OF SAMPLE FARMERS IN RD.53700

Sr No.	Source	Number and percentage* of farmers who took agri. information from this source								Number and percentage** of sample Farmer who used this:							
		Head of W.C.		Middle of W.C.		Tail of W.C.		All Places		Head of W.C.		Middle of W.C.		Tail of W.C.		All Places	
		No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
0	1	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1.	Agriculture Department	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.	Demonstration plots laid by insecticides/ pesticides firms	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.	Radio	1	10	2	20	1	10	4	13	1	100	2	100	-	-	3	75
4.	Television	-	-	3	30	-	-	3	10	-	-	3	100	-	-	3	100
5.	Newspaper	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	Landlord	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Other Farmers	4	40	1	10	1	10	6	20	4	100	1	100	1	100	6	100
8.	Input supplers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Other sources specify)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Total Farmers = 30
Head = 10
Middle = 10
Tail = 10

* of total sample farmers in the section concerned

** of those who took information from a source given in col.1

Table-36

MEMBERSHIP OF SOCIETIES/ASSOCIATIONS ETC.
IN SAMPLE WATER COURSE RD.53700

Sr. No.	Institution	Locality	Are the sample farmers members of of the societies/associations as in col.2						Total Farmers No. =(100)
			Yes		No		Not applicable		
			No	%	No	%	No	%	
0	1	2	3	4	5	6	7	8	9
1.	Water Users Association	Head	-	-	1	20.00	8	88.00	10
		Middle	-	-	-	-	10	100.0	10
		Tail	-	-	-	10.00	9	90.00	10
		All Places	-	-	1	33.33	29	96.67	30
2.	Cooperative Society	Head	-	-	1	10.00	9	90.00	10
		Middle	-	-	1	10.00	8	80.00	10
		Tail	-	-	-	-	10	100.00	10
		All Places	1	3.33	5	16.67	28	93.33	30
3.	Union Council	Head	1	10.00	9	90.00	-		10
		Middle	-	-	10	100.00	-	-	10
		Tail	-	-	10	100.00	-	-	10
		All Places	1	3.33	29	96.67	-	-	30
4.	Other Societies/ Association	Head	1	10.00	8	80.00	1	10.00	10
		Middle	2	20.00	4	40.00	4	40.00	10
		Tail	2	20.00	2	20.00	6	60.00	10
		All Places	5	16.67	14	46.67	11	36.67	30

Table-37

USE OF TRACTORS BY SAMPLE FARMERS IN
SAMPLE WATER COURSE RD. 53700

Sr. No.	Section	Is tractor used ?					Ownership Status of tractor used				Source of supply of rented in tractor				Farmer reporting problems in tractor supply	
		Yes		No		Total	Own		Rented		Own Village		Other Places			
		No.	% of col.2	No.	% of col.4	No. (=100)	No.	% of col.2	No.	% of col.2	No.	% of col.9	No	% of col.9	No.	% of col.6
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.	Head	10	100	-	-	10	-	-	10	100	5	50.00	5	50.00	7	70.0
2.	Middle	9	90	1	10	10	-	-	9	100	4	44.44	5	55.56	5	50.0
3.	Tail	10	100	-	-	10	-	-	10	100	5	50.00	5	50.00	8	80.0

Table-38

USE OF THRASHER BY SAMPLE FARMERS IN
SAMPLE WATER COURSE RD. 53700

Sr. No.	Section	Is Thrasher used ?					Ownership Status of Thrasher used				Source of supply of rented in Thrasher				Farmer reporting problems in Thrasher supply	
		Yes		No		Total	Own		Rented in		Own Village		Other Places			
		No.	% of col.2	No.	% of col.2	No. (=100)	No.	% of col.2	No.	% of col.2	No.	% of col.9	No.	% of col.9	Nr.	% of col.3
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.	Head	10	100	-	-	10	-	-	10	100	2	20.00	8	80.00	7	70.00
2.	Middle	10	100	-	-	10	-	-	10	100	4	40.00	6	60.00	4	40.00
3.	Tail	10	100	-	-	10	-	-	10	100	4	40.00	6	60.00	8	80.00
4.	All Sections	30	100	-	-	30	-	-	30	100	10	33.33	20	66.67	19	63.33

Table-1

AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS IN SAMPLE WATER COURSE RD 53700

Sr. No.	Crops	Location	Area	Main Product			By Product		
				Unit	Total	Per Hectare	Unit	Total	Per Hectare
0	1	2	3	4	5	6	7	8	9
1.	Maize Grain	Head	2.48	Mds	46.00	18.55	Bundle	730	294.35
		Middle	[illegible]	[illegible]	[illegible]	[illegible]	Bundle	510	167.7[illegible]
		Tail	3.34	Mds	46.00	13.77	Bundle	550	164.67
		Total	8.86	Mds	131.50	14.84	Bundle	1790	202.03
2.	Maize Fodder	Head	0.51	Bundle	300.00	588.24		-	-
		Middle	1.42	Bundle	629.00	4[illegible].62		-	-
		Tail	4.45	Bundle	3500.00	786.52		-	-
		Total	6.38	Bundle	4420.00	692.79		-	-
3.	Sorghum (fodder)	Head	2.38	Rs.	11050.00	4642.86		-	-
		Middle	4.96	Rs.	27050.00	5453.63		-	-
		Tail	10.83	Rs.	53600.00	4949.22		-	-
		Total	18.17	Rs.	91700.00	5046.78		-	-
4.	Sugarcane Converted into Gur	Head	0.81	Mds of Gur	60.00	74.70	C.T. Mds	140	172.84
							Bagg: Mds	92	113.58
		Middle	0.91	Mds of Gur	34.50	37.91	C.T. Mds	105	115.38
							Bagg: Mds	70	76.92
		Tail	0.81	Mds of Gur	40.00	49.38	C.T. Mds	50	61.73
							Bagg: Mds	30	37.04
		Total	2.53	Mds of Gur	134.50	53.16	C.T. Mds	295	116.60
							Bagg: Mds	192	75.89
5.	Sugarcane Sold in field	Head	-	Rs.	-	-	-	-	-
		Middle	0.61	Rs.	8000.00	13114.75	-	-	-
		Tail	-	Rs.	-	-	-	-	-
		Total	0.61	Rs.	8000.00	13114.75	-	-	-
6.	Pigeon Pea	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	-	-	-	-	-	-	-

C.T.= Cane Tops Bagg= Bagasse

Table-2

AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS OUTSIDE SAMPLE WATERCOURSE RD.53700 .

Sr. No.	Crops	Location	Area	Main Product			By Product		
				Unit	Total	Per Hectare	Unit	Total	Per Hectare
0	1	2	3	4	5	6	7	8	9
1.	Maize Grain	Head	1.01	Mds	15.00	14.85	Bundle	200	198.02
		Middle	1.01	Mds	13.50	13.37	Bundle	210	207.92
		Tail	-	Mds	-	-	Bundle	-	-
		Total	2.02	Mds	28.50	14.11	Bundle	410	202.97
2.	Maize Fodder	Head	-	Bundle	-	-		-	-
		Middle	-	Bundle	-	-		-	-
		Tail	-	Bundle	-	-		-	-
		Total	-	Bundle	-	-		-	-
3.	Sorghum (fodder)	Head	1.01	Rs.	5500.00	5445.54		-	-
		Middle	0.91	Rs.	4800.00	5274.73		-	-
		Tail	0.30	Rs.	1500.00	5000.00		-	-
		Total	2.22	Rs.	11800.00	5315.32		-	-
4.	Sugarcane Converted into Gur	Head	2.02	Mds of Gur	140.00	69.31	C.T. Mds	310	153.47
							Bagg: Mds	88	43.56
		Middle	-	Mds of Gur	-	-	C.T. Mds	-	-
							Bagg: Mds	-	-
		Tail	-	Mds of Gur	-	-	C.T Mds	-	-
							Bagg: Mds	-	-
		Total	2.02	Mds of Gur	140.00	69.31	C.T Mds	310	153.47
							Bagg: Mds	88	43.56
5.	Sugarcane Sold in field	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	-	-	-	-	-	-	-
6.	Pigeon Pea	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	-	-	-	-	-	-	-

C.T.= Cane Tops Bagg= Bagasse

Table-3

DISPOSAL MAIN PRODUCTS OTHER THEN SUGARCANE IN SAMPLE WATER COURSE RD 53700

Sr. No.	Crop Mode of Disposal	Maize (Maunds)								Sorghum (Rs)								Sugarcane (Mds)								Pigeon Pea (Bundles)							
		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places	
		Qty.	%	Qty.	%	Qty	%	Qty.	%	Rs.	%	Rs.	%	Rs.	%	Rs.	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
I. Total Output		61	100	52.5	100	46	100	159.5	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II. Disposal																																	
1.Retained for H.use		35.5	58.20	33	62.86	20	43.48	88.5	55.49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.Sold		15	24.59	13	24.76	-	-	28	17.55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.Landlord's Share		5.5	9.02	3	5.71	19	41.30	27.5	17.24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4.Artisan's dues		3	4.92	1	1.90	2	4.35	6	3.76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.Given to Labourers		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.Seed		-	-	-	-	2	4.35	2	1.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.Usher/Charity		2	3.28	2.5	4.76	3	6.52	7.5	4.70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8.Other Specify		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
III.Total =All Uses		61	100	52.5	100	46	100	159.5	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-4

DISPOSAL BY-PRODUCTS IN SAMPLE WATER COURSE RD 53700

Sr. No.	Crop Mode of Disposal	Maize (Qty. in Bundles)								Sorghum (Rupees)							
		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places	
		Qty.	%	Qty.	%	Qty	%	Qty.	%	Rs.	%	Rs.	%	Rs.	%	Rs.	%
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
I	Total Output	1230	100	1240	100	4050	100	6520	100	16550	100	31850	100	86250	100	103500	100
II.	Disposal																
	1.Retained for H.use	615	60	285	73.01	650	11.11	1890	30.43	850	8	2400	8.87	2800	5	6050	6.60
	2.Sold	450	24.27	230	10.62	3500	86.42	4180	62.32	2300	61.54	20225	57.02	32650	58.12	65175	58.21
	3.Landlord's Share	165	16.02	105	16.37	100	2.47	450	7.25	3400	30.77	9225	34.10	19650	36.55	32275	35.20
	4.Artisan's dues	-	-	-	-		-	-	-	-	-	-	-		-	-	-
	5.Given to Labourers	-	-	-	-		-	-	-	-	-	-	-		-	-	-
	6.Seed	-			-		-	-	-	-	-	-	-	-	-	-	-
	7.Usher/Charity	-					-	-	-	-	-	-	-		-	-	-
	8.Other Specify	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
III.	Total =All Uses	1230	100	1240	100	4050	100	6520	100	16550	100	31850	100	86250	100	103500	100

(Contd..)

Sugarcane (C.T. and Bagas in Maunds)															
Head				Middle				Tail				All Places			
C.T.	Bagas	Total	%	C.T.	Bagas	Total	%	C.T.	Bagas	Total	%	C.T.	Bagas	Total	%
18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
140	92.00	232	100	105	70	175	100	50	30	80	100	295	192	487	100
140	92.00	232	100	105	70	175	100	50	30	80	100	295	192	487	100
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-
-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-		-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-		-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
140	92	232	100	105	70	175	100	50	30	80	100	295	192	487	100

C.T.= Cane Tops Bagg= Baganse

Table-5

MODE OF SALE OF MAIZE IN SAMPLE WATER COURSE RD.53700

Sr. No.	Mode of Sale	Head		Middle		Tail		All Places	
		Qty	%	Qty	%	Qty	%	Qty	%
0	1	2	3	4	5	6	7	8	9
I.	In Village	15	100	13	100	-	-	28	100
	1. To Beoparis	-	-	-	-	-	-	-	-
	2. To Shop Keeper	-	-	-	-	-	-	28	100
	3. To Other	15	100	13	100	-	-	-	-
II.	In other village	-	-	-	-	-	-	-	-
	1. To Beoparis	-	-	-	-	-	-	-	-
	2. To Shop Keeper	-	-	-	-	-	-	-	-
	3. To Other	-	-	-	-	-	-	-	-
III.	In Peshawar	-	-	-	-	-	-	-	-
	1. Trough Commission Agent	-	-	-	-	-	-	-	-
	2. To Whole sellers	-	-	-	-	-	-	-	-
	3. To Other	-	-	-	-	-	-	-	-
IV.	In Other Urban centres	-	-	-	-	-	-	-	-
V.	Total Sales	15	100	13	100	-	-	28	100

Table-6

MODE OF SALE OF SORGHUM IN SAMPLE WATER COURSE RD.53700

Sr. No.	Mode of Sale	Head		Middle		Tail		All Places	
		Qty.	%	Qty.	%	Qty.	%	Qty.	%
0	1	2	3	4	5	6	7	8	9
I.	In Village	12300	100	20225	100	32650	100	-	-
	1. To Beoparis	-	-	-	-	-	-	-	-
	2. To Shop Keeper	-	-	-	-	-	-	-	-
	3. To Other	12300	100	20225	100	32650	100	-	-
II.	In other village	-	-	-	-	-	-	-	-
	1. To Beoparis	-	-	-	-	-	-	-	-
	2. To Shop Keeper	-	-	-	-	-	-	-	-
	3. To Other	-	-	-	-	-	-	-	-
III.	In Peshawar	-	-	-	-	-	-	-	-
	1. Trough Commission Agent	-	-	-	-	-	-	-	-
	2. To Whole sellers	-	-	-	-	-	-	-	-
	3. To Other	-	-	-	-	-	-	-	-
IV.	In Other Urban Centres	-	-	-	-	-	-	-	-
V.	Total Sales	12300	100	20225	100	32650	100	-	-

Table-7

MODE OF SALE OF PIGEON PEA IN SAMPLE WATER COURSE RD.53700

(NOT APPLICABLE)

Table-8

UTILIZATION OF SUGARCANE IN SAMPLE WATER COURSE RD 53700

Sr. No.	Particulars	Unit	Head	Middle	Tail	All Places
0	1	2	3	4	5	6
1.	Sugarcane Produced	Mds	660	1064	250	1974
2.	Sold to sugarmills	-	-	-	-	-
3.	Sold to Gur manufactures	-	-	534	-	534
4.	Converted into Gur	Mds	660	530	-	1440
5.	Used as Seed	Mds	-	-	-	-

Table-9

UTILIZATION OF GUR PRODUCED BY SAMPLE FARMERS
IN SAMPLE WATER COURSE RD 53700

Sr. No.	Utilization	Head		Middle		Tail		All Places	
		Mds	%	Mds	%	Mds	%	Mds	%
0	1	2	3	4	5	6	7	8	9
1.	Sold	52	86.66	24	53.33	15.5	77.5	91.50	73.20
2.	Self Consumed	8	13.33	21	46.66	4.5	22.5	33.50	26.80
3.	Landlord's Share	-	-	-	-	-	-	-	-
4.	Other Uses	-	-	-	-	-	-	-	-
5.	T o t a l:-	60	100	45	100	20	100	125	100

Table-10

NUMBER OF FARMERS REPORTING CONSUMPTION OF CHEMICAL FERTILIZERS IN RD 53700

Sr. No.	Location of farm	Total farmers growing this crop No(=100)	Quantity of Fertilizer Used: Urea		D A P		N P K		N P		Ammonium Sulphate		Ammonium Nitrate		F.Sulphate	
			No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
I.	MAIZE															
	a.Head of W.C.	10	10	100.00	1	10.00	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	8	7	87.50	1	12.50	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	7	7	100.00	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	25	24	96.00	2	8.00	-	-	-	-	-	-	-	-	-	-
II.	SORGHUM															
	a.Head of W.C.	8	6	75.00	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	7	7	100.00	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	10	10	100.00	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	25	23	92.00	-	-	-	-	-	-	-	-	-	-	-	-
III.	SUGARCANE															
	a.Head of W.C.	1	1	100.00	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	3	3	100.00	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	1	1	100.00	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	5	5	100.00	-	-	-	-	-	-	-	-	-	-	-	-
IV.	PIGEON PEA															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-11

QUANTITY OF CHEMICAL FERTILIZERS USED BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD 53700

Sr. No.	Location of fars	Area sown (Hectare)	Quantity of fertilizer used: (KG)													
			Urea		D A P		N P K		N P		Ammonium Sulphate		Ammonium Nitrate		P.Sulphate	
			Total	Per Hect-are	Total	Per Hect-are	Total	Per Hect-are	Total	Per Hect-are	Total	Per Hect-are	Total	Per Hect-are	Total	Per Hect-are
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
I.	MAIZE															
	a.Head of W.C.	2.99	595	199	50	17	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	4.46	375	84	50	11	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	7.79	600	77	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	15.24	1570	103	100	7	-	-	-	-	-	-	-	-	-	-
II.	SORGHUM															
	a.Head of W.C.	2.38	465	195	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	4.96	625	126	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	10.83	1450	134	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	18.17	2540	140	-	-	-	-	-	-	-	-	-	-	-	-
III.	SUGARCANE															
	a.Head of W.C.	0.61	200	247	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	1.52	350	230	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	0.81	350	247	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	3.14	750	239	-	-	-	-	-	-	-	-	-	-	-	-
IV.	PIGEON PEA															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-12

CONSUMPTION OF FARM YARD MANURE IN
SAMPLE WATER COURSE RD 537000

Sr. No.	Location of farm	Total farmers growing this crop	Farmers using Farm Yard Manure No.		Area Sown	Quantity used (KG) Total	Per Hectare
0	1	2	3	4	5	6	7
I.	MAIZE						
	a.Head of W.C.	10	2	20.00	2.99	2612	874
	b.Middle of W.C.	8	1	12.50	4.46	746	167
	c.Tail of W.C.	7	-	-	7.79	-	-
	d.All Places	25	3	12.00	15.24	3358	220
II.	SORGHUM						
	a.Head of W.C.	8	1	12.50	2.38	373	157
	b.Middle of W.C.	7	1	14.29	4.96	2986	602
	c.Tail of W.C.	10	2	20.00	10.83	4852	448
	d.All Places	25	4	16.00	18.17	8211	452
III.	SUGARCANE						
	a.Head of W.C.	1	-	-	0.81	-	-
	b.Middle of W.C.	3	-	-	1.52	-	-
	c.Tail of W.C.	1	-	-	0.81	-	-
	d.All Places	5	-	-	3.14	-	-
IV.	PIGEON PEA						
	a.Head of W.C.	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-

Table-13

NUMBER OF SAMPLE FARMERS WHO USED INSECTICII
PESTICIDES/WEEDICIDES IN SAMPLE WATER COURSE RD 53/00

Sr. No.	Location of farm	Total Farmer growing these crops No(=100)	Farmers who used: Insect:/ Pesticides		Farmers who used: Weedicides	
			No.	%	No.	%
0	1	2	3	4	5	6
I.	MAIZE					
	a. Head of W.C.	10	-	-	-	-
	b. Middle of W.C.	8	-	-	-	-
	c. Tail of W.C.	7	-	-	-	-
	d. All Places	25	-	-	-	-
II.	SORGHUM					
	a. Head of W.C.	8	-	-	-	-
	b. Middle of W.C.	7	-	-	-	-
	c. Tail of W.C.	10	-	-	-	-
	d. All Places	25	-	-	-	-
III.	SUGARCANE					
	a. Head of W.C.	1	-	-	-	-
	b. Middle of W.C.	3	-	-	-	-
	c. Tail of W.C.	1	-	-	-	-
	d. All Places	5	-	-	-	-
IV.	PIGEON PEA					
	a. Head of W.C.	-	-	-	-	-
	b. Middle of W.C.	-	-	-	-	-
	c. Tail of W.C.	-	-	-	-	-
	d. All Places	-	-	-	-	-

Table-14

QUANTITY OF SEED USED BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD 53700

(Kg)

Sr. No.	Crop	Total Area (Hectare)	Head Quantity used			Middle Quantity used			Tail Quantity used			All Places Quantity used		
			Improved	Local	Total	Improved	Local	Total	Improved	Local	Total	Improved	Local	Total
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Maize	15.24	-	159	159	-	159	159	-	396	396	-	714	714
2.	Sorghum	18.17	-	215	215	-	496	496	-	855	855	-	1566	1566
3.	Sugarcane	3.14	2986	2239	2986	-	3359	5598	-	2986	2986	5225	6345	11570
4.	Pigeon Pea	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-15

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD.53700

Crop: Maize Area:15.24 i) Head : 3.99 ha ii) Middle: 4.46 ha iii) Tail: 7.79 ha

Sr. No.	Physical Input	Head Purchased Total	Head Purchased Per Hect.	Head Self Supplied Total	Head Self Supplied Per Hect.	Head Total (2+4) Total	Head Total (2+4) Per Hect.	Middle Purchased Total	Middle Purchased Per Hect.	Middle Self Supplied Total	Middle Self Supplied Per Hect.	Middle Total (8+10) Total	Middle Total (8+10) Per Hect.	Tail Purchased Total	Tail Purchased Per Hect.	Tail Self Supplied Total	Tail Self Supplied Per Hect.	Total (14+16) Total	Total (14+16) Per Hect.	All Places Purchased (2+8+14) Total	All Places Purchased (2+8+14) Per Hect.	All Places Self Supplied (4+10+16) Total	All Places Self Supplied (4+10+16) Per Hect.	All Places Total Total	All Places Total Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Seed	724	242	39	13	763	255	681	153	-	-	681	153	727	93	393	50	1132	145	2144	141	432	28	2576	16[illegible]
2.	Farm Yard Manure	-	-	320	107	320	107	-	-	80	18	80	18	-	200	-	-	-	-	-	-	400	26	400	2[illegible]
3.	Chemical Fertilizer	1697	562	-	-	1697	562	1121	251	-	-	1121	251	1556	200	-	-	1556	200	4356	286	-	-	4356	28[illegible]
4.	Insecticide/ Pesticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Water Charges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	Dues of Artisans	472	158	-	-	472	158	100	22	-	-	100	22	150	19	-	-	150	19	722	47	-	-	722	47
7.	Total	2875	962	359	120	3234	1082	1902	426	80	18	1982	444	2445	314	393	50	2838	364	7222	474	832	55	8054	528

Table-16

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.53700

Crop: Maize Area: 15.24 i) Head : 2.37 ha ii) Middle: 4.46 ha iii) Tail: 7.79 ha

Sr. No.	Operations	Labour Inputs	Head: Paid Total	Head: Paid Per Hect:	Head: Self Supplied Total	Head: Self Supplied Per Hect:	Head: Total (1+3) Total	Head: Total (1+3) Per Hect:	Middle: Paid Total	Middle: Paid Per Hect:	Middle: Self Supplied Total	Middle: Self Supplied Per Hect:	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect:	Tail: Paid Total	Tail: Paid Per Hect:	Tail: Self Supplied Total	Tail: Self Supplied Per Hect:	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect:	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect:	All Places: Self Supp: (5+11+17) Total	All Places: Self Supp: (5+11+17) Per Hect:	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Ploughing		i.Manual	-	-	415	139	415	139	-	-	383	86	383	86	-	-	585	67	585	67	-	-	1323	87	1323	87
		ii.Animal	300	100	300	100	600	201	-	-	500	112	500	112	-	-	700	90	700	90	300	20	1500	98	1800	118
		iii.Machine	855	286	-	-	855	286	1245	279	-	-	1245	279	1750	225	-	-	1750	225	3850	253	-	-	3850	253
		iv.Total	1155	386	715	239	1870	625	1245	279	883	198	2128	477	1750	225	1285	157	2975	382	4150	272	2823	185	6973	458
2. Levelling		i.Manual	-	-	45	15	45	15	-	-	53	12	53	12	-	-	105	13	105	13	-	-	203	13	203	13
		ii.Animal	75	25	-	-	75	25	-	-	88	20	88	20	-	-	175	22	175	22	75	5	263	17	338	22
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	75	25	45	15	120	40	-	-	141	32	141	32	-	-	280	36	280	36	75	5	466	31	541	35
3. Planking		i.Manual	-	-	23	8	23	8	-	-	57	13	57	13	-	-	53	7	53	7	-	-	133	9	133	9
		ii.Animal	38	13	-	-	38	13	-	-	55	12	55	12	-	-	88	11	88	11	38	2	143	9	181	12
		iii.Machine	75	25	-	-	75	25	-	-	-	-	-	-	-	-	-	-	-	-	75	5	-	-	75	5
		iv.Total	113	38	23	8	136	45	-	-	112	25	112	25	-	-	141	18	141	18	113	7	276	18	389	26
4. Sowing		i.Manual	-	-	210	70	210	70	-	-	279	63	279	63	-	-	315	40	315	40	-	-	304	53	804	53
		ii.Animal	175	59	75	25	250	84	-	-	350	78	350	78	-	-	350	45	350	45	175	11	775	51	950	62
		iii.Machine	790	264	-	-	790	264	720	161	-	-	720	161	1380	177	-	-	1380	177	2890	190	-	-	2890	190
		iv.Total	965	323	285	95	1250	418	720	161	629	141	1349	302	1380	177	665	85	2045	263	3065	201	1579	104	4644	305
5. Watering		i.Manual	-	-	438	146	438	146	-	-	533	120	533	120	-	-	1052	135	1052	135	-	-	2023	133	2023	133
6. F.Y.Manure		i.Manual	-	-	68	23	68	23	-	-	120	27	120	27	-	-	360	46	360	46	-	-	548	36	128	36

Contd....)

Table-16

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.53700

Crop: Maize — Area: 15.24 — i) Head : 2.99 ha — ii) Middle: 4.46 ha — iii) Tail: 7.79 ha

Sr. No.	Operations	Labour Inputs	Head: Paid Total	Head: Paid Per Hect:	Head: Self Supplied Total	Head: Self Supplied Per Hect:	Head: Total (3+5) Total	Head: Total (3+5) Per Hect:	Middle: Paid Total	Middle: Paid Per Hect:	Middle: Self Supplied Total	Middle: Self Supplied Per Hect:	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect:	Tail: Paid Total	Tail: Paid Per Hect:	Tail: Self Supplied Total	Tail: Self Supplied Per Hect:	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect:	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect:	All Places: Self Supp: (5+11+17) Total	All Places: Self Supp: (5+11+17) Per Hect:	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
7. Chemical	i.Manual		-	-	52	17	52	17	-	-	31	7	31	7	-	-	45	6	45	6	-	-	128	8	128	8
8. Hoeing/Weed:	i.Manual		-	-	120	40	120	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	120	8	120	8
9. Harvesting	i.Manual		-	-	3000	1003	3000	1003	-	-	1785	400	1785	400	-	-	2045	263	2045	263	-	-	6830	448	6830	448
10.Carriage to Threshing Yard	i.Manual		-	-	525	176	525	176	-	-	363	81	363	81	-	-	405	52	405	52	-	-	1293	85	1293	85
	ii.Animal		-	-	350	117	350	117	-	-	250	56	250	56	-	-	270	35	270	35	-	-	870	57	870	57
	iii.Machine		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total		-	-	875	293	875	293	-	-	613	137	613	137	-	-	675	87	675	87	-	-	2163	142	2163	142
11.Threshing/ Winnowing	i.Manual		-	-	570	191	570	191	-	-	420	94	420	94	-	-	450	58	450	58	-	-	1440	94	1440	94
	ii.Animal		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iii.Machine		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total		-	-	570	191	570	191	-	-	420	94	420	94	-	-	450	58	450	58	-	-	1440	94	1440	94
12.Total	i.Manual		-	-	5466	1828	5466	1828	-	-	4024	902	4024	902	-	-	5355	687	5355	687	-	-	14845	974	14845	974
	ii.Animal	588	197	725	242	1313	439	-	-	1243	279	1243	279	-	-	1583	203	1583	203	588	39	3551	233	4139	272
	iii.Machine	1720	575	-	-	1720	575	1965	441	-	-	1965	441	3130	402	-	-	3130	402	6815	447	-	-	6815	447
	iv.Total	2308	772	6191	2071	8499	2842	1965	441	5267	1181	7232	1622	3130	402	6938	891	10068	1292	7403	486	18396	1207	25799	1693

(Concluded)

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD.53700

Crop: Sorghum Area:18.17 ha i) Head : 2.39 ha ii) Middle: 4.96 ha iii) Tail:10.83 ha

Sr. No.	Physical Input	Head						Middle						Tail						All Places					
		Purchased		Self Supplied		Total (2+4)		Purchased		Self Supplied		Total (8+10)		Purchased		Self Supplied		Total (14+16)		Purchased (2+8+14)		Self Supplied (4+10+16)		Total	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Seed	1003	421	105	44	1108	466	2495	503	-	-	2495	503	3374	312	-	-	3374	312	6872	378	105	6	6977	384
2.	Farm Yard Manure	-	-	50	21	50	21	-	-	320	65	320	65	-	-	790	73	790	73	-	-	1160	64	1160	64
3.	Chemical Fertilizer	1204	506	-	-	1204	506	1664	335	-	-	1664	335	3780	349	-	-	3780	349	6648	366	-	-	6648	366
4.	Insecticide/ Pesticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Water Charges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	Dues of Artisans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Total	2207	927	155	65	2362	992	4159	839	320	65	4479	903	7154	661	790	73	7944	734	13520	744	1265	70	14785	814

Table-18

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.53700

Crop: Sorghum — Area:18.17 — i) Head : 2.38 ha — ii) Middle: 4.96 ha — iii) Tail:10.83 ha

Sr. No.	Operations	Labour Inputs	Head: Paid Total	Head: Paid Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total Total	Head: Total (3+5) Per Hect.	Middle: Paid Total	Middle: Paid Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect.	Tail: Paid Total	Tail: Paid Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect.	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect.	All Places: Self Supp. (5+11+17) Total	All Places: Self Supp. (5+11+17) Per Hect.	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Ploughing	i.Manual		-	-	213	89	213	89	-	-	638	139	638	139	-	-	541	50	541	50	-	-	1442	79	1442	79
	ii.Animal		-	-	325	137	325	137	-	-	1050	212	1050	212	-	-	650	60	650	60	-	-	2025	111	2025	111
	iii.Machine		420	176	-	-	420	176	405	82	-	-	405	82	2420	223	-	-	2420	223	3245	179	-	-	3245	179
	iv.Total		420	176	538	226	958	403	405	82	1738	350	2143	432	2420	223	1191	110	3611	333	3245	179	3467	191	6712	369
2. Leveling	i.Manual		-	-	15	6	15	6	-	-	45	9	45	9	-	-	90	8	90	8	-	-	150	8	150	8
	ii.Animal		-	-	25	11	25	11	-	-	75	15	75	15	-	-	150	14	140	14	-	-	250	14	250	14
	iii.Machine		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total		-	-	40	17	40	17	-	-	120	24	120	24	-	-	240	22	240	22	-	-	400	22	400	22
3. Planking	i.Manual		-	-	15	6	15	6	-	-	94	19	94	19	-	-	66	6	66	6	-	-	175	10	175	10
	ii.Animal		-	-	25	11	25	11	-	-	150	30	150	30	-	-	50	5	50	5	-	-	225	12	225	12
	iii.Machine		-	-	-	-	-	-	180	36	-	-	180	36	390	36	-	-	390	36	570	31	-	-	570	31
	iv.Total		-	-	40	17	40	17	180	36	244	49	424	85	390	36	116	11	506	47	570	31	400	22	970	53
4. Sowing	i.Manual		-	-	163	68	163	68	-	-	430	87	430	87	-	-	395	36	395	36	-	-	988	54	988	54
	ii.Animal		-	-	213	89	213	89	-	-	500	101	500	101	-	-	325	30	325	30	-	-	1038	57	1038	57
	iii.Machine		225	95	-	-	225	95	570	115	-	-	570	115	1560	144	-	-	1560	144	2355	130	-	-	2355	130
	iv.Total		225	95	376	158	601	253	570	115	930	188	1500	302	1560	144	720	66	2280	211	2355	130	2026	112	4381	241
5. Watering	i.Manual		-	-	181	76	181	76	-	-	445	90	445	90	-	-	1478	136	1478	136	-	-	2104	116	2104	116
6. F.Y.Manure	i.Manual		-	-	8	3	8	3	-	-	60	12	60	12	-	-	278	26	278	26	-	-	346	19	346	19

(Contd...)

Table-13

LABOUR INPUT COST IN SAMPLE WATER COURSE NO.3700

Crop: Sorghum Area:18.17 ha. i) Head : [illegible] ha ii) Middle: 4.96 ha iii) Tail:10.83 ha

Sr. No.	Operations	Labour Inputs	Head: Paid Total	Head: Paid Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (3+5) Total	Head: Total (3+5) Per Hect.	Middle: Paid Total	Middle: Paid Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect.	Tail: Paid Total	Tail: Paid Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect.	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect.	All Places: Self Supp. (5+11+17) Total	All Places: Self Supp. (5+11+17) Per Hect.	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
7. Chemical		i.Manual	-	-	37	16	37	16	-	-	60	12	60	12	-	-	108	10	108	10	-	-	193	11	193	11
8. Hoeing/Weeding		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9. Harvesting		i.Manual	-	-	105	44	105	44	-	-	330	67	330	67	-	-	375	35	375	35	-	-	810	45	810	45
10.Carriage to Threshing yard.		i.Manual	-	-	105	44	105	44	-	-	330	67	330	67	-	-	375	35	375	35	-	-	810	45	810	45
		ii.Animal	-	-	90	38	90	38	-	-	220	44	220	44	-	-	250	23	250	23	-	-	560	31	560	31
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	195	82	195	82	-	-	550	111	550	111	-	-	625	58	625	58	-	-	1370	75	1370	75
11.Threshing/ Winnowing		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12. Total		i.Manual	-	-	842	354	842	354	-	-	2470	498	2470	498	-	-	3706	342	3706	342	-	-	7018	386	7018	386
		ii.Animal	-	-	478	285	678	285	-	-	1995	402	1995	402	-	-	1425	132	1425	132	-	-	4098	226	4098	226
		iii.Machine	645	271	-	-	645	271	1155	233	-	-	1155	233	4370	404	-	-	4370	404	6170	340	-	-	6170	340
		iv.Total	645	271	1520	639	2165	910	1155	233	4465	900	5620	1133	4370	404	5131	474	9501	877	6170	340	11116	612	17286	951

(Concluded)

Table-19

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD.53700

Crop: Sugarcane Area: 3.14 ha i) Head : 0.81 ha ii) Middle: 1.52 ha iii) Tail: 0.81 ha

Sr. No.	Physical Input	Head: Purchased Total	Head: Purchased Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (2+4) Total	Head: Total (2+4) Per Hect.	Middle: Purchased Total	Middle: Purchased Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (8+10) Total	Middle: Total (8+10) Per Hect.	Tail: Purchased Total	Tail: Purchased Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (14+16) Total	Tail: Total (14+16) Per Hect.	All Places: Purchased (2+8+14) Total	All Places: Purchased (2+8+14) Per Hect.	All Places: Self Supplied (4+10+16) Total	All Places: Self Supplied (4+10+16) Per Hect.	All Places: Total Total	All Places: Total Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Seed	-	-	1440	1778	1440	1778	2700	1776	-	-	2700	1776	1440	1778	-	-	1440	1778	4140	1318	1440	459	5580	1777
2.	Farm Yard Manure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.	Chemical Fertilizer	500	617	-	-	500	617	924	193	-	-	924	193	528	652	-	-	528	652	1952	421	-	-	1952	421
4.	Insecticide/ Pesticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Water Rate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	Dues of Artisans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Fuel Charges	-	-	1500	1852	1500	1852	-	-	1200	789	1200	789	-	-	320	395	320	395	-	-	3020	962	3020	962
8.	Rent of crushing Machine	292	260	-	-	292	360	172	113	-	-	172	113	195	241	-	-	195	241	659	210	-	-	659	210
9.	Total	792	979	2940	3630	3732	4607	3796	2083	1200	789	4996	2872	2163	2670	320	395	2483	3065	6751	1949	4460	1420	11211	3370

Table-20

LABOUR INPUT COST IN SAMPLE WATER COURSE 50.53700

Crop: Sugarcane Area: 3.14 ha i) Head : 0.81 ha ii) Middle: 1.52 ha iii) Tail: 0.81 ha

Sr. No.	Operations	Labour Inputs	Head: Paid Total	Head: Paid Per Hect:	Head: Self Supplied Total	Head: Self Supplied Per Hect:	Head: Total (3+5) Total	Head: Total (3+5) Per Hect:	Middle: Paid Total	Middle: Paid Per Hect:	Middle: Self Supplied Total	Middle: Self Supplied Per Hect:	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect:	Tail: Paid Total	Tail: Paid Per Hect:	Tail: Self Supplied Total	Tail: Self Supplied Per Hect:	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect:	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect:	All Places: Self Supp: (5+11+17) Total	All Places: Self Supp: (5+11+17) Per Hect:	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Ploughing		i.Manual	-	-	360	444	360	444	-	-	161	106	161	106	-	-	360	444	360	444	-	-	881	281	881	281
		ii.Animal	-	-	600	741	600	741	-	-	225	148	225	148	-	-	600	741	600	741	-	-	1425	454	1425	454
		iii.Machine	-	-	-	-	-	-	450	296	-	-	450	148	-	-	-	-	-	-	450	143	-	-	450	143
		iv.Total	-	-	960	1185	960	1185	450	296	386	254	836	550	-	-	960	1185	960	1185	450	143	2306	734	2756	878
2. Levelling		i.Manual	-	-	-	-	-	-	-	-	23	15	23	15	-	-	60	74	60	74	-	-	83	26	83	26
		ii.Animal	-	-	-	-	-	-	-	-	38	25	38	25	-	-	100	123	100	123	-	-	138	44	138	44
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	-	-	-	-	-	-	61	40	61	40	-	-	160	198	160	198	-	-	221	70	221	70
3. Planking		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	37	30	37	-	-	30	10	30	10
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50	62	50	62	-	-	50	16	50	16
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	80	99	80	99	-	-	80	25	80	25
4. Sowing		i.Manual	-	-	600	741	600	741	-	-	885	582	885	582	-	-	600	741	600	741	-	-	2085	664	2085	664
		ii.Animal	-	-	200	247	200	247	-	-	75	49	75	49	-	-	200	247	200	247	-	-	475	151	475	151
		iii.Machine	-	-	-	-	-	-	180	118	-	-	180	118	-	-	-	-	-	-	180	57	-	-	180	57
		iv.Total	-	-	800	988	800	988	180	118	960	632	1140	750	-	-	800	988	800	988	180	57	2560	815	2740	873
5. Watering		i.Manual	-	-	360	444	360	444	-	-	499	328	499	328	-	-	298	356	288	356	-	-	1147	365	1147	365
6. F.Y.Manure		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Contd..)

Table-20

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.53700

Crop: Sugarcane — Area: 3.14 ha — i) Head : 0.81 ha — ii) Middle: 1.52 ha — iii) Tail: 0.81 ha

Sr. No.	Operations	Labour Inputs	Head: Paid Total	Head: Paid Per Hect:	Head: Self Supplied Total	Head: Self Supplied Per Hect:	Head: Total (3+5) Total	Head: Total (3+5) Per Hect:	Middle: Paid Total	Middle: Paid Per Hect:	Middle: Self Supplied Total	Middle: Self Supplied Per Hect:	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect:	Tail: Paid Total	Tail: Paid Per Hect:	Tail: Self Supplied Total	Tail: Self Supplied Per Hect:	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect:	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect:	All Places: Self Supp: (5+11+17) Total	All Places: Self Supp: (5+11+17) Per Hect:	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
7. Chemical		i.Manual	-	-	15	19	15	19	-	-	28	18	28	18	-	-	15	19	15	19	-	-	58	18	58	18
8. Hoeing/Weed:		i.Manual	-	-	480	593	480	593	-	-	390	257	390	257	-	-	-	-	-	-	-	-	870	277	870	277
9. Harvesting		i.Manual	600	741	360	444	960	1185	1020	671	870	572	1890	1243	420	519	300	370	720	889	2040	650	1530	487	3570	1137
10.Carriage to Threshing yard/Gani		i.Manual	240	296	120	148	360	444	300	197	150	99	450	296	180	222	60	74	240	296	720	229	330	105	1050	334
		ii.Animal	320	395	160	198	480	593	480	316	-	-	480	316	320	395	-	-	320	395	1120	357	160	51	1280	408
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	560	691	280	346	840	1037	780	513	150	99	930	612	500	617	60	74	560	691	1840	586	490	156	2330	742
11.Threshing/ Winnowing/ Cane Crushing		i.Manual	-	-	450	556	450	556	-	-	255	168	255	168	-	-	300	370	300	370	-	-	1005	320	1005	320
		ii.Animal	-	-	1050	1296	1050	1296	-	-	595	391	595	391	-	-	700	864	700	864	-	-	2345	747	2345	747
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	1500	1852	1500	1852	-	-	850	559	850	559	-	-	1000	1235	1000	1235	-	-	3350	1067	3350	1067
12.Gur Making			1800				1800		910		210		1020		1200		-		1200		3810		210		4020	
13. Total		i.Manual	2640	3259	2745	3389	5385	6648	2130	1401	3471	2283	5601	3684	1800	2222	2013	2485	3813	4707	6570	2092	8229	2620	14799	4713
		ii.Animal	320	395	2010	2481	2330	2877	933	316	933	614	1413	930	320	395	1650	2037	1970	2432	1120	357	4593	1463	5713	1819
		iii.Machine	-	-	-	-	-	-	630	414	-	-	630	414	-	-	-	-	-	-	630	201	-	-	630	201
		iv.Total	2960	3654	4755	5870	7715	9524	3240	2131	4404	2897	7644	5028	2120	2617	3663	4522	7139	5858	8320	2659	12822	4083	21142	6733

Concluded.

Table-21

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD.53700
(PIGEON PEA)

(NOT APPLICABLE)

Table-22

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.53700
(PIGEON PEA)

(NOT APPLICABLE)

Table-23

PRODUCTION COST AND PROFIT IN SAMPLE WATER COURSE RD.53700

Sr. No.	Crops	Location	Area (Hectare)	Total Output: Main Product (Mds)	Total Output: By-product Unit	Total Output: Total Output	Market Price per unit (ex-farm) MP (Rs)	Market Price per unit (ex-farm) BP (Rs)	Total value of output: MP	Total value of output: BP	Total value of output: Total	Value per Hectare: MP	Value per Hectare: BP	Value per Hectare: Total	Total Farming cost: Physical inputs	Total Farming cost: Labour cost	Total Farming cost: Total	Cost per hectare	Profit/loss (+) (-): Total	Profit/loss (+) (-): Per Hectare	Total Imputed costs: Physical input	Total Imputed costs: Labour	Total Imputed costs: Total	Carry home Income =col.19+23: Total	Carry home Income =col.19+23: Per Hectare
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1. Maize	Head		2.99	46.00	Bundles	1030	108	[illegible]	4968	2060	7028	1662	689	2351	3234	8499	11733	[illegible]	4705	-1574	-	6191	6191	1486	497
	Middle		4.46	39.50	Bundles	1130	105	[illegible]	4168	2260	6409	930	507	1437	1982	7232	9214	[illegible]	-2307	-629	-	5267	5267	2461	552
	Tail		7.79	46.00	Bundles	4050	105	[illegible]	4830	8100	12930	620	1040	1660	2838	10068	12906	[illegible]	- 24	-3	-	6938	6938	6962	894
	A.Places		15.24	131.50	Bundles	6210			13946	12420	26366	915	815	1730	3054	25799	28853	[illegible]	-7488	-491	-	18396	18396	10909	716
2. Sorghum	Head		2.38	Hect:	Rs.	-	4643		11050	-	11050	4643	-	4643	3362	2165	5527	1902	6523	2741	-	1520	1520	8043	3380
	Middle		4.96	Hect:	Rs.	-	5454		27052	-	27052	5454	-	5454	4479	5620	10099	2036	16953	3418	-	4465	4465	21418	4318
	Tail		10.93	Hect:	Rs.	-	4949		53598	-	53598	4949	-	4949	7944	9501	17445	1611	36153	3338	-	5131	5131	41284	3812
	A.Places		18.17	Hect:	Rs.	-	15046		91700	-	91700	5047	-	5047	14735	17286	32071	1765	59629	3228	-	11116	11116	70745	3893
3. Sugarcane (Gur)	Head		0.81	60.00	Mds.C.T.	140	400	5	24000	7001	25804	29630	3641	31857	3732	7715	11447	14132	14357	17725	-	4755	4755	19112	23595
					Mds.Bagg:	92		12		1104			1362												
	Middle		1.52	34.50	Mds.C.T.	105	360	[illegible]	12420	5251	13785	8171	3451	9069	4996	7644	12640	8316	1145	753	-	4404	4404	5549	3651
					Mds.Bagg:	70		12		840			533												
	Tail		0.81	40.00	Mds.C.T.	50	300	5	12000	2501	12610	14815	3091	15568	2483	5783	8266	10205	4344	5363	-	3663	3663	9007	9885
					Mds.Bagg:	30		12		360			444												
	A.Places		3.14	134.50	Mds.C.T.	295			36420	14751	39589	11599	4701	12608	11211	21142	32353	7671	15502	4937	-	9159	9159	24661	7854
					Mds.Bagg:	192				2304			734												
4. Pigeon Pea	Head		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Middle		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tail		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	A.Places		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-24

CROPPING PATTERN ON SAMPLE FARM IN SAMPLE WATER COURSE RC 53[illegible]0C

Sr. No.	Crops	Area											
		Head			Middle			Tail			All Places		
		Hect-are	% of season	% of year	Hect-are	% of season	% of year	Hect-are	% of season	% of year	Hect-are	% of season	% of year
0	1	2	3	4	5	6	7	8	9	10	11	12	13
I.	Kharif 1987												
	1. Maize	2.99	48.38	19.56	4.46	40.77	21.34	7.79	46.09	21.44	15.24	41.70	21.01
	2. Sorghum	2.39	38.51	15.57	4.95	45.34	23.73	10.82	55.74	29.81	18.17	49.71	25.06
	3. Sugarcane	0.91	13.11	5.30	1.52	13.89	7.27	1.81	4.17	2.23	3.14	8.59	4.33
	4. Pigeon Pea	-	-	-	-	-	-	-	-	-	-	-	-
	5. All K.Crops	6.18	100.00	40.42	10.94	177.30	52.34	19.43	100.00	53.48	36.55	100.00	50.40
II.	Rabi 1987-88												
	1. Wheat	6.43	70.58	42.05	6.92	69.58	33.15	10.92	64.67	30.09	24.29	67.57	33.49
	2. Barley	0.56	6.15	3.66	0.20	2.01	0.96	-	-	-	0.76	2.11	1.05
	3. Berseem	2.12	23.27	13.87	2.83	28.41	13.54	5.97	35.33	16.43	10.92	30.36	15.06
	4. Spinach	-	-	-	-	-	-	-	-	-	-	-	-
	All Rabi Crops	9.11	100.00	59.58	9.96	100.00	47.66	16.90	100.00	46.52	35.97	100.00	49.60
III.	Kharif + Rabi	15.29	-	100.00	20.90	-	100.00	36.33	-	100.00	72.52	-	100.00

Table-25

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF
MAIZE IN SAMPLE WATER COURSE RD 53760

Sr. No.	Operations	Head (Area sown: 2.99)						Middle (Area sown: 4.46)						Tail (Area sown: 7.79)						All Places (Area sown: 15.24)					
		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Ploughing	13.39	4.62	12.00	4.01	15.00	5.02	12.76	2.86	10.00	2.24	22.00	4.93	17.50	2.25	14.00	1.80	30.00	3.85	44.39	2.89	36.00	2.36	67.00	4.40
2.	Levelling	1.50	0.50	1.50	0.50	-	-	1.75	0.39	1.75	0.39	-	-	3.50	0.45	3.50	0.45	-	-	6.75	0.44	6.75	0.44	-	-
3.	Planking	0.75	0.25	0.75	0.25	1.25	0.42	1.90	0.43	1.90	0.43	-	-	1.75	0.22	1.75	0.22	4.00	0.51	4.40	0.29	4.40	0.29	5.25	0.34
4.	Sowing	7.00	2.34	5.00	1.67	14.09	4.71	9.1	2.09	7.00	1.57	9.00	2.02	10.50	1.35	7.00	0.90	23.00	2.95	26.91	1.76	19.00	1.25	46.09	3.02
5.	Watering	14.78	4.94	-	-	-	-	18.0	4.04	-	-	-	-	38.50	4.93	-	-	-	-	71.18	4.67	-	-	-	-
6.	F.Y.Manure	2.25	0.75	-	-	-	-	4.00	0.90	-	-	-	-	12.00	1.54	-	-	-	-	18.25	1.20	-	-	-	-
7.	Che:Fertilizer	1.73	0.58	-	-	-	-	1.05	0.24	-	-	-	-	1.51	0.19	-	-	-	-	4.29	0.28	-	-	-	-
8.	Hoeing/Weeding	4.00	1.34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.00	0.26	-	-	-	-
9.	Harvesting	100.00	33.44	-	-	-	-	61.00	13.68	-	-	-	-	74.00	9.50	-	-	-	-	235.00	15.42	-	-	-	-
10.	Carriage to Threshingrd	17.50	5.85	17.50	5.85	-	-	12.50	2.80	12.50	2.80	-	-	13.50	1.73	-	-	-	-	43.50	2.83	43.50	2.85	-	-
11.	Threshing/ Winnowing	19.00	0.64	-	-	-	-	14.00	3.14	-	-	-	-	15.00	1.93	-	-	-	-	48.00	2.03	-	-	-	-
12.	Total	182.34	55.26	36.75	12.29	30.34	10.15	136.27	30.55	33.15	7.43	31.00	6.95	187.66	24.09	39.75	5.10	57.00	7.32	505.77	32.10	109.65	7.19	111.34	7.77

Table-26

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF SORGHUM IN SAMPLE WATER COURSE RD 53700

Sr. No.	Operations	Head (Area sown: 2.38)						Middle (Area sown: 4.96)						Tail (Area sown: 10.93)						All Places (Area sown: 18 17)					
		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Ploughing	7.25	3.05	6.50	2.73	7.00	2.94	23.00	4.64	21.00	4.23	7.00	1.41	18.25	1.69	13.00	1.20	41.50	3.83	48.50	2.67	40.50	2.23	55.50	3.05
2.	Levelling	0.50	0.21	0.50	0.21	-	-	1.50	0.30	1.50	0.30	-	-	3.00	0.28	3.00	0.28	-	-	5.00	0.23	5.00	0.28	-	-
3.	Planking	0.50	0.21	0.50	0.21	-	-	3.12	0.63	3.41	0.69	3.00	0.60	1.50	0.85	1.50	0.14	6.56	0.61	12.82	0.71	5.41	0.30	9.56	0.53
4.	Sowing	5.40	2.27	4.25	1.79	3.75	1.58	14.00	2.82	10.00	2.02	9.50	1.92	13.17	1.22	6.50	0.60	25.00	2.31	32.57	1.79	20.75	1.14	38.25	2.11
5.	Watering	6.04	2.54	-	-	-	-	24.83	5.01	-	-	-	-	49.25	4.55	-	-	-	-	80.12	4.41	-	-	-	-
6.	F.Y.Manure	0.25	0.11	-	-	-	-	2.00	0.40	-	-	-	-	9.25	0.85	-	-	-	-	11.50	0.63	-	-	-	-
7.	Che:Fertilizer	1.24	0.52	-	-	-	-	1.59	0.32	-	-	-	-	3.59	0.33	-	-	-	-	6.42	0.35	-	-	-	-
8.	Hoeing/Weeding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Harvesting	3.50	1.47	-	-	-	-	19.00	3.83	-	-	-	-	12.50	1.15	-	-	-	-	35.00	1.93	-	-	-	-
10.	Carriage to threshing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11.	Threshing/Winnowing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12.	Total	24.68	10.37	11.75	4.94	10.75	4.52	89.04	17.95	35.91	7.24	19.50	3.93	118.21	10.92	24.00	2.22	73.06	6.75	231.93	12.76	71.66	3.94	103.31	5.69

Table-27

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF
SUGARCANE IN SAMPLE WATER COURSE RD 53700

Sr. No.	Operations	Head (Area sown: 0.81)						Middle (Area sown: 1.52)						Tail (Area sown: 0.81)						All Places (Area sown: 4.96)					
		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect	Total	Per Hect:	Total	Per Hect:	Total	Per Hect	Total	Per Hect	Total	Per Hect	Total	Per Hect	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	3	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Ploughing	12.00	14.81	12.00	14.81	-	-	5.37	3.53	4.50	2.96	7.50	4.93	12.00	14.81	12.0	14.81	-	-	29.37	9.35	28.50	9.08	7.50	2.39
2.	Levelling	-	-	-	-	-	-	0.75	0.49	0.75	0.49	-	-	2.00	2.47	2.00	2.47	-	-	2.75	0.88	2.75	0.88	-	-
3.	Planking	-	-	-	-	-	-	-	-	-	-	-	-	1.00	1.23	1.00	1.23	-	-	1.00	0.32	1.00	0.32	-	-
4.	Sowing	20.00	24.69	4.00	4.94	-	-	31.50	20.72	1.50	0.99	3.00	1.97	20.00	24.69	4.00	4.94	-	-	71.50	22.77	9.50	3.02	3.00	0.96
5.	Watering	12.00	14.81	-	-	-	-	17.88	11.76	-	-	-	-	9.60	11.85	-	-	-	-	39.48	12.57	-	-	-	-
6.	F.Y.Manure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Che:Fertilizer	0.50	0.62	-	-	-	-	0.93	0.61	-	-	-	-	0.50	0.62	-	-	-	-	1.93	0.61	-	-	-	-
8.	Hoeing/Weeding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Harvesting	32.00	39.51	-	-	-	-	33.00	41.45	-	-	-	-	24.00	29.63	-	-	-	-	119.00	37.90	-	-	-	-
10.	Carriage to Threshing/C.crushing	12.00	14.81	12.00	14.81	-	-	15.00	9.87	9.00	5.92	-	-	8.00	9.88	8.00	9.8	-	-	35.00	11.15	29.00	9.24	-	-
11.	Threshing/Winnowing/yard Gani	15.00	18.52	15.00	18.52	-	-	8.50	5.59	8.50	5.59	-	-	10.00	12.35	10.0	12.35	-	-	33.50	10.67	33.50	10.67	-	-
12.	Gur Making	60.00	74.07	-	-	-	-	34.00	22.37	-	-	-	-	40.00	49.33	-	-	-	-	134.00	42.68	-	-	-	-
13.	Total	163.50	201.85	43.00	53.09	-	-	194.93	128.24	24.25	15.95	10.50	6.91	127.10	156.91	37	45.68	-	-	485.53	154.63	104.25	33.20	10.50	3.34

Table-28

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF PIGEON PEA IN SAMPLE WATER COURSE RD.53700

(NOT APPLICABLE)

Table-29

NUMBER OF FRUIT PLANTS, TREES AND FRUIT PRODUCTION IN SAMPLE WATER COURSE RD 53700

(NOT APPLICABLE)

Table-30

LIVESTOCK HOLDING OF SAMPLE HOUSEHOLDS
IN SAMPLE WATER COURSE RD.53700

Sr. No.	Kind of Livestock	No. of house-hold who possess these:	Number of livestock possessed											
			Head											
			Minor			Adult			Total			In-milk		
			a	b	c	a	b	c	a	b	c	a	b	c
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Buffalo	6.00	6.00	1.00	0.60	9.00	1.50	0.90	15.00	2.50	1.50	7.00	1.17	0.70
2.	Cow	1.00	2.00	2.00	0.20	2.00	2.00	0.20	4.00	4.00	0.40	1.00	1.00	0.10
3.	Goat	4.00	6.00	1.50	0.60	6.00	1.50	0.60	12.00	3.00	1.20	2.00	0.50	0.20
4.	Sheep	1.00	1.00	1.00	0.10	1.00	1.00	0.10	2.00	2.00	0.20	1.00	1.00	0.10
5.	Bullock	1.00	-	-	-	2.00	2.00	0.20	2.00	2.00	0.20	-	-	-
6.	He Buffalo	1.00	-	-	-	1.00	1.00	0.10	1.00	1.00	0.10	-	-	-
7.	Horse/Mule	-	-	-	-	-	-	-	-	-	-	-	-	-
8.	Donkey	1.00	-	-	-	1.00	1.00	0.10	1.00	1.00	0.10	-	-	-
9.	Camel	-	-	-	-	-	-	-	-	-	-	-	-	-
10.	Total	15.00	15.00	1.00	1.50	22.00	1.47	2.20	37.00	2.47	3.70	11.00	0.73	1.10
11.	Poultry	10	30	-	-	93	-	-	123	-	-	-	-	-

Total Household: 30
Head: 10
Middle: 10
Tail: 10

a. Total animal (Contd..)
b. Number per owner
c. Number per sample household in general

Table-30

LIVESTOCK HOLDING OF SAMPLE HOUSEHOLDS
IN SAMPLE WATER COURSE RD.53700

Sr. No.	Kind of Livestock	No. of house-hold who possess these:	Number of Livestock Possessed											
			Middle											
			Minor			Adult			Total			In-milk		
			a	b	c	a	b	c	a	b	c	a	b	c
0	0	15	16	17	18	19	20	21	22	23	24	25	26	27
1.	Buffalo	3.00	2.00	0.67	0.20	7.00	2.33	0.70	9.00	3.00	0.90	5.00	1.67	0.50
2.	Cow	1.00	1.00	1.00	0.10	-	-	-	1.00	1.00	0.10	-	-	-
3.	Goat	2.00	3.00	1.50	0.30	2.00	1.00	0.20	5.00	2.50	0.50	-	-	-
4.	Sheep	1.00	-	-	-	3.00	3.00	0.30	3.00	3.00	0.30	-	-	-
5.	Bullock	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	He Buffalo	1.00	-	-	-	1.00	1.00	0.10	1.00	1.00	0.10	-	-	-
7.	Horse/Mule	-	-	-	-	-	-	-	-	-	-	-	-	-
8.	Donkey	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Camel	-	-	-	-	-	-	-	-	-	-	-	-	-
10.	Total	8.00	6.00	0.75	0.60	13.00	1.63	1.30	19.00	2.38	1.90	5.00	0.63	1.50
11.	Poultry	7	-	-	-	30	-	-	55	-	-	-	-	-

Total Household:30
Head:10
Middle:10
Tail:10

a. Total animal (Contd..)
b. Number per owner
c. Number per sample household in general

Table-30

LIVESTOCK HOLDING OF SAMPLE HOUSEHOLDS
IN SAMPLE WATER COURSE RD.53700

Sr. No.	Kind of Livestock	No. of house-hold who possess these:	Number of Livestock Possessed											
			Tail											
			Minor			Adult			Total			In milk		
			a	b	c	a	b	c	a	b	c	a	b	c
0	0	28	29	30	31	32	33	34	35	36	37	38	39	40
1.	Buffalo	8.00	8.00	1.00	0.27	10.00	1.25	0.33	18.00	2.25	0.60	7.00	0.88	0.23
2.	Cow	1.00	-	-	-	1.00	1.00	0.03	1.00	1.00	0.03	-	-	-
3.	Goat	1.00	4.00	4.00	0.13	3.00	3.00	0.10	7.00	7.00	0.23	3.00	3.00	0.10
4.	Sheep	1.00	1.00	1.00	0.03	1.00	1.00	0.03	2.00	2.00	0.07	1.00	1.00	0.03
5.	Bullock	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	He Buffalo	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Horse/Mule	-	-	-	-	-	-	-	-	-	-	-	-	-
8.	Donkey	1.00	-	-	-	1.00	1.00	0.03	1.00	1.00	0.03	-	-	-
9.	Camel	-	-	-	-	-	-	-	-	-	-	-	-	-
10.	Total	12.00	13.00	1.08	0.43	16.00	1.33	0.53	29.00	2.42	0.97	22.00	0.92	0.37
11.	Poultry	10	34	-	-	111	-	-	145	-	-	-	-	-

Total Household:30
Head:10
Middle:10
Tail:10

a. Total animal
b. Number per owner
c. number per sample household in general

(Contd..)

Table-30

LIVESTOCK HOLDING OF SAMPLE HOUSEHOLDS
IN SAMPLE WATER COURSE RD.53700

Sr. No.	Kind of Livestock	No. of household who possess these:				Number of Livestock Possessed											
						All places											
						Minor			Adult			Total			Young		
		Head	Middle	Tail	All Places	a	b	c	a	b	c	a	b	c	a	b	c
0	0	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
1.	Buffalo	6.00	3.00	8.00	17.00	16.00	0.94	0.53	26.00	1.53	0.87	42.00	2.47	1.40	26.00	1.13	[illegible]
2.	Cow	1.00	1.00	1.00	3.00	3.00	1.00	0.10	3.00	1.00	0.10	6.00	2.00	0.20	1.00	0.33	0.0
3.	Goat	4.00	2.00	1.00	7.00	13.00	1.86	0.43	11.00	1.57	0.37	24.00	3.43	0.81	5.00	0.71	0.1
4.	Sheep	1.00	1.00	1.00	3.00	2.00	0.67	0.07	5.00	1.67	0.17	7.00	2.33	0.23	2.00	0.67	0.0
5.	Bullock	1.00	-	-	1.00	-	-	-	2.00	2.00	0.07	2.00	2.00	0.07	-	-	-
6.	He Buffalo	1.00	1.00	-	2.00	-	-	-	2.00	1.00	0.07	2.00	1.00	0.07	-	-	-
7.	Horse/Mule	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8.	Donkey	1.00	-	1.00	2.00	-	-	-	2.00	1.00	0.07	2.00	1.00	0.07	-	-	-
9.	Camel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.	Total	15.00	8.00	12.00	35.00	34.00	0.97	1.13	51.00	1.46	1.70	85.00	2.43	2.83	28.00	0.80	0.93
11.	Poultry	10	7	10	27	89	-	-	234	-	-	323	-	-	-	-	-

Total Household:30
Head:10
Middle:10
Tail:10

a. Total animal (Concluded)
b. Number per owner
c. Number per sample household in general

Table-31

MILK PRODUCTION AND UTILIZATION IN SAMPLE
WATER COURSE RD 53700

Sr. No.	Particulars	Unit	Head (Total sample farmers = 10)					Middle (Total sample farmers= 10)				
			Buffalo	Cow	Goat	Sheep	Total	Buffalo	Cow	Goat	Sheep	Total
0	1	2	3	4	5	6	7	8	9	10	11	12
1.	In Milk animal	Number	7.00	1.00	2.00	1.00	11.00	5.00	-	-	-	5.00
2.	Number of Owners	Number	6.00	1.00	2.00	1.00	10.00	3.00	-	-	-	3.00
3.	Avg.Daily milk production	Litre	4.00	3.00	0.38	0.25	7.63	4.67	-	-	-	4.67
4.	Avg.Monthly milk Production (1 x 3 x 30)	Litre	840.00	90.00	22.80	7.50	960.30	700.50	-	-	-	700.50
5.	Avg.Monthly sale (in normal in-milk state)	Litre	180.00	-	-	-	180.00	225.00	-	-	-	225.00
6.	5 as %age of 4 (5÷4x100)	%age	21.43	-	-	-	21.43	32.12	-	-	-	32.12
7.	Lactation period	Day	305.00	200.00	90.00	90.00	685.00	305.00	-	-	-	305.00
8.	Total Production per lactation period (1x3=7)	Litre	8540.00	600.00	68.40	22.50	9230.90	7121.75	-	-	-	7121.75
9.	Estimated sale per lactation period (6x8÷100)		1830.00	-	-	-	1830.00	2287.50	-	-	-	2287.50
10.	Price per litre	Rs.	6.00	-	-	-	6.00	6.00	-	-	-	6.00
11.	Estimated receipt from sales per lactation period (9x10)	Rs.	10980.00	-	-	-	10980.0	13725.0	-	-	-	13725.0
12.	Avg. annual sale proceed:											
	a. per owner household (11 ÷ 2)	Rs.	1830.00	-	-	-	1830.00	4575.00	-	-	-	4575.00
	b. per sample household in general	Rs.	183.00	-	-	-	183.00	1372.50	-	-	-	1372.50

(Contd....)

Table-31

MILK PRODUCTION AND UTILIZATION IN SAMPLE
WATER COURSE RD 53700

Sr. No.	Particulars	Unit	Tail (Total sample farmers = 10)					A.Places(Total Sample Farmers= 30)				
			Buffalo	Cow	Goat	Sheep	Total	Buffalo	Cow	Goat	Sheep	Total
0	1	2	13	14	15	16	17	18	19	20	21	22
1.	In Milk Animal	Number	7.00	-	3.00	1.00	11.00	19.00	1.00	5.00	2.00	27.00
2.	Number of Owner	Number	7.00	-	1.00	1.00	9.00	16.00	1.00	3.00	2.00	22.00
3.	Avg.Daily Milk Production	Litre	6.00	-	0.50	0.50	7.00	5.13	3.00	0.42	0.38	8.93
4.	Avg. Monthly Milk Production (1x3x30)	Litre	1260.00	-	45.00	15.00	1320.00	2924.10	90.00	63.00	22.80	3099.90
5.	Avg. Monthly sale (in normal in-milk state)	Litre	-	-	-	-	-	405.00	-	-	-	405.00
6.	5 as %age if 4(5÷4x100)	%age	-	-	-	-	-	13.85	-	-	-	13.85
7.	Lactation Period	Day	-	-	-	-	-	305.00	200.0	90.00	90.00	685.00
8.	Total Production per lactation period (1x3x7)	Litre	-	-	-	-	-	29728.00	600.0	189.00	68.40	30585.75
9.	Estimated sale per lactation period(6x8÷100)		-	-	-	-	-	4117.50	-	-	-	4117.50
10.	Price per litre	Rs.	-	-	-	-	-	6.00	-	-	-	6.00
11.	Estimated receipt from sales per lactation period (9x10)	Rs.	-	-	-	-	-	24705.00	-	-	-	24705.00
12.	Avg. Annual sale Proceed:											
	a: per owner household (11 ÷ 2)	Rs.	-	-	-	-	-	1544.06	-	-	-	1544.06
	b: per sample household in general	Rs.	-	-	-	-	-	823.50	-	-	-	823.50

(Concluded).

Table-32

INCOME FROM SALE OF DAIRY PRODUCTS (OTHER THAN MILK) DURING SIX MONTHS PROCEEDING INTERVIEW OF SAMPLE HOUSEHOLDS IN KHARIF 1987 IN SAMPLE WATER COURSE RD 53700

(NOT APPLICABLE)

Table-33

INCOME FROM HIRING OUT OF LIVESTOCK IN SAMPLE WATER COURSE RD. 53700

(NOT APPLICABLE)

Table-34

INCOME FROM SELECTED SOURCES DURING SIX MONTHS BEFORE INTERVIEW IN KHARIF 1987 IN SAMPLE WATER COURSE RD.53700

Sr. No.	Particulars	Unit	Sources: Rent of Land	Rent of other property	Trade	Industry	Foreign remittances	Home remittances	Other
0	1	2	3	4	5	6	7	8	9
1.	H.holds reporting income:	No							
	Head		-	1	1	-	-	-	-
	Middle		-	3	-	-	-	-	-
	Tail		-	6	1	2	-	-	-
	All Places		-	10	2	2	-	-	-
2.	Total Income:	Rs.							
	Head		-	350	3500	-	-	-	-
	Middle		-	3900	-	-	-	-	-
	Tail		-	45000	18000	36000	-	-	-
	All Places	Rs.	-	49250	21500	36000	-	-	-
3.	Avg. Income of Recipients:	Rs.							
	Head		-	-	350	3500	-	-	-
	Middle		-	-	1300	-	-	-	-
	Tail		-	-	7500	18000	18000	-	-
	All Places	Rs.	-	-	4925	10750	18000	-	-
4.	Avg.Income of sample households in General:	Rs.							
	Head		-	-	35	350	-	-	-
	Middle		-	-	390	-	-	-	-
	Tail		-	-	4500	8100	3600	-	-
	All Places	Rs.	-	-	1642	717	1200	-	-

Household:

1. Head 10
2. Middle 10
3. Tail 10
4. Total 30

Table-35

PERMANENT LABOUR ON FARM IN SAMPLE WATER COURSE [illegible]

Sr. No.	PARTICULARS	UNIT	HEAD	MIDDLE	TAIL	ALL PLACES
0	1	2	3	4	5	6
1.	Total Sample H.holds	No	10	10	10	30
2.	H.holds who have permanent labour	No	1	-	1	2
3.	2 as % of 1	%	10		10	6.67
4.	Total Labourers	No	1	-	1	2
5.	Labourers per:					
	a) Employing H.holds	No	1	-	1	2
	b) Sample H.hold in General	Rs.	0.1	-	0.1	0.07
6.	Wages paid in Kharif in Cash	Rs.	1800	-	2000	3800
7.	Value of other payments made in Kharif	Rs.	1200	-	1800	3000
8.	Total Payments (6 + 7)	Rs.	3000	-	3800	6800
9.	Avg. Payment per paying household	Rs.	3000	-	4600	7600
10.	Avg. Payment per sample household	Rs.	300	-	460	253

Table-1

AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS IN SAMPLE WATERCOURSE RD.53700

Sr. No.	Crops	Location	Area	Main Product			By Product		
				Unit	Total	Per Hectare	Unit	Total	Per Hectar
0	1	2	3	4	5	6	7	8	9
1.	Wheat	Head	6.43	Mds	218.00	33.90	Mds	461	71.70
		Middle	6.93	Mds	291.00	41.99	Mds	590	85.14
		Tail	10.93	Mds	441.00	40.35	Mds	905	82.80
		Total	24.29	Mds	950.00	39.11	Mds	1956	82.80
2.	Barley Grain	Head	-	Mds	-	-	Mds	-	-
		Middle	-	Mds	-	-	Mds	-	-
		Tail	-	Mds	-	-	Mds	-	-
		Total	-	Mds	-	-	Mds	-	-
3.	Barley Fodder	Head	0.56	Rs.	2900.00	5178.57	Rs.	-	-
		Middle	0.20	Rs.	1000.00	5000.00	Rs.	-	-
		Tail	-	Rs.	-	-	Rs.	-	-
		Total	0.76	Rs.	3900.00	5131.58	Rs.	-	-
4.	Berseem	Head	2.12	Rs.	13450.00	6344.34		-	-
		Middle	2.83	Rs.	24700.00	8727.92		-	-
		Tail	5.97	Rs.	40300.00	6750.42		-	-
		Total	10.92	Rs.	78450.00	7184.07		-	-
5.	Pea	Head	-		-	-		-	-
		Middle	-		-	-		-	-
		Tail	-		-	-		-	-
		Total	-		-	-		-	-
6.	Spinach	Head	-		-	-		-	-
		Middle	-		-	-		-	-
		Tail	-		-	-		-	-
		Total	-		-	-		-	-

Table-2

AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS OUTSIDE SAMPLE WATERCOURSE RD. 53700

Sr. No.	Crops	Location	Area	Main Product			By Product		
				Unit	Total	Per Hectare	Unit	Total	Per Hectare
0	1	2	3	4	5	6	7	8	9
1.	Wheat	Head	1.21	Mds	30.00	24.79	Mds	50	41.32
		Middle	0.81	Mds	32.00	39.51	Mds	60	74.07
		Tail	3.44	Mds	115.00	33.43	Mds	260	75.58
		Total	5.46	Mds	177.00	32.42	Mds	370	67.70
2.	Barley Grain	Head	-	Mds	-	-	Mds	-	-
		Middle	-	Mds	-	-	Mds	-	-
		Tail	-	Mds	-	-	Mds	-	-
		Total	-	Mds	-	-	Mds	-	-
3.	Barley Fodder	Head	-	Rs.	-	-	Rs.	-	-
		Middle	-	Rs.	-	-	Rs.	-	-
		Tail	-		-	-	Rs.	-	-
		Total	-	Rs.	-	-	Rs.	-	-
4.	Berseem	Head	1.01	Rs.	7500.00	7425.75	Rs.	-	-
		Middle	-	Rs.	-	-	Rs.	-	-
		Tail	1.82	Rs.	13700.00	7547.27	Rs.	-	-
		Total	2.83	Rs.	21200.00	7491.17	Rs.	-	-
5.	Pea	Head	-		-	-		-	-
		Middle	-		-	-		-	-
		Tail	-		-	-		-	-
		Total	-		-	-		-	-
6.	Spinach	Head	-		-	-		-	-
		Middle	-		-	-		-	-
		Tail	-		-	-		-	-
		Total	-		-	-		-	-

Table-2

DISPOSAL OF MAIN PRODUCTS IN SAMPLE WATER COURSE NO. 53700

Sr. No.	Crop Mode of Disposal	Wheat (Mds)								Barley (Mds)							
		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places	
		Qty.	%	Qty.	%	Qty.	%	Qty.	%	Qty.	%	Qty.	%	Qty.	%	Qty.	%
1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
I	Total Output	248.0	100.00	323.0	100.00	556.0	100.00	1127.0	100.00	-	-	-	-	-	-	-	-
II.	Disposal																
	1.Retained for H.use	122.9	49.56	160.6	49.72	157.2	28.27	440.7	39.10	-	-	-	-	-	-	-	-
	2.Sold	30.0	12.10	-	-	115.0	20.69	145.0	12.87	-	-	-	-	-	-	-	-
	3.Landlord's Share	73.0	29.44	114.8	35.54	234.0	42.09	421.8	37.43	-	-	-	-	-	-	-	-
	4.Artisan's dues	6.0	2.42	5.5	1.70	2.0	0.36	13.5	1.20	-	-	-	-	-	-	-	-
	5.Given to Labourers	2.0	0.81	19.4	5.89	18.5	3.33	39.5	3.50	-	-	-	-	-	-	-	-
	6.Seed	7.0	2.82	7.0	2.17	9.9	1.78	33.9	3.12	-	-	-	-	-	-	-	-
	7.Usher/Charity	5.2	2.10	11.8	3.65	17.9	3.22	34.9	3.10	-	-	-	-	-	-	-	-
	8.Other Specify	1.9	0.77	4.3	1.33	1.5	0.27	7.7	0.68	-	-	-	-	-	-	-	-
III.	Total =All Uses	248.0	100.00	323.0	100.00	556.0	100.00	1127.0	100.00	-	-	-	-	-	-	-	-

(Contd...)

Table-3

DISPOSAL OF MAIN PRODUCTS IN SAMPLE WATER COURSE RD. 5370'

Sr. No.	Crop Mode of Disposal	Berseem Rai								Pea (Mde)								Banaras (Mde)							
		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places	
		Qty.	%	Qty.	%	Qty.	%	Qty.	%	Qty.	%	Qty.	%	Qty.	%	Qty.	%	Qty.	%	Qty.	%	Qty.	%	Qty.	%
0	1	18	19	21	21	23	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
I	Total Output	20950	100.00	24700	100.00	54000	100.00	99650	100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II.	Disposal																								
	1.Retained for House	9475	45.23	13850	56.07	10250	18.98	33575	33.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.Sold	9525	45.47	4200	17.00	25300	52.14	42025	42.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3.Landlord s Share	1950	9.31	6650	26.92	15450	28.61	24050	24.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4.Artisan's dues	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5.Given to Labourers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6.Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7.Usher/Charity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8.Other Specify	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
III.	Total =All Uses	20950	100.00	24700	100.00	54000	100.00	99650	100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(Concluded)

Table-4

DISPOSAL OF BY-PRODUCTS IN SAMPLE WATER COURSE NO. 5270

Sr. No.	Crop Mode of Disposal	Wheat (Mds.)								Barley (Rs.)							
		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places	
		Qty.	%	Qty.	%	Qty	%	Qty.	%	Rs.	%	Rs.	%	Rs.	%	Rs.	%
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
I Total Output		511.0	100.00	650.0	100.00	1165.0	100.00	3326.0	100.00	2900	100.00	1000	100.00	-	-	3900	100.00
II. Disposal																	
1.Retained for H.use		336.0	65.75	348.0	53.54	471.5	40.47	1155.5	49.68	2400	82.76	500	50.00	-	-	2900	74.36
2.Sold		50.0	9.78	60.0	9.23	260.0	22.32	370.0	15.91	-	-	-	-	-	-	-	-
3.Landlord's Share		125.0	24.46	242.0	37.23	433.5	37.21	800.5	34.42	500	17.24	500	50.00	-	-	1000	25.64
4.Artisan's dues		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.Given to Labourers		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.Seed		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.Usher/Charity		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8.Other Specify		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
III.Total =All Uses		511.0	100.00	650.0	100.00	1165.0	100.00	3326.0	100.00	2900	100.00	1000	100.00	-	-	3900	100.00

(Contd....)

Table-4

DISPOSAL OF BY-PRODUCTS IN SAMPLE WATER COURSE NO. 53700

Sr. No.	Crop Mode of Disposal	Barseem (Rs)								Pea								Spinach							
		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places	
		Rs.	%	Rs.	%	Rs.	%	Rs.	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%
0	1	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
I Total Output		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II. Disposal																									
1.Retained for H.use		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.Sold		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.Landlord's Share		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4.Artisan's dues		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.Given to Labourers		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.Seed		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.Usher/Charity		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8.Other Specify		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
III.Total =All Uses		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(Concluded..)

Table-5

MODE OF SALE OF WHEAT IN SAMPLE WATER COURSE RD.53700

Sr. No.	Mode of Sale	Head		Middle		Tail		All Places	
		Qty.	%	Qty	%	Qty	%	Qty	%
0	1	2	3	4	5	6	7	8	9
I.	In Village	30	100	-	-	115	100	145	100
	1. To Beoparis	-	-	-	-	-	-	-	-
	2. To Shop Keepers	-	-	-	-	-	-	-	-
	3. To others	30	100	-	-	115	100	145	100
II.	In other Villages	-	-	-	-	-	-	-	-
	1. To Beoparis	-	-	-	-	-	-	-	-
	2. To Shop Keepers	-	-	-	-	-	-	-	-
	3. To others	-	-	-	-	-	-	-	-
III.	In Peshawar	-	-		-	-	-	-	-
	1. Through Commission Agents	-	-		-	-	-	-	-
	2. To whole sellers	-	-		-	-	-	-	-
	3. To others	-	-		-	-	-	-	-
IV.	In other urban centres	-	-		-	-	-	-	-
V.	Total Sales	30	100	-	-	115	100	145	100

Table-6

MODE OF SALE OF BARLEY IN SAMPLE WATER COURSE RD.53700

(NOT APPLICABLE)

Table-7

MODE OF SALE OF BERSEEM IN SAMPLE WATER COURSE RD.53700

Sr. No.	Mode of Sale	Head		Middle		Tail		All Places	
		Qty.	%	Qty	%	Qty	%	Qty	%
0	1	2	3	4	5	6	7	8	9
I.	In Village	9525	100	4200	100	28300	100	42025	100
	1. To Beoparis	9525	100	4200	100	28300	100	42025	100
	2. To Shop Keepers	-	-	-	-	-	-	-	-
	3. To others	-	-	-	-	-	-	-	-
II.	In other Villages	-	-	-	-	-	-	-	-
	1. To Beoparis	-	-	-	-	-	-	-	-
	2. To Shop Keepers	-	-	-	-	-	-	-	-
	3. To others	-	-	-	-	-	-	-	-
III.	In Peshawar	-	-	-	-	-	-	-	-
	1. Through Commission Agents	-	-	-	-	-	-	-	-
	2. To whole sellers	-	-	-	-	-	-	-	-
	3. To others	-	-	-	-	-	-	-	-
IV.	In other urban centres	-	-	-	-	-	-	-	-
V.	Total Sales	9525	100	4200	100	28300	100	42025	100

Table-8

MODE OF SALE OF PEA IN SAMPLE WATER COURSE RD.53700

(NOT APPLICABLE)

Table-9

MODE OF SALE OF SPINACH IN SAMPLE WATER COURSE RD.53700

(NOT APPLICABLE)

Table-10

NUMBER OF FARMERS REPORTING CONSUMPTION OF CHEMICAL FERTILIZERS IN SAMPLE WATER COURSE RD. 53700

Sr. No.	Location of farm	Total farmers growing this crop No(=100)	Farmers using fertilizers													
			Urea		D A P		N P K		N P		Ammonium Sulphate		Ammonium Nitrate		P.Sulphate	
			No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
I.	WHEAT															
	a.Head of W.C.	9	9	100.00	1	11.11	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	9	9	100.00	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	9	9	100.00	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	27	27	100.00	1	3.70	-	-	-	-	-	-	-	-	-	-
II.	BARLEY															
	a.Head of W.C.	3	2	150.00	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	1	1	100.00	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	4	3	133.33	-	-	-	-	-	-	-	-	-	-	-	-
III.	BERSEEM															
	a.Head of W.C.	8	6	133.33	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	8	6	133.33	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	8	4	133.33	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	24	16	150.00	-	-	-	-	-	-	-	-	-	-	-	-
IV.	P E A															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V.	SPINACH															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-11

QUANTITY OF CHEMICAL FERTILIZERS USED BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD.53700

Sr. No.	Location of farm	Area sown (Hectare)	Quantity of fertilizer used: (KG)													
			Urea		D A P		N P K		N P		Ammonium Sulphate		Ammonium Nitrate		P.Sulphate	
			Total	Per Hectare	Total	Per Hectare	Total	Per Hectare	Total	Per Hectare	Total	Per Hectare	Total	Per Hectare	Total	Per Hectare
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
I.	WHEAT															
	a.Head of W.C.	6.43	712.5	110.81	50	7.78	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	6.93	950.0	137.09	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	10.92	1387.5	127.06	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	24.28	3050.0	125.62	50	2.06	-	-	-	-	-	-	-	-	-	-
II.	BARLEY															
	a.Head of W.C.	0.56	108.5	193.75	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	0.20	50.0	250.00	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	0.76	158.5	208.55	-	-	-	-	-	-	-	-	-	-	-	-
III.	BERSEEM															
	a.Head of W.C.	2.12	175.0	82.55	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	2.93	250.0	88.34	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	5.97	325.0	54.44	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	10.92	750.0	68.68	-	-	-	-	-	-	-	-	-	-	-	-
IV.	P E A															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V.	SPINACH															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-12

CONSUMPTION OF FARM YARD MANURE IN SAMPLE WATER COURSE RD.53700

Sr. No.	Location of farm	Total farmers growing this crop	Farmers using Farm Yard Manure No.	Farmers using Farm Yard Manure %	Area Sown (Hec-tare)	Quantity used (KG) Total	Quantity used (KG) Per Hectare
0	1	2	3	4	5	6	7
I.	WHEAT						
	a.Head of W.C.	9	2	22.22	6.43	16	2
	b.Middle of W.C.	9	3	33.33	6.93	39	6
	c.Tail of W.C.	9	4	44.44	10.93	62	6
	d.All Places	27	9	33.33	24.29	117	5
II.	BARLEY						
	a.Head of W.C.	3	-	-	0.56	-	-
	b.Middle of W.C.	1	-	-	0.20	-	-
	c.Tail of W.C.	-	-	-	-	-	-
	d.All Places	4	-	-	0.76	-	-
III.	BERSEEM						
	a.Head of W.C.	8	5	62.50	2.12	24	11
	b.Middle of W.C.	8	2	25.00	2.83	24	8
	c.Tail of W.C.	8	3	37.50	5.97	18	3
	d.All Places	24	10	41.67	10.92	66	6
IV.	PEA						
	a.Head of W.C.	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-
V.	SPINACH						
	a.Head of W.C.	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-

Table-13

NUMBER OF SAMPLE FARMERS WHO USED INSECTICIDES/ PESTICIDES/WEEDICIDES IN SAMPLE WATER COURSE RD.53700

Sr. No.	Location of farm	Total Farmer Growing this crop No(=100)	Farmers who used: Insect:/ Pesticides		Farmers who used: Weedicides	
			No.	%	No.	%
0	1	2	3	4	5	6
I.	WHEAT					
	a. Head of W.C.	9	-	-	-	-
	b. Middle of W.C.	9	-	-	-	-
	c. Tail of W.C.	9	-	-	-	-
	d. All places	27	-	-	-	-
II.	BARLEY					
	a. Head of W.C.	3	-	-	-	-
	b. Middle of W.C.	1	-	-	-	-
	c. Tail of W.C.	-	-	-	-	-
	d. All places	4	-	-	-	-
III.	BERSEEM					
	a. Head of W.C.	-	-	-	-	-
	b. Middle of W.C.	-	-	-	-	-
	c. Tail of W.C.	-	-	-	-	-
	d. All places	-	-	-	-	-
IV.	PEA					
	a. Head of W.C.	-	-	-	-	-
	b. Middle of W.C.	-	-	-	-	-
	c. Tail of W.C.	-	-	-	-	-
	d. All places	-	-	-	-	-
V.	SPINACH					
	a.Head of W.C.	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-
	d.All Places	-	-	-	-	-

Table-14

QUANTITY OF SEED USED BY SAMPLE FARMERS
IN SAMPLE WATER COURSE RD.53700

(Kg)

Sr. No.	Crop	Total Area (Hectare)	Head Quantity used			Middle Quantity used			Tail Quantity used			All Places Quantity used		
			Improved	Local	Total	Improved	Local	Total	Improved	Local	Total	Improved	Local	Total
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Wheat	24.28	-	585.60	585.60	-	666.0	666.0	-	1084	1084	-	2336.60	2336.60
2.	Barley	0.76	-	54.75	54.75	-	20.0	20.0	-	-	-	-	74.75	75.75
3.	Berseem	10.92	-	53.51	53.51	-	68.5	68.5	-	123	123	-	245.00	245.00
4.	Pea	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Spinach	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-15

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD.52700

Crop: Wheat Area: 34.29 ha. i) Head : 6.43 ha ii) Middle: 6.93 ha. iii) Tail: 10.93 ha.

Sr. No.	Physical Input	Head: Purchased Total	Head: Purchased Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (2+4) Total	Head: Total (2+4) Per Hect.	Middle: Purchased Total	Middle: Purchased Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (8+10) Total	Middle: Total (8+10) Per Hect.	Tail: Purchased Total	Tail: Purchased Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (14+16) Total	Tail: Total (14+16) Per Hect.	All Places: Purchased (2+8+14) Total	All Places: Purchased (2+8+14) Per Hect.	All Places: Self Supplied (4+10+16) Total	All Places: Self Supplied (4+10+16) Per Hect.	All Places: Total Total	All Places: Total Per Hect.
0	1	2	3	4	5	6		8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Seed	1260	196	140	22	1400	[illegible]	1126	162	539	79	1664	240	1296	176	710	65	2006	241	4312	172	1388	57	5700	235
2.	Farm Yard Manure	-	-	585	91	585	1	-	-	1440	208	1440	208	-	-	2280	209	2280	209	-	-	4305	177	4305	177
3.	Chemical Fertilizer	2093	326	-	-	2093	[illegible]	2575	372	-	-	2575	372	3789	347	-	-	3789	347	8457	348	-	-	8457	348
4.	Insecticide/ Pesticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Water Charges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	Dues of Artisans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Total	4883	722	725	113	5408	841	4531	654	1979	285	6509	939	6215	569	2990	274	9205	842	15429	635	5693	234	21122	870

Table-16

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.55700

Crops Wheat Area:24.29 ha. i) Head : 5.43 ha. ii) Middle: 6.93 ha. iii) Tail: 10.93 ha.

Sr. No.	Operations	labour inputs	Head						Middle						Tail						All Places					
			Paid		Self Supplied		Total (3+5)		Paid		Self Supplied		Total(9+11)		Paid		Self Supplied		Total (15+17)		Paid (3+9+15)		Self Supp: (5+11+17)		Total (21+23)	
			Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Ploughing		i.Manual	-	-	846	132	846	132	-	-	930	134	930	134	-	-	1920	176	1920	176	-	-	3696	152	3696	152
		ii.Animal	800	124	600	93	1400	218	600	87	1150	166	1750	253	1900	174	1200	110	3100	284	3300	136	2950	121	6250	257
		iii.Machine	780	121	-	-	780	121	1665	240	-	-	1665	240	2175	199	-	-	2175	199	4620	190	-	-	4620	190
		iv.Total	1580	246	1446	225	3026	471	2265	327	2080	300	4345	627	4075	373	3120	285	7195	659	7920	326	6646	274	14556	600
2. Levelling		i.Manual	-	-	315	49	315	49	-	-	259	37	259	37	-	-	465	43	465	43	-	-	1039	43	1039	43
		ii.Animal	225	35	290	45	515	80	206	30	225	32	431	62	450	41	300	27	750	69	881	36	815	34	1696	70
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	225	35	605	94	830	129	206	30	484	70	690	100	450	41	765	70	1215	111	881	36	1854	76	2735	113
3. Planking		i.Manual	-	-	150	23	150	23	-	-	195	28	195	28	-	-	375	34	375	34	-	-	720	30	720	30
		ii.Animal	100	16	150	23	250	39	150	22	175	25	325	47	250	23	150	37	500	37	500	21	475	20	975	40
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	100	16	300	47	400	62	150	22	370	53	520	75	250	23	525	48	775	71	500	21	1195	49	1695	70
4. Sowing		i.Manual	-	-	503	78	503	78	-	-	583	84	583	84	-	-	1047	96	1047	96	-	-	2133	88	2133	88
		ii.Animal	400	62	300	47	700	109	300	43	450	65	750	108	950	87	600	55	1550	142	1650	68	1350	56	3000	124
		iii.Machine	180	28	-	-	180	28	450	65	-	-	450	65	770	70	-	-	770	70	1400	58	-	-	1400	58
		iv.Total	580	90	803	125	1383	215	750	108	1033	149	1783	257	1720	157	1647	151	3367	308	3050	126	3483	143	6533	269
5. Watering		i.Manual	-	-	408	63	408	63	-	-	634	91	634	91	-	-	572	52	572	52	-	-	1614	66	1614	66
6. F.Y.Manure		i.Manual	-	-	410	64	410	64	-	-	915	132	915	132	-	-	1950	178	1950	178	-	-	3275	135	3275	135

(Contd....)

Table-16

LABOUR INPUT COST IN SAMPLE WATER COURSE NO.23700

Sr. No.	Operations	labour inputs	Crops Wheat		Area:24.29 ha.				i) Head : 6.43 ha.						ii) Middle: 6.93 ha.						iii) Tail: 10.93 ha.					
			Head						Middle						Tail						All Places					
			Paid		Self Supplied		Total (3+5)		Paid		Self Supplied		Total (9+11)		Paid		Self Supplied		Total (15+17)		Paid (19+15)		Self Supplied (15+17)		Total (21+23)	
			Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
7. Chemical		i.Manual	-	-	64	10	64	10	-	-	79	11	79	11	-	-	111	10	111	10	-	-	354	10	354	10
8. Hoeing/Weed:		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9. Harvesting		i.Manual	-	-	3765	586	3765	586	-	-	3760	571	3760	571	-	-	3450	394	3450	394	-	-	14175	584	14175	584
10.Carriage to Threshing yard		i.Manual	420	65	495	77	915	142	120	17	645	93	765	110	425	40	1299	119	1724	159	965	40	2429	100	3404	140
		ii.Animal	240	37	500	78	740	115	120	17	4070	587	4190	605	16	1	869	80	885	81	376	15	5439	15	5315	239
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	660	103	995	155	1655	257	240	35	4715	680	4955	715	451	41	2158	199	2609	239	1341	56	7868	324	8219	380
11.Threshing/ Winnowing		i.Manual	90	14	260	56	450	[illegible]	130	26	529	76	709	102	250	23	1012	93	1262	115	520	21	1901	78	2421	100
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii.Machine	2310	359	-	-	2310	[illegible]	3632	524	-	-	3632	524	10311	943	-	-	10311	943	16253	669	-	-	16253	669
		iv.Total	2400	373	260	56	2760	429	3812	550	529	76	4341	626	10561	966	1012	93	11573	1059	16773	691	1901	78	18674	769
12.Total		i.Manual	510	79	7316	1138	7826	1217	300	43	8729	1260	9029	1303	685	63	15191	1390	15876	1453	1495	62	31236	1286	32731	1348
		ii.Animal	1755	274	1840	286	3605	561	1376	199	6070	876	7446	1074	3566	326	3119	285	6685	612	6707	276	11029	454	17736	730
		iii.Machine	3270	509	-	-	3270	509	5747	829	-	-	5747	829	13256	1213	-	-	13256	1213	22273	917	-	-	22273	917
		iv.Total	5545	862	9156	1424	14701	2286	7423	1071	14799	2135	22222	3207	17507	1602	18310	1675	35817	3277	30475	1255	42265	1740	72740	2995

(Concluded)

Table-17

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD.55700

Crop: Barley Area: 0.76 ha. i) Head : 0.56 ha. ii) Middle : 0.20 ha iii) Tail: 0.00 ha.

Sr. No.	Physical Input	Head						Middle						Tail						All Places					
		Purchased		Self Supplied		Total (2+4)		Purchased		Self Supplied		Total (8+10)		Purchased		Self Supplied		Total (14+16)		Purchased (2+8+14)		Self Supplied (14+10+16)		Total	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Seed	-	-	107	191	107	191	-	-	50	250	50	50	-	-	-	-	-	-	-	-	157	207	157	207
2.	Farm Yard Manure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.	Chemical Fertilizer	291	520	-	-	291	520	135	675	-	-	135	675	-	-	-	-	-	-	426	561	-	-	426.	561
4.	Insecticide/ Pesticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Water Charges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	Dues of Artisans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Total	291	520	107	191	398	711	135	675	50	250	185	925	-	-	-	-	-	-	426	561	157	207	593	767

Table-10

LABOUR INPUT COST IN SAMPLE WATER [illegible]RSE 40.53700

Crop: Barley Area: 0.76 i) Head [illegible] ha ii) Middle: 0.20 ha. iii) Tail: 0.00 ha

Sr. No.	Operations	Labour Inputs	Head: Paid Total	Head: Paid Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (3+5) Total	Head: Total (3+5) Per Hect.	Middle: Paid Total	Middle: Paid Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total Total	Middle: Total Per Hect.	Tail: Paid Total	Tail: Paid Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect.	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect.	All Places: Self Supp. (5+11+17) Total	All Places: Self Supp. (5+11+17) Per Hect.	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Ploughing	i.Manual		-	-	120	214	120	214	-	-	30	150	30	150	-	-	-	-	-	-	-	-	150	197	150	197
	ii.Animal		-	-	200	357	200	357	-	-	50	250	50	250	-	-	-	-	-	-	-	-	[illegible]	329	250	329
	iii.Machine		45	80	-	-	45	80	-	-	-	-	-	-	-	-	-	-	-	-	45	59	-	-	45	59
	iv.Total		45	80	320	571	365	652	-	-	80	400	80	400	-	-	-	-	-	-	45	59	400	526	445	585
2. Leveling	i.Manual		-	-	41	73	41	73	-	-	15	75	15	75	-	-	-	-	-	-	-	-	56	74	56	74
	ii.Animal		-	-	80	143	80	143	-	-	25	125	25	125	-	-	-	-	-	-	-	-	105	138	105	138
	iii.Machine		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total		-	-	121	216	121	216	-	-	40	200	40	200	-	-	-	-	-	-	-	-	161	212	161	212
3. Planking	i.Manual		-	-	30	54	30	54	-	-	8	40	8	40	-	-	-	-	-	-	-	-	38	50	38	50
	ii.Animal		-	-	50	89	50	89	-	-	13	65	13	65	-	-	-	-	-	-	-	-	63	83	63.	83
	iii.Machine		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total		-	-	80	143	80	143	-	-	21	105	21	105	-	-	-	-	-	-	-	-	101	133	101	133
4. Sowing	i.Manual		-	-	66	118	66	118	-	-	30	150	30	150	-	-	-	-	-	-	-	-	96	126	96	126
	ii.Animal		-	-	100	179	100	179	-	-	50	250	50	250	-	-	-	-	-	-	-	-	150	197	150	197
	iii.Machine		60	107	-	-	60	107	-	-	-	-	25	-	-	-	-	-	-	-	60	79	-	-	60	79
	iv.Total		60	[illegible]	166	296	226	404	-	-	80	400	80	400	-	-	-	-	-	-	60	79	246	324	306	403
5. Watering	i.Manual		-	-	51	91	51	91	-	-	30	150	30	150	-	-	-	-	-	-	-	-	81	107	81	107
6. F.Y.Manure	i.Manual		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(Contd.)

Table-18

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.53700

Crops: P ley Area: 0.76 ha. i) Head : 0.50 ha. ii) Middle : 0.20 ha. iii) Tail: 0.00 ha.

Sr. No.	Operations	Labour inputs	Head: Paid Total	Head: Paid Per Hect:	Head: Self Supplied Total	Head: Self Supplied Per Hect:	Head: Total (3+5) Total	Head: Total (3+5) Per Hect:	Middle: Paid Total	Middle: Paid Per Hect:	Middle: Self Supplied Total	Middle: Self Supplied Per Hect:	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect:	Tail: Paid Total	Tail: Paid Per Hect:	Tail: Self Supplied Total	Tail: Self Supplied Per Hect:	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect:	All Fi..es: Paid (3+9+15) Total	All Fi..es: Paid (3+9+15) Per Hect:	All Fi..es: Self Supp: (5+11+17) Total	All Fi..es: Self Supp: (5+11+17) Per Hect:	All Fi..es: Total (21+23) Total	All Fi..es: Total (21+23) Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
7. Chemical		i.Manual	-	-	11	20	11	20	-	-	4	20	4	20	-	-	-	-	-	-	-	-	15	20	15	20
8. Hoeing/Weeding		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9. Harvesting		i.Manual	-	-	330	589	330	589	-	-	-	-	-	-	-	-	-	-	-	-	-	-	330	434	330	434
10.Carriage to Threshing yard		i.Manual	-	-	360	643	360	643	-	-	-	-	-	-	-	-	-	-	-	-	-	-	360	474	360	474
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	360	643	360	643	-	-	-	-	-	-	-	-	-	-	-	-	-	-	360	474	360	474
11.Threshing/ Winnowing		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12. Total		i.Manual	-	-	1009	1802	1009	1802	-	-	117	585	117	585	-	-	-	-	-	-	-	-	1126	1482	1126	1482
		ii.Animal	-	-	430	768	430	768	-	-	138	690	138	690	-	-	-	-	-	-	-	-	568	747	568	747
		iii.Machine	105	188	-	-	105	188	-	-	-	-	-	-	-	-	-	-	-	-	105	138	-	-	105	138
		iv.Total	105	188	1439	2570	1544	2757	-	-	255	1275	255	1275	-	-	-	-	-	-	105	138	1694	2229	1799	2367

(Concluded)

Table-19

PHYSICAL INPUT COST IN SAMPLE WATER COURSE PD 53700

Crop: Berseem Area: 10.[illegible] ha. i) [illegible] 2 ha. ii) Middle : 2.83 ha. iii) Tail: 5.97 ha.

Sr. No.	Physical Input	Head: Purchased Total	Head: Purchased Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (2+4) Total	Head: Total (2+4) Per Hect.	Middle: Purchased Total	Middle: Purchased Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (8+10) Total	Middle: Total (8+10) Per Hect.	Tail: Purchased Total	Tail: Purchased Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (14+16) Total	Tail: Total (14+16) Per Hect.	All Places: Purchased (2+8+14) Total	All Places: Purchased (2+8+14) Per Hect.	All Places: Self Supplied (4+10+16) Total	All Places: Self Supplied (4+10+16) Per Hect.	All Places: Total Total	All Places: Total Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Seed	1358	641	-	-	1358	641	2273	803	-	-	2273	803	4755	679	-	-	4755	679	7386	704	-	-	7687	704
2.	Farm Yard Manure	-	-	900	425	900	425	-	-	900	318	900	318	-	-	590	99	590	99		-	2390	219	2390	219
3.	Chemical Fertilizer	477	225	-	-	477	225	682	241	-	-	682	241	723	121	-	-	723	121	1882	172	-	-	1882	172
4.	Insecticide/ Pesticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Water Charges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	Dues of Artisans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Total	1835	866	900	425	2735	1290	2955	1044	900	318	3855	1362	4779	801	590	99	5369	899	9569	876	2390	219	11959	1095

Table-20

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.53700

Crops: Berseem Area: 10.92 ha. i) Head : 2.12 ha. ii) Middle: 2.83 ha. iii) Tail: 5.97 ha.

Sr. No.	Operations	Labour inputs	Head: Paid Total	Head: Paid Per Hect:	Head: Self Supplied Total	Head: Self Supplied Per Hect:	Head: Total (3+5) Total	Head: Total (3+5) Per Hect:	Middle: Paid Total	Middle: Paid Per Hect:	Middle: Self Supplied Total	Middle: Self Supplied Per Hect:	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect:	Tail: Paid Total	Tail: Paid Per Hect:	Tail: Self Supplied Total	Tail: Self Supplied Per Hect:	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect:	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect:	All Places: Self Supp: (5+11+17) Total	All Places: Self Supp: (5+11+17) Per Hect:	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Ploughing	i.Manual		-	-	158	75	158	75	-	-	142	50	142	50	-	-	510	85	510	85	-	-	810	74	810	74
	ii.Animal		-	-	250	118	250	118	-	-	200	71	200	71	-	-	650	109	650	109	-	-	1100	101	1100	101
	iii.Machine		120	57	150	71	270	127	60	21	120	42	180	64	120	20	-	-	120	20	300	27	270	25	570	52
	iv.Total		120	57	558	263	678	320	60	21	462	163	522	184	120	20	1160	194	1280	214	300	27	2180	200	2480	227
2. Leveling	i.Manual		-	-	45	21	45	21	-	-	68	24	68	24	-	-	105	18	105	18	-	-	218	20	218	20
	ii.Animal		-	-	75	35	75	35	-	-	88	31	88	31	-	-	175	29	175	29	-	-	338	31	338	31
	iii.Machine		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total		-	-	120	57	101	57	-	-	156	55	156	55	-	-	280	47	280	47	-	-	556	51	556	51
3. Planking	i.Manual		-	-	8	4	8	4	-	-	26	9	26	9	-	-	98	16	98	16	-	-	132	12	132	12
	ii.Animal		-	-	13	6	13	6	-	-	44	16	44	16	-	-	163	27	163	27	-	-	220	20	220	20
	iii.Machine		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total		-	-	21	10	21	10	-	-	70	25	70	25	-	-	261	44	261	44	-	-	352	32	352	32
4. Sowing	i.Manual		-	-	134	63	134	63	-	-	180	64	180	64	-	-	176	29	176	29	-	-	490	45	490	45
	ii.Animal		-	-	150	71	150	71	-	-	150	53	150	53	-	-	75	13	75	13	-	-	375	34	375	34
	iii.Machine		50	24	270	127	320	151	300	106	-	-	300	106	-	-	120	20	120	20	350	32	390	36	740	68
	iv.Total		50	24	554	261	604	285	300	106	330	117	630	223	-	-	371	62	371	62	350	32	1255	115	1605	147
5. Watering	i.Manual		-	-	177	83	177	83	-	-	218	77	218	77	-	-	291	49	291	49	-	-	686	63	686	63
6. F.Y.Manure	i.Manual		-	-	773	346	773	346	-	-	390	138	390	138	-	-	510	85	510	85	-	-	1633	150	1633	150

(Contd...)

Table-20

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.53700

Crops: Berseem Area: 10.92 ha. i) Head : 2.12 ha. ii) Middle : 2.83 ha. iii) Tail: 5.97 ha.

Sr. No.	Operations	Labour inputs	Head						Middle						Tail						All Places					
			Paid		Self Supplied		Total (3+5)		Paid		Self Supplied		Total (9+11)		Paid		Self Supplied		Total (15+17)		Paid (3+9+15)		Self Supp: (5+11+17)		Total (21+23)	
			Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
7. Chemical		i.Manual	-	-	52	25	52	25	11	4	26	9	37	13	-	-	50	8	50	8	11	1	128	12	139	13
8. Hoeing/Weed:		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9. Harvesting		i.Manual	-	-	930	439	930	[illegible]	-	-	2220	784	2220	784	-	-	2340	392	2340	392	-	-	5490	503	5490	503
10.Carriage to Threshing yard		i.Manual	-	-	240	113	240	[illegible]	-	-	2100	742	2100	742	-	-	1260	211	1260	211	-	-	3600	330	3600	330
		ii.Animal	40	19	240	113	280	[illegible]	-	-	200	71	200	71	-	-	1229	206	1229	206	40	4	1669	153	1709	157
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	40	19	480	226	520	245	-	-	2300	813	2300	813	-	-	2489	417	2489	417	40	4	5269	483	5309	486
11.Threshing/ Winnowing		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12. Total		i.Manual	-	-	2477	1168	2477	1168	11	4	5370	1898	5381	1901	-	-	5340	894	5340	894	11	1	13187	1208	13198	1209
		ii.Animal	40	19	728	343	768	362	-	-	682	241	682	241	-	-	2292	384	2292	384	40	4	3702	339	3742	343
		iii.Machine	170	80	420	198	590	278	360	127	120	42	480	170	120	20	120	20	240	40	550	60	660	60	1310	120
		iv.Total	210	99	3625	1710	3835	1809	371	131	6172	2181	6543	2312	120	20	7752	1298	7872	1319	701	64	17549	1607	18250	1671

(Concluded)

Table-21

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD.53700
(P E A)

(NOT APPLICABLE)

Table-22

LABOUR INPUT COST IN SAMPLE WATER COURSE RD. 53000
(P E A)

(NOT APPLICABLE)

Table-23

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD.53700
(SPINACH)

(NOT APPLICABLE)

Table-24

LABOUR INPUT COST IN SAMPLE WATER COURSE RD. 53000
(SPINACH)

(NOT APPLICABLE)

Table-25

PRODUCTION COST AND PROFIT IN SAMPLE WATER COURSE RD.53700

Sr. No.	Crops	Location	Area (Hectare)	Total Output: Main Product (Mds)	Total Output: By-product Unit	Total Output: By-product Total Output	Market Price per unit (ex-farm) MP (Rs)	Market Price per unit (ex-farm) BP (Rs)	Total value of output MP	Total value of output BP	Total value of output Total	Value per hectare MP	Value per hectare BP	Value per hectare Total	Total Farming cost: Physical inputs	Total Farming cost: Labour cost	Total Farming cost: Total	Cost per hectare	Profit/loss (+) (-): Total	Profit/loss (+) (-): Per hectare	Total Imputed costs: Physical input	Total Imputed costs: Labour	Total Imputed costs: Total	Carry home Income =col.19+23: Total	Carry home Income =col.19+23: Per hectare
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1. Wheat		Head	6.43	213.00	Mds	461	100	[illegible]	21300	13650	35650	3390	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-	5158	[illegible]	24677	3838
		Middle	6.93	291.00	Mds	590	100	[illegible]	29100	17700	46800	4199	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-	14799	[illegible]	32888	4743
		Tail	10.93	441.00	Mds	905	100	[illegible]	44100	27150	71250	4035	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-	18310	[illegible]	44538	4075
		A.Places	24.29	950.00	Mds	1954	100	-	[illegible]	[illegible]	153680	3911	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-	42365	[illegible]	102883	4203
2. Barley		Head	0.56	Hect:	Rs.	-	5179	-	2900	-	2900	5179	-	5179	395	1544	1942	3468	[illegible]	1711	-	1439	1439	2397	4280
		Middle	0.20	Hect:	Rs.	-	5000	-	1000	-	1000	5000	-	5000	135	655	640	2200	[illegible]	2800	-	255	255	815	4075
		Tail	-	Hect:	Rs.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		A.Places	0.76	Hect:	Rs.	-	5132	-	3900	-	3900	5132	-	5132	583	1799	2382	3134	1516	1997	-	1694	1694	2212	4226
3. Berseem		Head	2.12	Hect:	Rs.	-	6344	-	13450	-	13450	6344	-	6344	2735	3835	6570	3099	6880	3245	-	3625	3625	10505	4955
		Middle	2.83	Hect:	Rs.	-	8728	-	24700	-	24700	8728	-	8728	3855	6543	10398	3674	14302	5054	-	6172	6172	20474	7235
		Tail	5.97	Hect:	Rs.	-	6750	-	40300	-	40300	6750	-	6750	5369	7872	13241	2218	27059	4532	-	7752	7752	34811	5831
		A.Places	10.92	Hect:	Rs.	-	7184	-	78450	-	78450	7184	-	7184	11959	10378	30209	2766	48241	4418	-	17549	17549	65790	6025
4. Pea		Head	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		A.Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5. Spinach		Head	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		A.Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-26

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF WHEAT IN SAMPLE WATER COURSE RD.53700

Sr. No.	Operations	Head (Area sown: 6.43)						Middle (Area sown: 6.93)						Tail (Area sown: 10.93)						All Places (Area sown: 24.29)					
		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Ploughing	32.20	5.01	28.00	4.35	14.00	2.18	32.00	4.62	35.00	5.05	27.75	4.00	64.00	5.86	62.00	5.67	37.00	3.39	128.20	5.28	[illegible]	5.15	78.75	3.24
2.	Levelling	10.50	1.63	10.50	1.63	-	-	8.63	1.25	8.63	1.25	-	-	15.50	1.42	15.00	1.37	-	-	34.63	1.43	34.13	1.41	-	-
3.	Planking	5.00	0.78	5.00	0.78	-	-	6.50	0.94	6.50	0.94	-	-	12.50	1.14	8.00	0.73	-	-	24.00	0.99	19.50	0.80	-	-
4.	Sowing	16.91	2.63	14.00	2.18	9.00	1.40	19.43	2.80	15.00	2.16	3.50	0.51	34.95	3.20	31.00	2.84	13.00	1.19	71.29	2.93	60.00	2.47	25.50	1.05
5.	Watering	13.95	2.17	-	-	-	-	21.13	3.05	-	-	-	-	18.33	1.68	-	-	-	-	53.41	2.20	-	-	-	-
6.	F.Y.Manure	14.00	2.18	-	-	-	-	30.50	4.40	-	-	-	-	65.00	5.95	-	-	-	-	109.50	4.51	-	-	-	-
7.	Che:Fertilizer	2.02	0.31	-	-	-	-	2.64	0.38	-	-	-	-	3.77	0.34	-	-	-	-	8.43	0.35	-	-	-	-
8.	Hoeing/Weeding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Harvesting	109.50	17.03	-	-	-	-	119.00	17.17	-	-	-	-	214.58	19.58	-	-	-	-	442.50	18.22	-	-	-	-
10.	Carriage to Threshing/ yard	30.50	4.74	19.00	2.95	-	-	21.50	3.10	18.50	2.67	-	-	54.48	4.98	13.78	1.26	-	-	106.48	4.38	51.28	2.11	-	-
11.	Threshing/ Winnowing	15.00	2.33	-	-	25.25	3.93	23.62	3.41	-	-	38.80	5.60	62.67	5.73	-	-	62.91	5.76	101.29	4.17	-	-	126.96	5.23
12.	Total	249.58	38.81	76.50	11.90	48.25	7.50	284.95	41.12	83.63	12.07	70.05	10.11	545.20	49.88	129.78	11.87	112.91	10.33	1079.73	44.45	289.91	11.94	231.21	9.52

Table-27

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF BARLEY IN SAMPLE WATER COURSE RD.53700

Sr. No.	Operations	Head (Area sown: 0.56)						Middle (Area sown: 0.20)						Tail (Area sown: 0.00)						All Places (Area sown: 0.76)					
		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Ploughing	4.00	7.14	4.00	7.14	0.75	1.34	1.00	5.00	1.00	5.00	-	-	-	-	-	-	-	-	5.00	6.58	5.00	6.58	0.75	0.99
2.	Levelling	1.39	2.46	1.38	2.46	-	-	0.50	2.50	0.50	2.50	-	-	-	-	-	-	-	-	1.88	2.47	1.88	2.47	-	-
3.	Planking	1.00	1.79	1.00	1.79	-	-	0.25	1.25	0.25	1.25	-	-	-	-	-	-	-	-	1.25	1.64	1.25	1.64	-	-
4.	Sowing	2.19	3.91	2.00	3.57	1.00	1.79	1.00	5.00	1.00	5.00	-	-	-	-	-	-	-	-	3.19	4.20	3.00	3.95	1.00	1.32
5.	Watering	1.69	3.02	-	-	-	-	1.00	5.00	-	-	-	-	-	-	-	-	-	-	2.69	3.54	-	-	-	-
6.	F.Y.Manure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Che:Fertilizer	0.15	0.27	-	-	-	-	0.13	0.65	-	-	-	-	-	-	-	-	-	-	0.28	0.37	-	-	-	-
8.	Hoeing/Weeding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Harvesting	11.00	19.64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.00	14.47	-	-	-	-
10.	Carriage to threshing	12.00	21.43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.00	15.79	-	-	-	-
11.	Threshing/ Winnowing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12.	Total	33.41	59.66	8.38	14.96	1.75	3.13	3.88	19.40	2.75	13.75	-	-	-	-	-	-	-	-	37.29	49.07	11.13	14.64	1.75	2.30

Table-28

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF BERSEEM IN SAMPLE WATER COURSE RD.53700

Sr. No.	Operations	Head (Area sown: 10.92)						Middle (Area sown: 2.12)						Tail (Area sown: 2.93)						All Places (Area sown: 5.97)					
		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Ploughing	5.29	2.50	5.00	2.36	5.50	2.59	4.75	1.68	4.00	1.41	11.00	3.89	17.00	2.85	13.00	2.18	16.50	2.76	27.04	2.48	22.00	2.01	33.00	3.02
2.	Levelling	1.50	0.71	1.50	0.71	-	-	2.25	0.80	4.00	1.41	-	-	3.50	0.59	3.50	0.59	-	-	7.25	0.66	9.00	0.82	-	-
3.	Planking	1.13	0.53	0.25	0.12	-	-	0.88	0.31	0.20	0.07	-	-	3.25	0.54	3.25	0.54	-	-	5.26	0.48	3.70	0.34	-	-
4.	Sowing	4.51	2.13	3.00	1.42	6.50	3.07	6.00	2.12	3.00	1.06	5.00	1.77	5.91	0.99	1.50	0.25	7.00	1.17	16.42	1.50	7.50	0.69	18.50	1.69
5.	Watering	6.10	2.88	-	-	-	-	7.25	2.56	-	-	-	-	9.87	1.65	-	-	-	-	23.22	2.12	-	-	-	-
6.	F.Y.Manure	22.50	10.61	-	-	-	-	12.00	4.59	-	-	-	-	17.00	2.85	-	-	-	-	52.50	4.81	-	-	-	-
7.	Che:Fertilizer	1.63	0.77	-	-	-	-	1.25	0.44	-	-	-	-	1.77	0.30	-	-	-	-	4.65	0.43	-	-	-	-
8.	Hoeing/Weeding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Harvesting	31.00	14.63	-	-	-	-	74.00	26.15	-	-	-	-	78.00	13.07	-	-	-	-	183.00	16.76	-	-	-	-
10.	Carriage to threshing	7.00	3.30	7.00	3.30	-	-	70.00	24.73	4.00	1.41	-	-	42.00	7.04	27.25	4.56	-	-	119.00	10.90	38.25	3.50	-	-
11.	Threshing/ Winnowing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12.	Total	89.66	38.05	16.75	7.90	12.00	5.66	179.38	63.39	15.20	5.37	16.00	5.65	178.30	29.87	48.50	8.12	23.50	3.94	438.34	40.14	80.45	7.37	51.50	4.72

Table-29

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF PEA IN SAMPLE WATER COURSE RD. 53700

(NOT APPLICABLE)

Table-30

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF SPINACH IN SAMPLE WATER COURSE RD.53700

(NOT APPLICABLE)

STATISTICAL TABLES OF SAMPLE WATER COURSE RD. 70800

612a

APPENDICES OF SCHEDULE-I

NO.	TITLE	PAGE.NO
1.	TENURE STATUS OF SAMPLE FARMERS IN SAMPLE WATER COURSE RD. 70800	620
2.	LITERACY STATUS OF SAMPLE FARMERS IN SAMPLE WATER COURSE RD.70800	620
3.	LEVEL OF EDUCATION OF THE SAMPLE FARMERS IN RD. 70800	621
4.	HOUSEHOLD SIZE IN SAMPLE WATER COURSE RD.70800	622
5.	HOUSEHOLD SIZE AND COMPOSITION IN SAMPLE WATER COURSE RD.70800	622
6.	LITERACY AND ACTIVITY STATUS OF THE SAMPLE POPULATION IN SAMPLE WATER COURSE RD. 70800	623
7.	DISTRIBUTION OF WORKING MEMBERS BY OCCUPATION IN SAMPLE WATER COURSE RD.70800	624
8.	PLACE OF WORK IN SAMPLE WATER COURSE RD.70800	624
9.	MONTHLY INCOME (OTHER THAN FARMING) IN SAMPLE WATER COURSE RD.70800	625
10.	LAND HOLDINGS OF SAMPLE HOUSEHOLDS OF SAMPLE WATER COURSE RD. 70800	626
11.	AREA RENTED IN/OUT ON CASH/BATAI IN SAMPLE WATER COURSE RD.70800	627
12.	LAND USE IN SAMPLE WATER COURSE RD.70800	627
13.	IRRIGATED AREA BY MEAN OF IRRIGATION IN SAMPLE WATER COURSE RD.70800	628
14.	NUMBER OF TUBEWELLS IN SAMPLE WATER COURSE RD.70800	628
15.	SOURCES OF FINANCE OF TUBEWELL IN SAMPLE WATER COURSE RD.70800	628

TITLE	PAGE NO
NUMBER OF WATER TURNS (WARABANDI) PER FIELD IN SAMPLE WATER COURSE RD.70800	629
TIME PER TURN OF WATER SUPPLY (WARABANDI) IN SAMPLE WATER COURSE RD.70800	629
NUMBER OF WARABANDI LOST DURING KHARIF 1987 IN SAMPLE WATER COURSE RD.70800	630
REASON FOR LOSS OF WATER TURN IN SAMPLE WATER COURSE RD.70800	630
INCIDENCE OF EXCHANGE OF WATER WITH OTHER FARMERS IN SAMPLE WATER COURSE RD. 70800	630
NUMBER OF TIMES WATER WAS EXCHANGED DURING KHARIF 1987 IN SAMPLE WATER COURSE RD.70800	631
FREE WATER FOR IRRIGATION OTHER THAN ON EXCHANGE IN SAMPLE WATER COURSE RD.70800	631
TAMPERING OF WATER IN SAMPLE WATER COURSE RD.70800	631
DE-SILTING OF WATER COURSE IN A YEAR IN SAMPLE WATER COURSE RD.70800 ?	632
WHEN WAS THE WATER COURSE DE-SILTED LAST IN SAMPLE WATER COURSE RD.70800 ?	632
CANAL WATER PROBLEMS IN SAMPLE WATER COURSE RD.70800	633
MANAGEMENT OF DE-SILTATION OF WATER COURSE: ARE THE FARMERS SATISFIED WITH THE EXISTING ARRANGEMENTS IN SAMPLE WATER COURSE RD.70800?	634
INCIDENCE OF INDEBTEDNESS IN SAMPLE WATER COURSE RD.70800	634
AMOUNT BORROWED BY SOURCE DURING THE TWELVE MONTH IN SAMPLE WATER COURSE RD.70800	635
UTILIZATION OF LOAN IN SAMPLE WATER COURSE RD.70800	636

NO.	TITLE	PAGE
31.	ANY IMPROVEMENT ON FARM CONTEMPLATED BY THE SAMPLE FARMERS IF THEY COULD GET ADEQUATE LOAN IN SAMPLE WATER COURSE RD.70800	636
32.	USE OF SELECTED FARM INPUTS AND SOURCE OF SUPPLY IN SAMPLE WATER COURSE RD.70800	638
33.	USE OF IMPROVED [illegible] IN SAMPLE WATER COURSE RD.70800	638
34.	INPUTS IN THE SUPPLY OF WHICH PROBLEMS HAVE BEEN REPORTED BY FARMERS IN SAMPLE WATER COURSE RD.70800	641
35.	SOURCE OF AGRICULTURAL INFORMATION OF SAMPLE FARMERS IN RD.70800	642
36.	MEMBERSHIP OF SOCIETIES/ASSOCIATION ETC. IN SAMPLE WATER COURSE RD.70800	643
37.	USE OF TRACTORS BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD. 70800	644
38.	USE OF THRASHER BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD. 70800	644

APPENDICES OF SCHEDULE-II (KHARIF)

1.	AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS IN SAMPLE WATER COURSE RD.70800	645
2.	AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS OUTSIDE SAMPLE WATER COURSE RD.70800	646
3.	DISPOSAL OF MAIN PRODUCTS OTHER THAN SUGAR-CANE IN SAMPLE WATER COURSE RD.70800	647
4.	DISPOSAL OF BY-PRODUCTS IN SAMPLE WATER COURSE RD. 70800	648
5.	MODE OF SALE OF MAIZE IN SAMPLE WATER COURSE RD. 70800	649

T I T L E	PAGE NO
MODE OF SALE OF SORGHUM IN SAMPLE WATER COURSE RD. 70800	649
MODE OF SALE OF PIGEON PEA IN SAMPLE WATER COURSE RD. 70800	649
UTILIZATION OF SUGARCANE IN SAMPLE WATER COURSE RD.70800	650
UTILIZATION OF GUR PRODUCED BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD.70800	650
NUMBER OF FARMERS REPORTING CONSUMPTION OF CHEMICAL FERTILIZERS IN SAMPLE WATER COURSE RD. 70800	651
QUANTITY OF CHEMICAL FERTILIZERS USED BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD. 70800	652
CONSUMPTION OF [illegible] IN SAMPLE WATER COURSE RD. 70800	653
NUMBER OF SAMPLE FARMERS WHO USED INSECTICIDES/PESTICIDES/WEEDICIDES IN SAMPLE WATER COURSE RD.70800	654
QUANTITY OF SEED USED BY SAMPLE FARMERS IN SAMPLE WATERCOURSE RD.70800	655
PHYSICAL INPUT COST OF MAIZE IN SAMPLE WATER COURSE RD.70800	656
LABOUR INPUT COST OF MAIZE IN SAMPLE WATER COURSE RD.70800	657
PHYSICAL INPUT COST OF SORGHUM IN SAMPLE WATER COURSE RD.70800	659
LABOUR INPUT COST OF SORGHUM IN SAMPLE WATER COURSE RD.70800	660
PHYSICAL INPUT COST OF SUGARCANE IN SAMPLE WATER COURSE RD.70800	662
LABOUR INPUT COST OF SUGARCANE IN SAMPLE WATER COURSE RD.70800	663

NO.	T I T L E	PAGE NO
21.	PHYSICAL INPUT COST OF PIGEON PEA IN SAMPLE WATER COURSE RD.70800	665
22.	LABOUR INPUT COST OF PIGEON PEA IN SAMPLE WATER COURSE RD.70800	666
23.	PRODUCTION COST AND PROFIT IN SAMPLE WATER COURSE RD.70800	668
24.	CROPPING PATTERN ON SAMPLE FARMS IN SAMPLE WATER COURSE RD.70800	669
25.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF MAIZE IN SAMPLE WATER COURSE RD.70800	670
26.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF SORGHUM IN SAMPLE WATER COURSE RD.70800	671
27.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF SUGARCANE IN SAMPLE WATER COURSE RD.70800	672
28.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF PIGEON PEA IN SAMPLE WATER COURSE RD.70800	673
29.	NUMBER OF FRUIT PLANTS, TREES AND FRUIT PRODUCTION IN SAMPLE WATER COURSE RD.70800	674
30.	LIVESTOCK HOLDINGS OF SAMPLE HOUSEHOLDS IN SAMPLE WATER COURSE RD.70800.	678
31.	MILK PRODUCTION AND UTILIZATION IN SAMPLE WATER COURSE RD. 70800	682
32.	INCOME FROM SALE OF DAIRY PRODUCTS (OTHER THAN MILK) DURING SIX MONTHS PROCEEDING INTERVIEW OF SAMPLE HOUSEHOLDS IN KHARIF 1987 IN SAMPLE WATER COURSE RD.70800	684
33.	INCOME FROM HIRING OUT OF LIVESTOCK IN SAMPLE WATER COURSE RD. 70800	684
34.	INCOME FROM SELECTED SOURCES DURING SIX MONTHS BEFORE INTERVIEW IN KHARIF 1987 IN SAMPLE WATER COURSE RD. 70800	685
35.	PERMANENT LABOUR ON FARM IN SAMPLE WATER COURSE RD.70800	685

APPENDICES OF SCHEDULE-II (RABI)

NO.	TITLE	PAGE NO
1.	AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS IN SAMPLE WATER COURSE RD.70800	686
2.	AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS OUTSIDE SAMPLE WATER COURSE RD.70800	687
3.	DISPOSAL OF MAIN PRODUCTS IN SAMPLE WATER COURSE RD.70800	688
4.	DISPOSAL OF BY-PRODUCTS IN SAMPLE WATER COURSE RD.70800	680
5.	MODE OF SALE OF WHEAT IN SAMPLE WATER COURSE RD.70800	692
6.	MODE OF SALE OF BARLEY IN SAMPLE WATER COURSE RD.70800	693
7.	MODE OF SALE OF BERSEEM IN SAMPLE WATER COURSE RD.70800	694
8.	MODE OF SALE OF PEA IN SAMPLE WATER COURSE RD. 70800	695
9.	MODE OF SALE OF SPINACH IN SAMPLE WATER COURSE RD.70800	695
10.	NUMBER OF FARMERS REPORTING CONSUMPTION OF CHEMICAL FERTILIZERS IN SAMPLE WATER COURSE RD.70800	696
11.	QUANTITY OF CHEMICAL FERTILIZERS USED BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD.70800	697
12.	CONSUMPTION OF FARM YARD MANURE IN SAMPLE WATER COURSE RD.70800	698
13.	NUMBER OF SAMPLE FARMERS WHO USED INSECTICIDES/PESTICIDES/WEEDICIDES IN SAMPLE WATER COURSE RD.70800	699
14.	QUANTITY OF SEED USED BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD.70800	700
15.	PHYSICAL INPUT COST OF WHEAT IN SAMPLE WATER COURSE RD.70800	701

NO.	TITLE	PAGE NO
16.	LABOUR INPUT COST OF WHEAT IN SAMPLE WATER COURSE RD.70800	702
17.	PHYSICAL INPUT COST OF BARLEY IN SAMPLE WATER COURSE RD.70800	704
18.	LABOUR INPUT COST OF BARLEY IN SAMPLE WATER COURSE RD.70800	705
19.	PHYSICAL INPUT COST OF BERSEEM IN SAMPLE WATER COURSE RD.70800	707
20.	LABOUR INPUT COST OF BERSEEM IN SAMPLE WATER COURSE RD.70800	708
21.	PHYSICAL INPUT COST OF PEA IN SAMPLE WATER COURSE RD.70800	710
22.	LABOUR INPUT COST OF PEA IN SAMPLE WATER COURSE RD. 70800	711
23.	PHYSICAL INPUT COST OF SPINACH IN SAMPLE WATER COURSE RD.70800	713
24.	LABOUR INPUT COST OF SPINACH IN SAMPLE WATER COURSE RD. 70800	713
25.	PRODUCTION COST AND PROFIT IN SAMPLE WATER COURSE RD.70800	714
26.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF WHEAT IN SAMPLE WATER COURSE RD. 70800	715
27.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF BARLEY IN SAMPLE WATER COURSE RD.70800	716
28.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF BERSEEM IN SAMPLE WATER COURSE RD.70800	717
29.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF PEA IN SAMPLE WATER COURSE RD.70800	718
30.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF SPINACH IN SAMPLE WATER COURSE RD.70800	719

Table-1

TENURE STATUS OF SAMPLE FARMERS IN
SAMPLE WATER COURSE RD. 70800

Sr. No.	Location	Tenure Status: Owner No.	Owner %	Owner cum tenant No	Owner cum tenant %	Tenant No.	Tenant %	Total Farmers No=100
0	1	2	3	4	5	6	7	8
1.	Head of W.C.	80	80.00	2	20.00	-	-	10
2.	Middle of W.C.	10	100.00	-	-	-	-	10
3.	Tail of W.C.	9	90.00	1	10.00	-	-	10
4.	Total	27	90.00	3	10.00	-	-	30

W.C.= Water Course

Table-2

LITERACY STATUS OF SAMPLE FARMERS
IN SAMPLE WATER COURSE RD.70800

Sr. No.	Location	Literate No.	Literate %	Illiterate No.	Illiterate %	Total No (=100)
0	1	2	3	4	5	6
1.	Head of Water Course	7	70	3	30	10
2.	Middle of Water Course	6	60	4	40	10
3.	Tail of Water Course	9	90	1	10	10
4.	T o t a l :-	22	73	8	27	30

Table-3

LEVEL OF EDUCATION OF THE SAMPLE FARMERS
IN SAMPLE WATER COURSE RD. 70800

Sr. No.	Level of Education	Location: Head of W.C No.	Head of W.C %	Middle of W.C No.	Middle of W.C %	Tail of W.C No.	Tail of W.C %	Total No(=100)
0.	1	2	3	4	5	6	7	8
1.	Class 1-5	[illegible]	67	1	50	-	-	3
2.	Class 6-9	1	33	-	-	1	50	2
3.	Matric	-	-	1	10	1	50	2
4.	Intermediate	-	-	-	-	-	-	-
5.	Graduate	-	-	-	-	-	-	-
6.	MA/M.Sc	-	-	-	-	-	-	-
7.	MBBS	-	-	-	-	-	-	-
8.	B.Sc (Eng)	-	-	-	-	-	-	-
9.	B.Sc (Agri)	-	-	-	-	-	-	-
10.	B.Com/BBA	-	-	-	-	-	-	-
11.	M.Com/MBA	-	-	-	-	-	-	-
12.	Other professional Diploma/Degree	-	-	-	-	-	-	-
13.	Other	-	-	-	-	-	-	-
14.	T o t a l	3	100	2	100	2	100	7

Table-4

HOUSEHOLD SIZE IN SAMPLE WATER COURSE RD.70800

Sr. No.	Location	Sample Household	Total Population	Average size of household
0	1	2	3	4
1.	Head of Watercourse	10	151	15.10
2.	Middle of Watercourse	10	114	11.40
3.	Tail of Watercourse	10	97	9.70
4.	Total	30	362	12.07

Table-5

HOUSEHOLD SIZE AND COMPOSITION IN SAMPLE WATER COURSE RD.70800

Sr. No.	Age Group (Years)	Sex	Total Members							
			Head		Middle		Tail		All Places	
			No.	%	No.	%	No.	%	No.	%
0	1	2	3	4	5	6	7	8	9	10
1.	Below 5	Male	23	27.38	15	24.59	10	20.83	48	24.87
		Female	17	25.37	17	32.08	15	30.61	49	28.99
		Both	40	26.49	32	28.07	25	25.77	97	26.80
2.	5 and above	Male	61	72.62	46	75.41	38	79.17	145	75.13
		Female	50	74.63	36	67.92	34	69.39	120	71.01
		Both	111	73.51	82	71.93	72	74.23	265	73.20
3.	All Ages	Male	84	100.00	61	100.00	48	100.00	193	100.00
		Female	67	100.00	53	100.00	49	100.00	169	100.00
		Both	151	100.00	114	100.00	97	100.00	362	100.00

Table-6

LITERACY AND ACTIVITY STATUS OF THE SAMPLE POPULATION IN SAMPLE WATER COURSE RD.70800

Sr. No.	Location	Total Respondents	Sex	Total Members	Literate (excluding students)		At School		Total literates at school	
					No	%	No.	%	No	%
0	1	2	3	4	5	6	7	8	9	10
1.	Head of watercourse	10	Male	84	10	11.90	18	21.43	28	33.33
			Female	67	-	-	-	-	-	-
			Both	151	10	6.62	18	11.92	28	18.54
2.	Middle of water course	10	Male	61	10	16.39	16	26.23	26	42.62
			Female	53	-	-	-	-	-	-
			Both	114	10	8.77	16	14.44	26	22.81
3.	Tail of Watercourse	10	Male	48	10	20.83	10	20.83	20	41.67
			Female	49	-	-	-	-	-	-
			Both	97	10	10.31	10	10.31	20	20.62
4.	All places	30	Male	193	30	15.54	44	22.80	74	38.34
			Female	169	-	-	-	-	-	-
			Both	362	30	8.29	44	12.15	74	12.15

Table-7

DISTRIBUTION OF WORKING MEMBERS BY OCCUPATIONS
IN SAMPLE WATER COURSE RD.70800

Sr. No.	Occupation	Location: Head	Middle	Tail	Total
0	1	2	3	4	5
1.	Paid employment	13	6	2	21
	a. On Farm	-	-	-	-
	b. Off Farm	13	6	2	21
2.	Self employed	10	10	10	30
	a. Farming	10	10	10	30
	b. Trade/Industry Transport	-	-	-	-
	c. Artisans	-	-	-	-
	d. Other	-	-	-	-
3.	Grand Total	23	16	12	51

Table-8

PLACE OF WORK IN SAMPLE WATER COURSE RD.70800

Sr. No.	Place of Work	Head	Middle	Tail	Total
0	1	2	3	4	5
1.	Sample W.C and other places in Peshawar Distt.	8	5	2	15
2.	Elsewhere in NWFP	3	1	-	4
3.	Other Province	2	-	-	2
4.	Other Countries	-	-	-	-
5.	All Places	13	6	2	21

Table-9

MONTHLY INCOME (OTHER THAN FARMING)
IN SAMPLE WATER COURSE RD.70800

Sr. No.	Income Group (Rs. per month)	Location	Number	Total Income(Rs)	Average Income(Rs)
0	1	2	3	4	5
1.	Upto Rs. 500	Head	-	-	-
		Middle	-	-	-
		Tail	-	-	-
2.	501 to 1000	Head	4	3700	925.00
		Middle	2	1700	850.00
		Tail	1	900	900.00
3.	1001 to 1500	Head	9	10700	1188.89
		Middle	4	5000	1250.00
		Tail	1	1300	1300.00
4.	1501 to 2000	Head	-	-	-
		Middle	-	-	-
		Tail	-	-	-
5.	2001 to 2500	Head	-	-	-
		Middle	-	-	-
		Tail	-	-	-
6.	2501 to 3000	Head	-	-	-
		Middle	-	-	-
		Tail	-	-	-
7.	3001 to 400	Head	-	-	-
		Middle	-	-	-
		Tail	-	-	-
8.	4001 to 5000	Head	-	-	-
		Middle	-	-	-
		Tail	-	-	-
9.	Above 5000	Head	-	-	-
		Middle	-	-	-
		Tail	-	-	-

Table-10

LAND HOLDINGS OF SAMPLE HOUSEHOLDS OF SAMPLE WATER COURSE RD. 70800

Sr. No.	Locality	Total respondent	Location of Land	Area Owned Total	Area Owned Average	Area Rented in Total	Area Rented in Average	Area Rented Out Total	Area Rented Out Average	Operated Holding Total	Operated Holding Average
0	1	2	3	4	5	6	7	8	9	10	11
1.	Head of W.C	10	a.This water-course	27.11	2.71	1.62	0.16	2.43	0.24	26.30	2.63
			b.Other places	18.00	1.80	-	-	1.62	0.16	16.38	1.64
			c. Total	45.11	4.51	1.62	0.16	4.05	0.41	42.68	4.27
2.	Middle of W.C.	10	a.This water-course	10.42	1.04	2.53	0.25	5.77	0.58	7.18	0.72
			b.Other places	11.33	1.13	-	-	1.21	0.12	10.12	1.01
			c. Total	21.75	2.18	2.53	0.25	6.98	0.70	17.30	1.73
3.	Tail of W.C.	10	a.This water-course	16.19	1.62	3.90	0.39	4.55	0.46	15.54	1.55
			b.Other places	4.30	0.43	1.42	0.14	1.62	0.16	4.10	0.41
			c. Total	20.49	2.05	5.32	0.53	6.17	0.62	19.64	1.96
4.	All Places	30	a.This water-course	53.72	1.79	8.05	0.27	12.75	0.43	49.02	1.63
			b.Other places	33.63	1.12	1.42	0.05	4.45	0.15	30.62	1.02
			c. Total	87.35	2.91	9.47	0.32	17.20	0.57	79.62	2.65

Table-11

AREA RENTED IN/OUT ON CASH/BATAI IN
SAMPLE WATER COURSE RD.70800

Sr. No.	Location	Area Rented In			Area Rented Out		
		Batai	Cash Rent	Total	Batai	Cash Rent	Total
0	1	2	3	4	5	6	7
1.	Head of W.C.	1.62	-	1.62	2.43	-	2.43
2.	Middle of W.C.	2.53	-	2.53	5.77	-	5.77
3.	Tail of W.C.	3.90	-	3.90	4.55	-	4.55
4.	All Places	8.05	-	8.05	12.75	-	12.75

Table-12

LAND USE IN SAMPLE WATER COURSE RD.70800

Sr. No.	Land Use	Head		Middle		Tail		All Places	
		Hec-tare	%	Hec-tare	%	Hec-tare	%	Hec-tare	%
0	1	2	3	4	5	6	7	8	9
1.	Crops	16.65	57.95	11.15	100	18.26	78.98	46.06	73.11
2.	Orchard	1.42	4.94	-	-	-	-	1.42	2.25
3.	Not available for cultivation	10.66	37.11	-	-	4.86	21.02	15.52	24.64
4.	Total Area	28.73	100.0	11.15	100	23.12	100.0	63.12	100.0

Table-13

IRRIGATED AREA BY MEANS OF IRRIGATION
IN SAMPLE WATER COURSE RD.70800

Sr. No.	Means of Irrigation	Head of W.C. Jareeb	%	Middle of W.C Jareeb	%	Tail of W.C Jareeb	%	Total Jareeb	%
0	1	2	3	4	5	6	7	8	9
1.	Canal Only	121	100	57	100	75.25	100	253.25	100
2.	Open well only	-	-	-	-	-	-	-	-
3.	Tube-well only	-	-	-	-	-	-	-	-
4.	Mixed	-	-	-	-	-	-	-	-
5.	Total (All types)	121	100	57	100	75.25	100	253.25	100

Table-14

NUMBER OF TUBEWELLS IN SAMPLE WATER COURSE RD.70800

(NO TUBEWELL HERE)

Table-15

SOURCES OF FINANCE OF TUBEWELL IN
SAMPLE WATER COURSE RD.70800

(NOT APPLICABLE; NO TUBEWELL HERE)

Table-16

NUMBER OF WATER TURNS (WARABANDI) PER FIELD
IN SAMPLE WATER COURSE RD.70800

Sr. No.	Particulars	Location: Head No.	Head %	Middle No.	Middle %	Tail No.	Tail %	All places No.	All places %
0	1	2	3	4	5	6	7	8	9
1.	Total Farmers	10	[illegible]	[illegible]	[illegible]	[illegible]	100	30	100
2.	One turn per week	-	-	-	-	-	-	-	-
3.	One turn per two weeks.	10	100	10	100	10	100	30	100
4.	Water not yet allotted but drawing once per week.	-	-	-	-	-	-	-	-

Table-17

TIME PER TURN OF WATER SUPPLY (WARABANDI)
IN SAMPLE WATER COURSE RD.70800

Sr. No.	Location	Water drawn once every:	Distribution of water users by number of hours of water supply: Upto one No.	Upto one %	1 - 2 No.	1 - 2 %	2 - 4 No.	2 - 4 %	4 - 6 No.	4 - 6 %	6 - 8 No.	6 - 8 %	More than 8 No.	More than 8 %	All cases No(=100)
1.	Head Section	12th day	2	20.00	3	30.00	4	40.00	1	10.00	-	-	-	-	10
2.	Middle Section	12th day	4	40.00	3	30.00	2	20.00	-	-	-	-	1	10.00	10
3.	Tail Section	12th day	3	30.00	2	20.00	3	30.00	1	10.00	-	-	1	10.00	10
4.	All Places	12th day	9	30.00	8	26.67	9	30.00	2	6.67	-	-	2	6.67	30

Table-18

NUMBER OF WATER TURNS LOST DURING THE PERIOD
APRIL - DECEMBER 1988 IN SAMPLE WATER COURSE RD.70800

No.	Number of turns lost	Head		Middle		Tail		All Places
		No.	%	No.	%	No.	%	No (=100)
0	1	2	3	4	5	6	7	8
1.	None	-	-	-	-	-	-	-
2.	One	-	-	-	-	-	-	-
3.	Two	-	-	-	-	-	-	-
4.	Three	-	-	-	-	-	-	-
5.	Four	-	-	-	-	-	-	-
6.	Five	4	36.36	4	36.36	3	27.27	11
7.	More than 5	6	31.58	6	31.58	7	36.84	19
8.	All	10	33.33	10	33.33	10	33.33	30

Note: The canal is closed in January every year. In 1988 it was closed also during February and March for repair.

Table-19

REASON FOR LOSS OF WATER TURN IN
SAMPLE WATER COURSE RD.70800

(NOT APPLICABLE; NO TURN LOST ANY WHERE)

Table-20

INCIDENCE OF EXCHANGE OF WATER WITH OTHER
FARMERS IN SAMPLE WATER COURSE RD.70800

(NO CASE REPORTED FROM ANYWHERE)

Table-21

NUMBER OF TIMES WATER WAS EXCHANGED DURING KHARIF 1987
IN SAMPLE WATER COURSE RD.70800

(NO CASE REPORTED ANYWHERE)

Table-22

FREE WATER FOR IRRIGATION OTHER THAN ON
EXCHANGE IN SAMPLE WATER COURSE RD.70800

Sr. No.	Location	Is free water ever taken ? Yes No.	Yes %	No No.	No %	Is free water ever given ? Yes No	Yes %	No No	No %	Total No(=100)
0	1	2	3	4	5	6	7	8	9	10
1.	Head of W.C.	-	-	9	90	-	-	10	100	10
2.	Tail of W.C.	-	-	10	100	-	-	10	100	10
3.	Tail of W.C.	1	10	10	100	1	10	9	90	10
4.	All places	1	3	29	97	1	3	29	97	30

Table-23

TAMPERING OF WATER IN SAMPLE WATER COURSE RD.70800

Sr. No.	Location	Is sample farmer,s share of water tampered ? Yes No.	Yes %	No No.	No %	Total Farmers No(=100)
0	1	2	3	4	5	10
1.	Head of W.C.	7	70	3	30	10
2.	Middle of W.C.	2	20	8	80	10
3.	Tail of W.C.	1	10	9	90	10
4.	All places	10	33	20	67	30

Table-24

DE-SILTING OF WATER COURSE IN A YEAR IN SAMPLE WATER COURSE RD.70800 ?

Sr. No.	Number of De-silting in a year	Head of W.C.		Middle of WC		Tail of W.C		All Places	
		No.	%	No.	%	No.	%	No.	%
0	1	2	3	4	5	6	7	14	15
1.	One	1	2	3	8	4	13	8	33
2.	Two	-	-	3	8	1	3	4	7
3.	Three	-	-	-	-	-	-	-	-
4.	Four	-	-	-	-	-	-	-	-
5.	Five or More	-	-	-	-	-	-	-	-
6.	Not reported	9	18	4	10	5	17	18	30
7.	When need	-	-	-	-	-	-	-	-
8.	All cases	10	100	10	100	10	100	60	100

Table-25

WHEN WAS THE WATER COURSE DE-SILTED LAST IN SAMPLE WATER COURSE RD.70800 ?

Sr. No.	Number of De-silting in a la year	Head		Middle		Tail		All Places	
		No.	%	No.	%	No.	%	No.	%
0	1	2	3	4	5	6	7	4	5
1.	Rabi 1986-87 (Oct-86 to April-87)	-	-	2	20	2	20	4	13.33
2	Kharif 1987 (May-Nov.87)	4	40	7	70	7	70	18	60.00
3.	Rabi 1987-88 (December 87)	-	-	-	-	-	-	-	-
4.	Not cleared during last 12 month	-	-	-	-	-	-	-	-
5.	No Response	4	40	3	30	3	30	10	33.33
6.	When the canal was dry	-	-	-	-	-	-	-	-
7.	All cases	10	100	10	100	10	100	30	100.00

Table 26

CANAL WATER PROBLEMS IN SAMPLE WATER COURSE RD.70800

Sr. No.	Problems	Location water course	Is this problems faced Yes No.	Yes %	No No.	No %	Total Farmers No(=100)
0	1	2	3	4	5	6	7
1.	A general shortage of water	Head	9	90	1	10	10
		Middle	9	90	1	10	10
		Tail	9	90	1	10	10
		All points	27	93	3	17	30
2.	Defective slope of the channel	Head	-	-	10	100	10
		Middle	-	-	10	100	10
		Tail	-	-	10	100	10
		All points	-	-	30	100	30
3.	Siltation of the channel	Head	1	10	9	90	10
		Middle	1	10	9	90	10
		Tail	2	20	8	80	10
		All points	4	13	26	87	30
4.	Warabandi defects (in convenient timing)	Head	1	10	9	90	10
		Middle	6	60	4	40	10
		Tail	-	-	10	100	10
		All points	7	23	23	77	30
5.	Theft of water	Head	6	60	4	40	10
		Middle	1	10	9	90	10
		Tail	1	10	9	90	10
		All points	8	27	22	73	30

Table-27

MANAGEMENT OF DE-SILTATION OF WATER COURSE: ARE THE FARMERS SATISFIED WITH THE EXISTING ARRANGEMENTS IN SAMPLE WATER COURSE RD.70800 ?

Sr. No.	Location	Are the farmers satisfied with existing arrangements ? Yes No.	Yes %	No No.	No %	Total Farmers No(=100)
0	1	2	3	4	5	6
1.	Head of W.C.	1	10	9	90	10
2.	Middle of W.C.	4	40	6	60	10
3.	Tail of W.C.	3	30	7	70	10
4.	All points	8	27	22	73	30

Table-28

INCIDENCE OF INDEBTEDNESS IN SAMPLE WATER COURSE RD.70800

Sr. No.	Location course on Water course	Farmers who have ever been indebt No.	%	Farmers in debt on inter-viewed date No.	%	Amount of debt (Rs) Total	Average per Borrower	Average per Sample farmer	Total Farmers No(=100)
0	1	2	3	4	5	6	7	8	9
1.	Head of W.C.	-	-	-	-	-	-	-	10
2.	Middle of W.C.	1	10	1	10	5000	5000	500	10
3.	Tail of W.C.	-	-	-	-	-	-	-	10
4.	All points	1	3	1	3	5000	5000	167	30

Table-29

AMOUNT BORROWED BY SOURCE IN SAMPLE
WATER COURSE RD.70800

Sr. No.	Source	Amount							
		Head		Middle		Tail		All Places	
		Rs	%	Rs	%	Rs	%	Rs	%
0	1	2	3	4	5	6	7	8	9
1.	Agri. Development Bank	-	-	-	-	-	-	-	-
2.	Commercial Bank	-	-	5000	100	-	-	5000	100
3.	Cooperatives Bank	-	-	-	-	-	-	-	-
4.	Traders	-	-	-	-	-	-	-	-
5.	Private money lender	-	-	-	-	-	-	-	-
6.	Relatives	-	-	-	-	-	-	-	-
7.	Friends	-	-	-	-	-	-	-	-
8.	Other	-	-	-	-	-	-	-	-
9.	All cases	-	-	5000	100	-	-	5000	100

Table - 30

UTILIZATION OF LOAN IN SAMPLE WATER COURSE RD.70800

No.	Source	Amount							
		Head		Middle		Tail		All Places	
		Rs	%	Rs	%	Rs	%	Rs	%
0	1	2	3	4	5	6	7	8	9
1.	Purchase of Farm inputs	-	-	5000	100	-	-	5000	100
2.	Purchase of Farm Machinery	-	-	-	-	-	-	-	-
3.	Purchase of land	-	-	-	-	-	-	-	-
4.	Repayment of loan	-	-	-	-	-	-	-	-
5.	Business	-	-	-	-	-	-	-	-
6.	Domestic consumption	-	-	-	-	-	-	-	-
7.	Other purposes	-	-	-	-	-	-	-	-
8.	T o t a l :	-	-	5000	100	-	-	5000	100

Table-31

ANY IMPROVEMENT ON FARM CONTEMPLATED BY THE SAMPLE FARMERS IF THEY COULD GET ADEQUATE LOAN IN SAMPLE WATER COURSE RD.70800

Sr. No.	Location	Any improvement contemplated?				Total Farmers No(=100)
		Yes		No		
		No.	%	No.	%	
0	1	2	3	4	5	6
1.	Head of W.C.	-	-	10	100	10
2.	Tail of W.C.	1	10	9	100	10
3.	Tail of W.C.	-	-	10	100	10
4.	All places	1	3	29	97	30

Table-32

USE OF SELECTED FARM INPUTS AND SOURCE OF SUPPLY IN SAMPLE WATER COURSE RD.70800

Sr. No.	Name of Inputs	Location points of farm as W.C	Farms who use is No.	%	Sources of Supply: Villages No.	%	Outside No.	%	Both No.	%	Total Farmers No=(100
0	1	2	3	4	5	6	7	8	9	10	11
1.	Urea	Head	10	100.00	3	30.00	7	70.00	-	12.50	10
		Middle	9	90.00	-	-	9	100.00	-	-	10
		Tail	[illegible]	[illegible]	1	11.11	8	88.89	-	-	10
		All Places	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	85.71	-	2.57	[illegible]
2.	DAP	Head	8	80.00	3	37.50	5	62.50	-	-	10
		Middle	6	60.00	-	-	6	100.00	-	-	10
		Tail	8	80.00	1	12.50	7	87.50	-	-	10
		All Places	22	73.33	4	18.18	18	81.82	-	-	30
3.	NPK	Head	6	60.00	1	16.67	5	83.33	-	-	10
		Middle	1	10.00	-	-	1	100.00	-	-	10
		Tail	-	-	-	-	-	-	-	-	10
		All Places	7	23.33	1	14.29	6	85.71	-	-	30
4.	NP	Head	1	10.00	-	-	1	100.00	-	-	10
		Middle	3	30.00	-	-	3	100.00	-	-	10
		Tail	1	10.00	-	-	1	100.00	-	-	10
		All Places	5	16.67	-	-	5	100.00	-	-	30
5.	Ammonium Sulphate	Head	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	30
6.	Ammonium Nitrate	Head	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	10
		Tail	2	20.00	-	-	-	-	-	-	10
		All Places	2	6.67	-	-	-	-	-	-	30
7.	Insec-ticides/ Pesticides	Head	1	10.00	-	-	-	-	-	-	10
		Middle	3	30.00	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	10
		All Places	4	13.33	-	-	-	-	-	-	30
8.	Weedecides	Head	1	10.00	-	-	-	-	-	-	10
		Middle	2	20.00	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	10
		All Places	3	10.00	-	-	-	-	-	-	30

Table-33

USE OF IMPROVED SEED IN SAMPLE WATER COURSE RD.70800

Sr. No.	Seed	Location	Farmers who: Know about this		Use this		If used: where purchased: In the village		Own		Other places		Total Farmers (No.=100)
			No.	% of Col.13	No.	% of Col.13	No.	% of Col.5	No.	% of Col.5	No.	% of Col.5	
0	1	2	3	4	5	6	7	8	9	10	11	12	13
1.	WHEAT												
		Head	-	-	-	-	-	-	-	-	-	-	10
	i- Pak-81	Middle	4	40.00	4	40.00	-	-	2	50.00	2	50.00	10
		Tail	3	30.00	2	20.00	-	-	-	-	2	100.00	10
		All Places	7	23.33	6	20.00	-	-	2	33.33	4	66.67	30
	ii- L-73	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	3	30.00	3	30.00	-	-	-	-	3	100.00	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	3	10.00	3	10.00	-	-	-	-	3	100.00	30
	iii- Sarhad-82	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	1	10.00	1	10.00	-	-	-	-	1	100.00	10
		All Places	1	3.33	1	3.33	-	-	-	-	1	100.00	30
	iv- Khyber-79	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	-	-	30
	v- Pirsabaq-85	Head	1	10.00	1	10.00	-	-	-	-	-	-	10
		Middle	1	10.00	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	2	6.67	1	3.33	-	-	-	-	-	-	30
	vi- Maxipak	Head	9	90.00	9	90.00	1	11.11	5	55.56	3	33.33	10
		Middle	3	30.00	3	30.00	-	-	2	66.67	1	33.33	10
		Tail	4	40.00	4	40.00	2	50.00	2	50.00	-	-	10
		All Places	16	53.33	16	53.33	3	18.75	9	56.25	4	25.00	30

(Contd....)

Table-33

USE OF IMPROVED SEED IN SAMPLE WATER COURSE RD.70800

Sr. No.	Seed	Location	Farmers who: Know about this		Use this		If used: where purchased: In the village		Own		Other places		Total Farme No(=1
			No.	% of col.1	No.	% of col.1	No.	% of col.5	No.	% of col.5	No.	% of col.5	
0	1	2	3	4	5	6	7	8	9	10	11	12	13
	vii- Khushal	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	1	10.00	1	10.00	-	-	1	100.00	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	1	3.33	1	3.33	-	-	1	100.00	-	-	30
	viii- Chanab	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	-	-	30
2.	SUGARCANE												
		Head	-	-	-	-	-	-	-	-	-	-	10
	i- M-161	Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	-	-	30
	ii- CP-48	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	-	-	30
	iii- CO-310	Head	2	20.00	2	20.00	-	-	2	100.00	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	2	6.67	2	6.67	-	-	2	100.00	-	-	30

(Contd.....

Table-33

USE OF IMPROVED SEED IN SAMPLE WATER COURSE RD.70800

Sr. No.	Seed	Location	Farmers who: Know about this		Use this		If used; where purchased: In the village		Own		Other places		Total Farmers No.(=100)
			No.	% of Col.13	No.	% of Col.13	No.	% of Col.5	No.	% of Col.5	No.	% of Col.5	
0	1	2	3	4	5	6	7	8	9	10	11	12	13
3.	MAIZE	Head	7	70.00	7	70.00	-	-	4	57.14	3	42.86	10
		Middle	3	30.00	3	30.00	-	-	2	66.67	1	33.33	10
	i- Sarhad White	Tail	7	70.00	7	70.00	3	42.86	4	57.14	-	-	10
		All Places	17	56.67	17	56.67	3	17.65	10	58.82	4	23.53	30
	ii-Changaz	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	-	-	30
	iii- Zia	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	-	-	30
	iv- Shaheen	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	-	-	30
	v- Hameshah	Head	1	10.00	1	10.00	-	-	1	100.00	-	-	10
		Middle	5	50.00	5	50.00	-	-	5	100.00	-	-	10
		Tail	2	20.00	1	10.00	1	50.00	1	50.00	-	-	10
		All Places	8	26.67	8	26.67	1	12.50	7	87.50	-	-	30
4.	RICE	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
	i- Irri-6	Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	-	-	30
	ii- Basmati	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	-	-	30

(Concluded)

Table-34

INPUTS IN THE SUPPLY OF WHICH PROBLEMS HAVE BEEN REPORTED BY FARMERS IN SAMPLE WATERCOURSE RD.70800

Sr. No.	Location	Total Farmers No(=100)	Farmers reporting problems in supply of: Fertilizer		Improved seed		Farm Insecticides		Machinery	
			No	%	No	%	No	%	No	%
0	1	2	3	4	5	6	7	8	9	10
1.	Head	10	7	70.00	3	30.00	-	-	-	-
2.	Middle	10	-	-	-	-	-	-	-	-
3.	Tail	10	1	10.00	1	10.00	-	-	-	-
4.	All Places	30	8	27.00	4	13.00	-	-	-	-

Table-35

SOURCE OF AGRICULTURAL INFORMATION OF SAMPLE FARMERS IN RD.70800

Sl. No.	Source	Number and percentage* of farmers who took farm information from this source								Number and percentage** of sample farmers who used this:							
		Head of W.C.		Middle of W.C.		Tail of W.C.		All Places		Head of W.C.		Middle of W.C.		Tail of W.C.		All Places	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1.	Agriculture Department	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-
2.	Demonstration plots laid by insecticides/ pesticides firms	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.	Radio	-	-	1	10	3	30	4	13	-	-	1	100	1	33	2	50
4.	Television	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Newspaper	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	Landlord	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Other Farmers	3	30	4	40	4	40	11	37	1	33	3	75	3	75	7	64
8	Insurance officers	-	-			-	-	-	-	-	-	-	-	-	-	-	-
9	Other sources specify	-	-			-	-	-	-	-	-	-	-	-	-	-	-

Total Farmers = 30
Head = 11
Mid = 10
Tail = 10

* of total sample farmers in the section concerned

** of those who took information from a source given in col.1

Table-36

MEMBERSHIP OF SOCIETIES/ASSOCIATIONS ETC.
IN SAMPLE WATER COURSE RD.70800

Sr. No.	Institution	Locality	Are the sample farmers members of of the societies/associations: Yes No				Not applicable		Total Farmers No (100)
			No	%	No	%	No	%	
0	1	2	3	4	5	6	7	8	9
1.	Water Users Association	Head	-	-	1	10.00	9	90.00	10
		Middle	-	-	2	20.00	8	80.00	10
		Tail	-	-	4	40.00	6	60.00	10
		All Places	-	-	7	23.33	23	76.67	30
2.	Cooperative Society	Head	1	10.00	2	20.00	7	70.00	10
		Middle	-	-	2	20.00	8	80.00	10
		Tail	1	10.00	3	30.00	6	60.00	10
		All Places	2	6.67	7	23.33	21	70.00	30
3.	Union Council	Head	1	10.00	9	90.00	-	-	10
		Middle	-	-	10	100.00	-	-	10
		Tail	-	-	10	100.00	-	-	10
		All Places	1	3.33	29	96.67	-	-	30
4.	Other Societies/ Association	Head	1	10.00	1	10.00	8	80.00	10
		Middle	2	20.00	7	70.00	1	10.00	10
		Tail	-	-	10	100.00	-	-	10
		All Places	3	10.00	18	60.00	9	30.00	30

Table-37

USE OF TRACTORS BY SAMPLE FARMERS IN
SAMPLE WATER COURSE RD. 70900

Sr. No.	Section	Is tractor used ? Yes No.	Yes % of col.2	No No.	No % of col.4	Total No. (=100)	Ownership Status of tractor used: Own No.	Own % of col.2	Rented in No.	Rented in % of col.2	Source of suppl. of rented in tractor: Own Village No.	Own Village % of col.9	Other Places No.	Other Places % of col.9	Farmers reporting problems in tractor supply No.	% of col.6
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.	Head	10	100	-	-	10	1	10.00	9	90.00	3	33.33	6	66.67	8	80.00
2.	Middle	10	100	-	-	10	-	-	10	100.00	2	20.00	8	80.00	9	90.00
3.	Tail	10	100	-	-	10	1	10.00	9	90.00	1	11.11	8	88.89	6	60.00
4.	All Sections	30	100	-	-	30	2	6.67	28	93.33	6	21.43	22	78.57	23	76.67

Table-38

USE OF THRASHER BY SAMPLE FARMERS IN
SAMPLE WATER COURSE RD. 70900

Sr. No.	Section	Is Thrasher used ? Yes No.	Yes % of col.2	No No.	No % of col.2	Total No. (=100)	Ownership Status of Thrasher used: Own No.	Own % of col.2	Rented in No.	Rented in % of col.2	Source of suppl. of rented in Thrasher: Own Village No.	Own Village % of col.9	Other Places No.	Other Places % of col.9	Farmers reporting problems in Thrasher supply No.	% of col.6
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.	Head	10	100	-	-	10	-	-	10	100	2	20.00	8	80.00	9	90.00
2.	Middle	10	100	-	-	10	-	-	10	100	2	20.00	8	80.00	9	90.00
3.	Tail	10	100	-	-	10	-	-	10	100	1	10.00	9	90.00	6	60.00
4.	All Sections	30	100	-	-	30	-	-	30	100	5	16.67	25	83.33	24	80.00

Table-1

AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS IN SAMPLE WATERCOURSE RD.70800

Sr. No.	Crops	Location	Area	Main Product			By Product		
				Unit	Total	Per Hectare	Unit	Total	Per Hectare
0	1	2	3	4	5	6	7	8	9
1.	Maize Grain	Head	2.12	Mds	39.75	18.75	Bundle	397	187.26
		Middle	2.38	Mds	43.50	18.28	Bundle	432	181.51
		Tail	1.72	Mds	26.50	15.41	Bundle	275	159.88
		Total	6.22	Mds	109.75	17.64	Bundle	1104	177.49
2.	Maize Fodder	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	0.51	Bundle	200.00	392.16	-	-	-
		Total	0.51	Bundle	200.00	392.16	-	-	-
3.	Sorghum (fodder)	Head	1.11	Rs.	3740.00	3369.37	-	-	-
		Middle	1.21	Rs.	4675.00	2863.64	-	-	-
		Tail	1.92	Rs.	5340.00	2781.25	-	-	-
		Total	4.24	Rs.	13755.00	3244.10	-	-	-
4.	Sugarcane Converted into Gur	Head	0.35	Mds of Gur	7.00	20.00	C.T. Mds	22	62.86
							Bagg: Mds	14	40.00
		Middle	-	Mds of Gur	-	-	C.T. Mds	-	-
							Bagg: Mds	-	-
		Tail	-	Mds of Gur	-	-	C.T. Mds	-	-
							Bagg: Mds	-	-
		Total	0.35	Mds of Gur	7.00	20.00	C.T. Mds	22	62.86
							Bagg: Mds	14	40.00
5.	Sugarcane Sold in field	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	-	-	-	-	-	-	-
6.	Pigeon Pea	Head	-	-	-	-	-	-	-
		Middle	0.71	Rs.	215.00	302.82	-	-	-
		Tail	0.35	Rs.	65.00	185.71	-	-	-
		Total	1.06	Rs.	280.00	264.15	-	-	-

C.T.= Cane Tops Bagg:= Bagasse

Table-2

AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS OUTSIDE SAMPLE WATERSHEDS PD.70000

Sr. No.	Crops	Location	Area	Main Product			By Product		
				Unit	Total	Per Hectare	Unit	Total	Per Hectare
0	1	2	3	4	5	6	7	8	9
1.	Maize Green	Head	1.52	Mds	34.00	22.37	Bundle	202	132.37
		Middle	0.91	Mds	18.00	19.78	Bundle	120	131.87
		Tail	1.32	Mds	[illegible]	25.00	Bundle	335	253.79
		Total	3.75	Mds	85.00	22.67	Bundle	717	191.20
2.	Maize Fodder	Head	–	–	–	–	–	–	–
		Middle	–	–	–	–	–	–	–
		Tail	–	–	–	–	–	–	–
		Total	–	–	–	–	–	–	–
3.	Sorghum (Fodder)	Head	0.40	Rs.	1500.00	3750.00	–	–	–
		Middle	0.40	Rs.	800.00	2000.00	–	–	–
		Tail	0.30	Rs.	150.00	500.00	–	–	–
		Total	1.10	Rs.	2450.00	2227.27	–	–	–
4.	Sugarcane Converted into Gur	Head	–	Mds of Gur	–	–	C.T. Mds	–	–
							Bagg: Mds	–	–
		Middle	–	Mds of Gur	–	–	C.T. Mds	–	–
							Bagg: Mds	–	–
		Tail	–	Mds of Gur	–	–	C.T. Mds	–	–
							Bagg: Mds	–	–
		Total	–	Mds of Gur	–	–	C.T. Mds	–	–
							Bagg: Mds	–	–
5.	Sugarcane Sold in field	Head	–	–	–	–	–	–	–
		Middle	–	–	–	–	–	–	–
		Tail	–	–	–	–	–	–	–
		Total	–	–	–	–	–	–	–
6.	Pigeon Pea	Head	–	–	–	–	–	–	–
		Middle	–	–	–	–	–	–	–
		Tail	–	–	–	–	–	–	–
		Total	–	–	–	–	–	–	–

C.T.= Cane Tops Bagg:= Bagasse

Table-3

DISPOSAL OF MAIN PRODUCTS OTHER THAN SUGARCANE IN SAMPLE WATER COURSE RD.70900

Sr. No.	Particulars	Maize (Maunds)								Sorghum (Rs)								Sugarcane (Mds)								Pigeon Pea (Bundles)							
		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places		Head		Middle		Tail		All places		Head		Middle		Tail		All Places	
		Qty.	%	Qty.	%	Qty	%	Qty.	%	Rs.	%	Rs.	%	Rs.	%	Rs.	%	Qty.	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
I	Total Output	73.75	100	61.50	100	59.50	100	194.7[illegible]	100	5240	100	5475	100	5490	100	16205	100	-	-	-	-	-	-	-	-	-	-	215	100	65	100.0	280	100.0
II.	Disposal																																
	1.Retained for H.use.	32.75	44.41	31.75	51.63	14.50	24.37	79.[illegible]	40.56	-	-	500	9.13	3840	69.95	4340	26.78	-	-	-	-	-	-	-	-	-	-	215	100	42	64.62	257	91.79
	2.Sold	34.00	46.10	18.00	29.27	33.00	55.46	85.[illegible]	43.65	5240	100	4475	81.74	1650	30.05	11365	70.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3.Landlord's share	-	-	5.50	8.94	8.00	13.45	13.[illegible]	6.93	-	-	500	9.13	-	-	500	3.09	-	-	-	-	-	-	-	-	-	-	-	-	23	35.38	23	8.21
	4.Artisan's dues	3.50	4.75	3.50	5.69	2.25	3.78	9.[illegible]	4.75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5.Given to labourers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6.Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7.Usher/ Charity	2.75	3.73	2.50	4.07	1.00	1.68	6.25	3.21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8.Other specify	0.75	1.02	0.25	0.41	0.75	1.26	1.75	0.90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
III.	Total All uses	73.75	100	61.50	100	59.50	100	194.70	100	5240	100	5240	100	-	-	16205	100	-	-	-	-	-	-	-	-	-	-	215	100	65	100	280	100.0

Table-4

DISPOSAL OF BY-PRODUCTS IN SAMPLE WATER COURSE RD. 70800

Sr. No.	Crop mode of disposal	Maize (Qty. in Bundles)								Sorghum (Rupees)							
		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places	
		Qty.	%	Qty.	%	Qty	%	Qty.	%	Rs.	%	Rs.	%	Rs.	%	Rs.	%
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
I	Total Output	659	100	552	100	810	100	2021	100	-	-	-	-	-	-	-	-
II.	Disposal																
	1.Retained for H.use	397	[illegible]	[illegible]	66.3	[illegible]	[illegible]	1387	67.36	-	-	-	-	-	-	-	-
	2.Sold	262	39.76	120	21.74	335	41.36	717	18.38	-	-	-	-	-	-	-	-
	3.Landlord's Share	-	-	55	9.96	162	20.00	217	14.26	-	-	-	-	-	-	-	-
	4.Artisan's dues	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5.Given to Labourers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6.Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7.Usher/Charity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8.Other Specify	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
III.	Total =All Uses	659	100	552	100	810	100	2021	100	-	-	-	-	-	-	-	-

(Contd..)

Sugarcane (C.T. and Bagg: in Maunds)															
Head				Middle				Tail				All Places			
C.T.	Bagg:	Total	%	C.T.	Bagg:	Total	%	C.T.	Bagg:	Total	%	C.T.	Bagg:	Total	%
18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
22	14	36	100	-	-	-	-	-	-	-	-	22	14	36	100
22	14	36	100	-	-	-	-	-	-	-		22	14	36	100
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	14	36	100	-	-	-	-	-	-	-	-	22	14	36	100

(Concluded)

C.T.= Cane Tops Bagg:= Bagasse

Table-5

MODE OF SALE OF MAIZE IN SAMPLE WATER COURSE RD. 70800

NOT APPLICABLE)

Table-6

MODE OF SALE OF SORGHUM IN SAMPLE WATER COURSE RD. 70800

(NOT APPLICABLE)

Table-7

MODE OF SALE OF PIGEON PEA IN SAMPLE WATER COURSE RD. 70800

(NOT APPLICABLE)

Table-8

UTILIZATION OF SUGARCANE IN SAMPLE WATER COURSE RD.70800

Sr. No.	Particulars	Unit	Head	Middle	Tail	All places
0	1	2	3	4	5	6
1.	Sugarcane produced	Mds	110	-	-	110
2.	Sold to sugarmills	Mds	-	-	-	-
3.	Sold to Gur manufacturer	Mds	-	-	-	-
4.	Converted into Gur	Mds	110	-	-	110
5.	Used as seed	Mds	-	-	-	-

Table-9

UTILIZATION OF GUR PRODUCED BY SAMPLE FARMERS
IN SAMPLE WATER COURSE RD. 70800

Sr. No.	Utilization	Head		Middle		Tail		All Places	
		Mds	%	Mds	%	Mds	%	Mds	%
0	1	2	3	4	5	6	7	8	9
1.	Sold	-	-	-	-	-	-	-	-
2.	Self consumed	7	100	-	-	-	-	7	100
3.	Landlord's share	-	-	-	-	-	-	-	-
4.	Other uses	-	-	-	-	-	-	-	-
5.	T o t a l:	7	100	-	-	-	-	7	100

Table-10

NUMBER OF FARMERS REPORTING CONSUMPTION OF CHEMICAL FERTILIZERS IN SAMPLE WATER COURSE RD. 70800

Sr. No.	Location of farm	Total farmers growing this crop. No(=100)	Fertilizers: Urea		D A P		N P K		N P		Ammonium Sulphate		Ammonium Nitrate		P.Sulphate	
			No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
I.	MAIZE															
	a.Head of W.C.	7	7	100.0	1	14	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	6	6	100.0	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	6	6	100.0	1	17	-	-	-	-	-	-	-	-	-	-
	d.All Places	19	19	100.0	2	1	-	-	-	-	-	-	-	-	-	-
II.	SORGHUM															
	a.Head of W.C.	3	3	100.0	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	4	3	75.00	2	50	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	5	5	100.0	1	20	-	-	-	-	-	-	-	-	-	-
	d.All Places	12	11	91.67	3	25	-	-	-	-	-	-	-	-	-	-
III.	SUGARCANE															
	a.Head of W.C.	2	2	100.0	2	100	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	2	2	100.0	2	100	-	-	-	-	-	-	-	-	-	-
IV.	PIGEON PEA															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-11

QUANTITY OF CHEMICAL FERTILIZERS USED BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD. 7+800

r. o.	Location of fara	Area sown (Hectare)	Quantity of fertilizer used: (KG) Urea Total	Urea Per Hectare	D A P Total	D A P Per Hectare	N P K Total	N P K Per Hectare	N P Total	N P Per Hectare	Ammonium Sulphate Total	Ammonium Sulphate Per Hectare	Ammonium Nitrate Total	Ammonium Nitrate Per Hectare	P.Sulphate Total	P.Sulphate Per Hectare
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
.	MAIZE															
	a.Head of W.C.	2.12	313	148	75	35	-	-	-	-		-	-	-	-	-
	b.Middle of W.C.	2.38	275	116	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	2.23	250	112	50	22	-	-	-	-	-	-	-	-	-	-
	d.All Places	6.73	838	125	125	19	-	-	-	-	-	-	-	-	-	
I.	SORGHUM															
	a.Head of W.C.	1.11	125	113	-	-	-	-	-	-		-	-	-	-	-
	b.Middle of W.C.	1.21	125	103	75	62	-	-	-	-	-	-	-	-	-	
	c.Tail of W.C.	1.92	225	117	25	13		-	-	-		-		-	-	
	d.All Places	4.24	475	112	100	24	-	-	-	-	-	-	-	-	-	
II.	SUGARCANE															
	a.Head of W.C.	0.35	100	286	100	286	-	-	-	-	-	-	-	-	-	
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	d.All Places	0.35	100	286	100	286	-	-	-	-	-	-	-	-	-	
V.	PIGEON PEA															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	b.Middle of W.C.	0.71	-	-	-	-	-	-	-	-	-	-	-	-	-	
	c.Tail of W.C.	0.35	-	-	-	-	-	-	-	-	-	-	-	-	-	
	d.Al. Places	1.06	-	-	-	-	-	-	-	-	-	-	-	-	-	

Table-12

CONSUMPTION OF FARM YARD MANURE IN
SAMPLE WATER COURSE RD. 70800

Sr. No.	Location of farm	Total farmers growing this crop	Farmers using Farm Yard Manure		Area Sown (Hec-tare)	Quantity used (KG)	
			No.	%		Total	Per Hectare
0	1	2	3	4	5	6	7
I.	MAIZE						
	a.Head of W.C.	7	3	42.86	2.12	2239	1056
	b.Middle of W.C.	6	-	-	2.38	-	-
	c.Tail of W.C.	6	3	50.00	2.23	3471	1557
	d.All Places	19	6	31.58	6.73	5710	848
II.	SORGHUM						
	a.Head of W.C.	3	-	-	1.11	-	-
	b.Middle of W.C.	4	-	-	1.21	-	-
	c.Tail of W.C.	5	-	-	1.92	-	-
	d.All Places	12	-	-	4.24	-	-
III.	SUGARCANE						
	a.Head of W.C.	2	2	100.0	0.35	2239	6397
	b.Middle of W.C.	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-
	d.All Places	2	2	100.0	0.35	2239	6397
IV.	PIGEON PEA						
	a.Head of W.C.	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-

Table-13

NUMBER OF SAMPLE FARMERS WHO USED INSECTICIDES/ PESTICIDES/WEEDICIDES IN SAMPLE WATERCOURSE RD.70800

Sr. No.	Location of farm	Total Farmer Growing this crops No(=100)	Farmers who used:Insect:/ Pesticides		Farmers who used: Weedicides	
			No.	%	No.	%
0	1	2	3	4	5	6
I.	MAIZE					
	a. Head of W.C.					
	b. Middle of W.C.		---- N.A.----			
	c. Tail of W.C.					
	d. All places					
II.	SORGHUM					
	a. Head of W.C.					
	b. Middle of W.C.		---- N.A.----			
	c. Tail of W.C.					
	d. All places					
III.	SUGARCANE					
	a. Head of W.C.					
	b. Middle of W.C.		---- N.A.----			
	c. Tail of W.C.					
	d. All places					
IV.	PIGEON PEA					
	a. Head of W.C.					
	b. Middle of W.C.		---- N.A.----			
	c. Tail of W.C.					
	d. All places					

N.A. = Not Applicable

Table-14

QUANTITY OF SEED USED BY SAMPLE FARMERS IN SAMPLE WATERCOURSE RD.70800

(Kg)

Sr. No.	Crop	Total Area (Hectare)	Head Quantity used			Middle Quantity used			Tail Quantity used			All Places Quantity used		
			Improved	Local	Total	Improved	Local	Total	Improved	Local	Total	Improved	Local	Total
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Maize	6.73	-	169	169	-	224	224	-	191	191	-	584	584
2.	Sorghum	4.24	-	127	127	-	122	122	-	306	306	-	555	555
3.	Sugarcane	0.35	1866	-	1866	-	-	-	-	-	-	1866	-	1866
4.	Pigeon Pea	1.06	-	-	-	-	30	30	-	14	14	-	44	44

Table-15

PHYSICAL INPUT COST IN SAMPLE WATER RD.75800

Crop: Maize Area: 6.73 i) Head : 2.12 ha ii) Middle: 2.38 ha iii) Tail: 2.23 ha

Sr. No.	Physical Input	Head						Middle						Tail						All Places					
		Purchased		Self Supplied		Total (2+4)		Purchased		Self Supplied		Total (8+10)		Purchased		Self Supplied		Total (14+16)		Purchased (2+8+14)		Self Supplied (4+10+16)		Total	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Seed	461	217	-	-	461	217	297	125	309	130	606	255	290	130	105	47	395	177	1048	156	414	61	1461	217
2.	Farm Yard Manure	260	123	-	-	260	123	-	-	-	-	-	-	279	125	-	-	279	125	539	80	-	-	539	80
3.	Chemical Fertilizer	1055	498	-	-	1055	498	1395	586	-	-	1395	586	955	428	-	-	955	428	3405	506	-	-	3405	506
4.	Insecticide/ Pesticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Water Charges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	Dues of Artisans	740	349	-	-	740	349	410	172	-	-	410	172	40	13	-	-	40	18	1190	177	-	-	1190	177
7.	Total	2516	1187	-	-	2516	1187	2102	883	309	130	2411	1013	1564	701	105	47	1669	743	6182	918	414	61	6595	980

Table-16

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.70800

Crop: Maize | Area: 6.73 | (i) Head : 2.12 ha | (ii) Middle: 2.38 ha | (iii) Tail: 2.23 ha

Sr. No.	Operations	Labour inputs	Head: Paid Total	Head: Paid Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (3+5) Total	Head: Total (3+5) Per Hect.	Middle: Paid Total	Middle: Paid Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect.	Tail: Paid Total	Tail: Paid Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect.	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect.	All Places: Self Supp. (5+11+17) Total	All Places: Self Supp. (5+11+17) Per Hect.	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Ploughing	i.Manual		-	-	324	153	324	153	-	-	68	28	68	28	-	-	141	59	141	[illegible]	-	-	533	79	533	79
	ii.Animal		-	-	360	170	360	170	-	-	-	-	-	-	-	-	180	81	180	[illegible]	-	-	540	80	540	80
	iii.Machine		750	354	-	-	750	354	925	389	-	-	925	389	750	314	-	-	750	[illegible]	2375	353	-	-	2375	353
	iv.Total		750	354	684	323	1434	676	925	389	68	28	993	417	750	314	321	144	1021	[illegible]	2375	353	1073	159	3448	512
2. Levelling	i.Manual		-	-	23	11	23	11	-	-	-	-	-	-	-	-	15	7	15	[illegible]	-	-	38	6	38	6
	ii.Animal		-	-	30	14	30	14	-	-	-	-	-	-	-	-	30	13	30	[illegible]	-	-	60	9	60	9
	iii.Machine		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-
	iv.Total		-	-	53	25	53	25	-	-	-	-	-	-	-	-	45	20	45	[illegible]	-	-	98	14	98	14
3. Planking	i.Manual		-	-	45	21	45	21	-	-	-	-	-	-	-	-	8	3	8	[illegible]	-	-	53	8	53	8
	ii.Animal		-	-	60	28	60	28	-	-	-	-	-	-	-	-	15	7	15	[illegible]	-	-	75	11	75	11
	iii.Machine		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total		-	-	105	50	105	50	-	-	-	-	-	-	-	-	23	10	23	10	-	-	128	19	128	19
4. Sowing	i.Manual		-	-	143	67	143	67	-	-	87	37	87	37	-	-	83	37	83	37	-	-	313	46	313	46
	ii.Animal		-	-	120	57	120	57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	120	18	120	18
	iii.Machine		188	89	-	-	188	38	288	121	-	-	288	121	275	123	-	-	275	123	751	112		-	751	112
	iv.Total		188	89	263	124	450	212	288	121	87	37	375	158	275	123	83	37	358	161	751	112	433	64	1184	176
5. Watering	i.Manual		-	-	278	131	278	131	-	-	259	109	259	109	-	-	144	65	144	65	-	-	681	101	681	101
6. F.Y.Manual	i.Manual		-	-	45	21	45	21	-	-	-	-	-	-	-	-	60	27	60	27	-	-	[illegible]	16	135	16

(Contd....)

Table-16

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.70800

Crop: Maize | Area: 6.73 | i) Head : 2.12 ha | ii) Middle: 2.38 ha | iii) Tail: 2.23 ha

Sr. No.	Operations	Labour Inputs	Head: Paid Total	Head: Paid Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (3+5) Total	Head: Total (3+5) Per Hect.	Middle: Paid Total	Middle: Paid Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect.	Tail: Paid Total	Tail: Paid Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect.	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect.	All Places: Self Supp. (5+11+17) Total	All Places: Self Supp. (5+11+17) Per Hect.	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
7. Chemical		i.Manual	-	-	29	14	29	14	-	-	40	17	40	17	-	-	23	10	23	10	-	-	92	14	92	14
8. Hoeing/Weeding		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9. Harvesting		i.Manual	-	-	458	216	458	216	-	-	900	378	900	378	-	-	585	262	585	262	-	-	1943	239	1943	239
10.Carriage to Threshing Yard		i.Manual	-	-	250	118	250	118	-	-	465	195	465	195	-	-	240	108	240	108	-	-	955	142	955	142
		ii.Animal	-	-	167	79	167	79	-	-	310	130	310	130	-	-	160	72	160	72	-	-	637	95	637	95
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	417	197	417	197	-	-	775	326	775	326	-	-	400	179	400	179	-	-	1592	237	1592	237
11.Threshing/ Winnowing		i.Manual	-	-	250	118	250	118	-	-	465	195	465	195	-	-	240	108	240	108	-	-	955	142	955	142
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	250	118	250	118	-	-	465	195	465	195	-	-	240	108	240	108	-	-	955	142	955	142
12.Total		i.Manual	-	-	1344	670	1344	670	-	-	2284	960	2284	960	-	-	1539	690	1539	690	-	-	5666	842	5666	842
		ii.Animal	-	-	737	348	737	348	-	-	310	130	310	130	-	-	385	173	385	173	-	-	1432	213	1432	213
		iii.Machine	933	442	-	-	938	442	1213	510	-	-	1213	510	975	437	-	-	975	437	3126	464	-	-	3126	464
		iv.Total	933	442	2581	1217	3518	1660	1213	510	2594	1094	3807	1599	975	437	1924	863	2899	1300	3126	464	7098	1055	10224	1519

(Concluded)

Table-17

PHYSICAL INPUT COST IN SAMPLE WATER RD.70800

Crop: Sorghum Area: 4.24 ha i) Head : 1.11 ha ii) Middle: 1.21 ha iii) Tail: 1.92 ha

Sr. No.	Physical Input	Head						Middle						Tail						All Places					
		Purchased		Self Supplied		Total (2+4)		Purchased		Self Supplied		Total (8+10)		Purchased		Self Supplied		Total (14+16)		Purchased (2+8+14)		Self Supplied (14+10+16)		Total	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Seed	392	353	-	-	392	353	412	340	-	-	412	340	763	630	-	-	763	630	1567	369	-	-	1567	369
2.	Farm Yard Manure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.	Chemical Fertilizer	325	293	-	-	325	293	535	442	-	-	535	442	665	550	-	-	665	550	1525	360	-	-	1525	360
4.	Insecticide/ Pesticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Water Charges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	Dues of Artisans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Total	717	646	-	-	717	646	947	783	-	-	947	783	1428	1180	-	-	1428	1180	3092	729	-	-	3092	729

Table-18

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.70800

Crop: Sorghum | Area: 4.24 | i) Head : 1.11 ha | ii) Middle: 1.21 ha | iii) Tail: 1.92 ha

Sr. No.	Operations	Labour inputs	Head: Paid Total	Head: Paid Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (3+5) Total	Head: Total (3+5) Per Hect.	Middle: Paid Total	Middle: Paid Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect.	Tail: Paid Total	Tail: Paid Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect.	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect.	All Places: Self Supp. (5+11+17) Total	All Places: Self Supp. (5+11+17) Per Hect.	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Ploughing		i.Manual	-	-	281	253	281	253	-	-	334	276	334	276	-	-	279	145	279	145	-	-	694	211	694	211
		ii.Animal	-	-	360	324	360	324	-	-	525	434	525	434	-	-	400	208	400	208	-	-	1285	303	1285	303
		iii.Machine	210	189	-	-	210	189	300	248	-	-	300	248	690	359	-	-	690	359	1200	293	-	-	1200	293
		iv.Total	210	189	641	577	851	767	300	248	859	710	1159	958	690	359	679	354	1369	713	1200	293	2179	514	3379	797
2. Leveling		i.Manual	-	-	47	41	45	41	-	-	15	12	15	12	-	-	15	8	15	8	-	-	75	18	75	18
		ii.Animal	-	-	60	54	60	54	-	-	25	21	25	21	-	-	25	13	25	13	-	-	110	26	110	26
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	105	95	105	95	-	-	40	33	40	33	-	-	40	21	40	21	-	-	185	44	185	44
3. Planking		i.Manual	-	-	45	41	45	41	-	-	63	52	63	52	-	-	15	8	15	9	-	-	123	29	123	29
		ii.Animal	-	-	60	54	60	54	-	-	55	45	55	45	-	-	25	13	25	13	-	-	140	33	140	33
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	105	95	105	95	-	-	118	98	118	98	-	-	40	21	40	21	-	-	263	62	263	62
4. Sowing		i.Manual	-	-	83	75	83	75	-	-	134	111	134	111	-	-	71	37	71	37	-	-	288	68	288	69
		ii.Animal	-	-	100	90	100	90	-	-	163	134	163	134	-	-	-	-	-	-	-	-	263	62	263	62
		iii.Machine	60	54	-	-	60	54	150	124	-	-	150	124	285	148	-	-	285	148	495	117	-	-	495	117
		iv.Total	60	54	183	165	243	219	150	124	297	245	447	369	285	148	71	37	356	185	495	117	551	130	1046	247
5. Watering		i.Manual	-	-	41	37	41	37	-	-	78	64	78	64	-	-	192	100	192	100	-		311	73	311	73
6. F.Y.Manure		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(Contd..)

Table-18

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.76900

Crop: Sorghum Area: 4.24 i) Head : 1.11 ha ii) Middle: 1.21 ha iii) Tail: 1.92 ha

Sr. No.	Operations	Labour Inputs	Head: Paid Total	Head: Paid Per Hect:	Head: Self Supplied Total	Head: Self Supplied Per Hect:	Head: Total (3+5) Total	Head: Total (3+5) Per Hect:	Middle: Paid Total	Middle: Paid Per Hect:	Middle: Self Supplied Total	Middle: Self Supplied Per Hect:	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect:	Tail: Paid Total	Tail: Paid Per Hect:	Tail: Self Supplied Total	Tail: Self Supplied Per Hect:	All Places: Total (15+17) Total	All Places: Total (15+17) Per Hect:	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect:	All Places: Self Supp: (5+11+17) Total	All Places: Self Supp: (5+11+17) Per Hect:	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
7. Chemical		i.Manual	-	-	11	10	11	10	-	-	15	12	15	12	-	-	20	10	20	10	-	-	46	11	46	11
8. Hoeing/Weeding		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9. Harvesting		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	720	375	720	375	-	-	870	205	870	205
10.Carriage to Threshing yard		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11.Threshing/ Winnowing		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12. Total		i.Manual	-	-	506	456	506	456	-	-	789	652	789	652	-	-	1312	683	1312	683	-	-	2607	615	2607	615
		ii.Animal	-	-	580	523	580	523	-	-	768	634	768	634	-	-	450	234	450	234	-	-	1798	424	1798	424
		iii.Machine	270	243	-	-	270	243	450	372	-	-	450	372	975	508	-	-	975	508	1695	400	-	-	1695	400
		iv.Total	270	243	1086	978	1356	1222	450	372	1557	1286	2007	1658	975	508	1762	918	2737	1426	1695	400	4405	1039	6100	1439

(Concluded)

Table-19

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD.70800

Crop: Sugarcane Area: 0.35 ha i) Head : 0.35 ha ii) Middle: 0.00 ha iii) Tail: 0.00 ha

Sr. No.	Physical Input	Head						Middle						Tail						All Places					
		Purchased		Self Supplied		Total (2+4)		Purchased		Self Supplied		Total (8+10)		Purchased		Self Supplied		Total (14+16)		Purchased (2+8+14)		Self Supplied (14+10+16)		Total	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Seed	920	2629	60	171	980	2800	-	-	-	-	-	-	-	-	-	-	-	-	920	2629	60	171	980	2800
2.	Farm Yard Manure	-	-	200	571	200	571	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200	571	200	571
3.	Chemical Fertilizer	552	1577	-	-	522	1577	-	-	-	-	-	-	-	-	-	-	-	-	552	1577	-	-	552	1577
4.	Insecticide/ Pesticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Water Rate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	Dues of Artisans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Fuel Charges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8.	Rent of crushing Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Total	1472	4206	260	743	1732	-	-	-	-	-	-	-	-	-	-	-	-	-	1472	4206	260	743	1732	4949

Table-20

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.70300

Crops: Sugarcane Area: 0.35 ha i) Head : 0.35 ha ii) Middle: 0.00 ha iii) Tail: 0.00 ha

Sr. No.	Operations	Labour inputs	Head: Paid Total	Head: Paid Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (3+5) Total	Head: Total (3+5) Per Hect.	Middle: Paid Total	Middle: Paid Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect.	Tail: Paid Total	Tail: Paid Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect.	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect.	All Places: Self Supp. (5+11+17) Total	All Places: Self Supp. (5+11+17) Per Hect.	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Ploughing		i.Manual	-	-	165	471	165	471	-	-	-	-	-	-	-	-	-	-	-	-	-	-	165	471	165	471
		ii.Animal	-	-	275	786	275	786	-	-	-	-	-	-	-	-	-	-	-	-	-	-	275	786	275	786
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	440	1257	440	1257	-	-	-	-	-	-	-	-	-	-	-	-	-	-	440	1257	440	1257
2. Levelling		i.Manual	-	-	13	38	13	38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	38	13	38
		ii.Animal	-	-	22	63	22	63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22	63	22	63
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	35	101	35	101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35	101	35	101
3. Planking		i.Manual	-	-	23	64	23	64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23	64	23	64
		ii.Animal	-	-	37	106	37	106	-	-	-	-	-	-	-	-	-	-	-	-	-	-	37	106	37	106
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	60	170	60	170	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60	170	60	170
4. Sowing		i.Manual	-	-	210	600	210	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	210	600	210	600
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	210	600	210	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	210	600	210	600
5. Watering		i.Manual	-	-	120	343	120	343	-	-	-	-	-	-	-	-	-	-	-	-	-	-	120	343	120	343
6. F.Y.Manure		i.Manual	-	-	53	150	53	150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	53	150	53	150

(Contd..)

Table-20

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.70800

Crop: Sugarcane | Area: 0.35 ha | i) Head : 0.35 ha | ii) Middle: 0.00 ha | iii) Tail: 0.00 ha

Sr. No.	Operations	Labour Inputs	Head Paid Total	Head Paid Per Hect:	Head Self Supplied Total	Head Self Supplied Per Hect:	Head Total (3+5) Total	Head Total (3+5) Per Hect:	Middle Paid Total	Middle Paid Per Hect:	Middle Self Supplied Total	Middle Self Supplied Per Hect:	Middle Total (9+11) Total	Middle Total (9+11) Per Hect:	Tail Paid Total	Tail Paid Per Hect:	Tail Self Supplied Total	Tail Self Supplied Per Hect:	Tail Total (15+17) Total	Tail Total (15+17) Per Hect:	All Places Paid (3+9+15) Total	All Places Paid (3+9+15) Per Hect:	All Places Self Supp: (5+11+17) Total	All Places Self Supp: (5+11+17) Per Hect:	All Places Total (21+23) Total	All Places Total (21+23) Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
7. Chemical		i.Manual	-	-	15	43	15	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15	43	15	43
8. Hoeing/Weed:		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9. Harvesting		i.Manual	60	171	150	429	210	600	-	-	-	-	-	-	-	-	-	-	-	-	60	171	150	429	210	600
10.Carriage to Threshing yard/Gani		i.Manual	-	-	105	300	105	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	105	300	105	300
		ii.Animal	125	357	-	-	125	357	-	-	-	-	-	-	-	-	-	-	-	-	125	357	-	-	125	357
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	125	357	105	300	230	657	-	-	-	-	-	-	-	-	-	-	-	-	125	357	105	300	230	657
11.Threshing/ Winnowing/ Cane Crushing		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12.Gur Making		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13. Total		i.Manual	60	171	853	2438	913	2609	-	-	-	-	-	-	-	-	-	-	-	-	60	171	853	2438	913	2609
		ii.Animal	125	357	334	954	459	1311	-	-	-	-	-	-	-	-	-	-	-	-	125	357	334	954	459	1311
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	185	529	1187	3392	1372	3921	-	-	-	-	-	-	-	-	-	-	-	-	185	529	1187	3392	1372	3921

Table-21

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD.70800

Crop: Pigeon Pea Area: 1.06 ha i) Head : 0.00 ha ii) Middle: 0.71 ha iii) Tail: 0.35 ha

Sr. No.	Physical Input	Head						Middle						Tail						All Places					
		Purchased		Self Supplied		Total (2+4)		Purchased		Self Supplied		Total 8+10)		Purchased		Self Supplied		Total (14+16)		Purchased (2+8+14)		Self Supplied (4+10+16)		Total	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Seed	-	-	-	-	-	-	105	148	-	-	105	148	51	72	-	-	51	72	156	147	-	-	156	147
2.	Farm Yard Manure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.	Chemical Fertilizer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4.	Insecticide/ Pesticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Water Rate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	Dues of Artisans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Fuel Charges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Rent of crushing Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Total	-	-	-	-	-	-	105	148	-	-	105	148	51	72	-	-	51	72	156	147	-	-	156	147

Table-22

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.70800

Crop: Pigeon Pea Area: 1.06 ha i) Head : 0.00 ha ii) Middle: 0.71 ha iii) Tail: 0.35 ha

Sr. No.	Operations	Labour Inputs	Head: Paid Total	Head: Paid Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (3+5) Total	Head: Total (3+5) Per Hect.	Middle: Paid Total	Middle: Paid Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect.	Tail: Paid Total	Tail: Paid Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect.	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect.	All Places: Self Supp. (5+11+17) Total	All Places: Self Supp. (5+11+17) Per Hect.	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Ploughing		i.Manual	-	-	-	-	-	-	-	-	40	57	40	57	-	-	13	37	13	37	-	-	53	50	53	50
		ii.Animal	-	-	-	-	-	-	-	-	38	53	38	53	-	-	-	-	-	-	-	-	38	35	38	35
		iii.Machine	-	-	-	-	-	-	270	380	-	-	270	380	120	343	-	-	120	343	390	368	-	-	390	368
		iv.Total	-	-	-	-	-	-	270	380	78	109	348	490	120	343	13	37	133	380	390	368	91	86	481	453
2. Levelling		i.Manual	-	-	-	-	-	-	-	-	8	11	8	11	-	-	-	-	-	-	-	-	8	7	8	7
		ii.Animal	-	-	-	-	-	-	-	-	13	18	13	18	-	-	-	-	-	-	-	-	13	12	13	12
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	-	-	-	-	-	-	20	28	20	28	-	-	-	-	-	-	-	-	20	19	20	19
3. Planking		i.Manual	-	-	-	-	-	-	-	-	8	11	8	11	-	-	-	-	-	-	-	-	8	7	8	7
		ii.Animal	-	-	-	-	-	-	-	-	13	18	13	18	-	-	-	-	-	-	-	-	13	12	13	12
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	-	-	-	-	-	-	20	28	20	28	-	-	-	-	-	-	-	-	20	19	20	19
4. Sowing		i.Manual	-	-	-	-	-	-	-	-	32	44	32	11	-	-	11	31	11	31	-	-	42	40	42	40
		ii.Animal	-	-	-	-	-	-	-	-	13	18	13	18	-	-	-	-	-	-	-	-	13	12	13	12
		iii.Machine	-	-	-	-	-	-	90	127	-	-	90	127	60	171	-	-	60	171	150	142	-	-	150	142
		iv.Total	-	-	-	-	-	-	90	127	44	62	134	189	60	171	11	31	71	202	150	142	55	52	205	193
5. Watering		i.Manual	-	-	-	-	-	-	-	-	34	48	34	48	-	-	26	75	26	75	-	-	60	57	60	57
6. F.Y.Manure		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(Contd..)

Table-22

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.70800

Crop: Pigeon Pea Area: 1.06 ha i) Head : 0.30 ha ii) Middle: 0.71 ha iii) Tail: 0.35 ha

Sr. No.	Operations	Labour Inputs	Head: Paid Total	Head: Paid Per Hect:	Head: Self Supplied Total	Head: Self Supplied Per Hect:	Head: Total (3+5) Total	Head: Total (3+5) Per Hect:	Middle: Paid Total	Middle: Paid Per Hect:	Middle: Self Supplied Total	Middle: Self Supplied Per Hect:	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect:	Tail: Paid Total	Tail: Paid Per Hect:	Tail: Self Supplied Total	Tail: Self Supplied Per Hect:	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect:	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect:	All Places: Self Supp: (5+11+17) Total	All Places: Self Supp: (5+11+17) Per Hect:	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
7. Chemical		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8. Hoeing/Weed:		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9. Harvesting		i.Manual	-	-	-	-	-	-	-	-	98	137	98	137	-	-	45	129	45	129	-	-	143	134	143	134
10.Carriage to Threshing yard		i.Manual	-	-	-	-	-	-	-	-	15	21	15	21	-	-	15	43	15	43	-	-	30	28	30	28
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	-	-	-	-	-	-	15	21	15	21	-	-	15	43	15	43	-	-	30	28	30	28
11.Threshing/ Winnowing		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12. Total		i.Manual	-	-	-	-	-	-	-	-	233	329	233	329	-	-	110	314	110	314	-	-	343	324	343	324
		ii.Animal	-	-	-	-	-	-	-	-	75	106	75	106	-	-	-	-	-	-	-	-	75	71	75	71
		iii.Machine	-	-	-	-	-	-	360	507	-	-	360	507	180	514	-	-	180	514	540	509	-	-	540	509
		iv.Total	-	-	-	-	-	-	360	507	308	434	668	941	180	514	110	314	290	829	540	509	418	395	958	904

Concluded

Table-23

PRODUCTION COST AND PROFIT IN SAMPLE WATER COURSE FD.70800

Sr. No.	Crops	Location	Area (Hectare)	Total Output: Main Product (Mds)	Total Output: By-product Unit	Total Output: By-product Total Output	Market Price per unit (ex-farm): MP (Rs)	Market Price per unit (ex-farm): BP (Rs)	Total value of output: MP	Total value of output: BP	Total value of output: Total	Value per Hectare: MP	Value per Hectare: BP	Value per Hectare: Total	Total Farming cost: Physical inputs	Total Farming cost: Labour cost	Total Farming cost: Total	Cost per hectare	Profit/loss (+) (-): Total	Profit/loss (+) (-): Per Hectare	Total Imputed costs: Physical input	Total Imputed costs: Labour	Total Imputed costs: Total	Carry Home Income =col.19+23: Total	Carry Home Income =col.19+23: Per Hectare
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1. Maize	Head		2.12	39.75	Bundles	397	100	3	3975	1191	5166	1873	562	2437	2516	6033	8549	4033	-3383	-1596	-	5095	5095	1712	808
	Middle		2.38	43.50	Bundles	432	100	3	4350	1296	5446	1828	545	2372	2411	6217	8628	3625	-2982	-1253	-	5005	5005	2023	850
	Tail		2.23	36.60	Bundles	475	100	3	3650	1425	4075	1198	639	1837	1669	2898	4567	2048	-492	-221	-	1923	1923	1431	642
	A.Places		6.73	119.75	Bundles	1304			10975	3912	14887	1631	581	2212	6596	15148	21744	3231	-6857	-1019	-	12023	12023	5166	768
2. Sorghum	Head		1.11	Hect:	Rs.	-	3369	-	3740	-	3740	3369	-	3369	717	1356	2073	1868	1667	1502	-	1086	1086	2753	2480
	Middle		1.21	Hect:	Rs.	-	3864	-	4675	-	4675	3364	-	3864	947	2007	2954	2441	1721	1422	-	1557	1557	3278	2709
	Tail		1.92	Hect:	Rs.	-	1161	-	2229	-	2229	1161	-	1161	1428	2737	4165	2169	-1936	-1008	-	1762	1762	-174	-91
	A.Places		4.24	Hect:	Rs.	-	8374	-	10644	-	10644	2510	-	2510	3092	6100	9192	2168	1452	342	-	4405	4405	5857	1381
3. Sugar-cane (Sur)	Head		0.35	7.00	Mds C.T.	22	350	5	2450	1101	2728	7000	3141	7794	1732	1372	3104	8869	-376	-1074	-	1187	1187	811	2317
					Mds Bagg:	14		12		1681			4801												
	Middle		-	-	Mds C.T.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					Mds Bagg:																				
	Tail		-	-	Mds C.T.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					Mds Bagg:																				
	A.Places		0.35	7.00	Mds C.T.	22	-	5	2450	1101	2728	7000	3141	7794	1732	1372	3104	8869	-376	-1074	-	1187	1187	811	2317
					Mds Bagg:	14		12		1681			4801												
4. Pigeon Pea	Head		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Middle		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tail		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	A.Places		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

C.T.= Cane Tops Bagg:= Bagasse

Table-24

CROPPING PATTERN ON SAMPLE FARMS IN SAMPLE WATER COURSE RD.70800

Sr. No.	Crops	Area											
		Head			Middle			Tail			All Places		
		Hect-are	% of season	% of year	Hect-are	% of season	% of year	Hect-are	% of season	% of year	Hect-are	% of season	% of year
0	1	2	3	4	5	6	7	8	9	10	11	12	13
I.	Kharif 1987												
	1. Maize	2.12	59.22	12.16	2.39	55.35	26.71	3.23	49.58	17.75	5.73	54.06	17.80
	2. Sorghum	1.11	31.01	6.37	1.21	28.1[illegible]	13.07	1.92	45.67	15.31	4.24	34.35	10.84
	3. Sugarcane	0.35	9.72	2.01	-	-	-		-		0.35	3.[illegible]	0.83
	4. Pigeon Pea	-	-	10.	0.71	19.93	2.76	0.35	7.72	2.77	1.06	5.94	2.71
	5. All Kharif Crops	3.58	100.00	20.34	4.30	100.00	44.29	4.51	100.00	35.75	13.38	100.00	31.[illegible]
II.	Rabi 1987-88												
	1. Wheat	8.09	56.41	46.41	4.25	87.63	46.45	5.82	72.39	45.81	18.16	67.91	46.42
	2. Barley	0.61	4.40	3.50	-	-	-	0.40	4.98	3.13	1.01	3.78	2.58
	3. Berseem	2.93	20.43	16.24	0.20	4.12	2.19	0.81	10.07	6.46	3.84	14.36	9.99
	4. Pea	2.32	16.75	13.31	0.40	8.25	4.37	1.01	12.56	8.15	3.73	13.95	9.53
	5. All Rabi Crops	13.85	100.00	79.46	4.85	100.00	53.00	8.04	100.00	64.11	26.74	100.00	68.35
III.	Kharif + Rabi	17.43	-	100.00	9.15	-	100.00	12.54	-	100.00	39.12	-	100.00

Table-25

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF MAIZE IN SAMPLE WATER COURSE RD.70800

Sr. No.	Operations	Head (Area sown: 2.12)						Middle (Area sown: 2.38)						Tail (Area sown: 2.23)						All Places (Area sown: 6.73)					
		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	3	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Ploughing	10.80	5.09	9.00	4.25	15.00	7.08	2.25	0.95	-	-	18.50	7.77	4.70	2.11	3.00	1.35	14.00	6.28	17.75	2.64	12.00	1.78	47.50	7.06
2.	Levelling	0.75	0.35	0.74	0.35	-	-	-	-	-	-	-	-	0.50	0.22	0.50	0.22	-	-	1.25	0.19	1.25	0.19	-	-
3.	Planking	1.50	0.71	1.50	0.71	-	-	-	-	-	-	-	-	0.25	0.11	0.25	0.11	-	-	1.75	0.26	1.75	0.26	-	-
4.	Sowing	4.75	2.24	3.00	1.42	3.75	1.77	2.90	1.22	-	-	5.75	2.42	2.75	1.23	-	-	5.25	2.35	10.40	1.55	3.00	0.45	14.75	2.19
5.	Watering	9.25	4.36	-	-	-	-	8.98	3.37	-	-	-	-	4.80	2.15	-	-	-	-	23.03	3.42	-	-	-	-
6.	F.Y.Manure	1.50	0.71	-	-	-	-	-	-	-	-	-	-	2.00	0.90	-	-	-	-	3.50	0.50	-	-	-	-
7.	Che:Fertilizer	1.98	0.46	-	-	-	-	1.33	0.56	-	-	-	-	0.76	0.34	-	-	-	-	3.07	0.46	-	-	-	-
8.	Hoeing/Weeding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Harvesting	16.50	7.67	-	-	-	-	30.03	12.61	-	-	-	-	19.50	8.74	-	-	-	-	65.75	9.77	-	-	-	-
10.	Carriage to Threshing/yard	8.33	3.93	8.33	3.93	-	-	15.50	6.51	15.50	6.51	-	-	8.00	3.59	8.00	3.59	-	-	31.83	4.73	31.83	4.73	-	-
11.	Threshing/ Winnowing	8.33	3.93	-	-	-	-	15.50	6.51	-	-	-	-	8.00	3.59	-	-	-	-	31.83	4.73	-	-	-	-
12.	Total	62.44	29.45	22.58	10.65	18.75	8.84	76.46	32.13	15.50	6.51	24.25	10.19	51.26	22.99	11.75	5.27	19.25	8.63	190.16	28.26	49.83	7.40	62.25	9.25

Table-26

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF SORGHUM IN SAMPLE WATER COURSE RD.70800

Sr. No.	Operations	Head (Area sown: 1.11)						Middle (Area sown: 1.21)						Tail (Area sown: 1.92)						All Places (Area sown: 4.24)					
		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	3	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Ploughing	9.38	8.45	9.00	8.11	3.50	3.15	11.13	9.20	10.50	8.68	5.30	[illegible]	9.30	4.84	8.00	4.17	12.50	6.51	29.81	[illegible]	27.50	6.49	21.00	4.95
2.	Levelling	1.50	1.35	1.50	1.35	-	-	0.50	0.41	0.50	0.41	-	-	0.50	0.26	0.50	0.26	-	-	2.50	[illegible]	2.50	0.59	-	-
3.	Planking	1.50	1.35	1.50	1.35	-	-	2.10	1.74	1.10	0.91	-	-	0.50	0.26	0.50	0.26	-	-	4.10	[illegible]	3.10	0.73	-	-
4.	Sowing	2.75	2.48	2.00	1.80	1.00	0.90	4.46	3.69	3.25	2.69	2.50	2.07	2.38	1.24	-	-	4.75	2.47	9.59	2.26	5.25	1.24	8.25	1.95
5.	Watering	1.37	1.23	-	-	-	-	2.60	2.15	-	-	-	-	6.40	3.33	-	-	-	-	10.37	2.45	-	-	-	-
6.	F.Y.Manure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Chs:Fertil.ser	0.37	0.33	-	-	-	-	0.50	0.41	-	-	-	-	0.65	0.34	-	-	-	-	1.52	0.36	-	-	-	-
8.	Hoeing/Weeding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Harvesting	-	-	-	-	-	-	5.00	4.13	-	-	-	-	24.00	12.50	-	-	-	-	29.00	6.84	-	-	-	-
10.	Carriage to threshing	-	-	-	-	-	-	5.00	4.13	5.00	4.13	-	-	24.00	12.50	24.00	12.50	-	-	29.00	6.84	29.00	6.84	-	-
11.	Threshirg/ Winnowing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12.	Total	16.87	15.20	14.00	12.61	4.50	4.05	31.29	25.86	20.35	16.82	7.50	6.20	67.73	35.28	33.00	17.19	17.25	8.98	115.89	27.33	67.35	15.88	29.25	6.90

Table-27

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF SUGARCANE IN SAMPLE WATER COURSE RD.70800

Sr. No.	Operations	Head (Area sown: 0.35)						Middle (Area sown: 0.00)						Tail (Area sown: 0.00)						All Places (Area sown: 0.35)					
		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect	Total	Per Hect:	Total	Per Hect:	Total	Per Hect	Total	Per Hect	Total	Per Hect	Total	Per Hect	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	3	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Ploughing	5.50	15.71	5.50	15.71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.50	15.71	5.50	15.71	-	-
2.	Levelling	0.44	1.26	0.44	1.26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.44	1.26	0.44	1.26	-	-
3.	Planking	0.75	2.14	0.75	2.14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.75	2.14	0.75	2.14	-	-
4.	Sowing	7.00	20.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	20.00	-	-	-	-
5.	Watering	4.00	11.43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.00	11.43	-	-	-	-
6.	F.Y.Manure	1.75	5.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.75	5.00	-	-	-	-
7.	Che:Fertilizer	0.50	1.43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.50	1.43	-	-	-	-
8.	Hoeing/Weeding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Harvesting	7.00	20.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	20.00	-	-	-	-
10.	Carriage to Threshing/cane crushing	2.50	7.14	2.50	7.14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50	7.14	2.50	7.14	-	-
11.	Threshing/Winnowing/Yard Gani	2.00	5.71	2.00	5.71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.00	5.71	2.00	5.71	-	-
12.	Gur Making	10.00	28.57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.00	28.57	-	-	-	-
13.	Total	41.44	118.40	11.19	31.97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	41.44	118.40	11.19	31.97	-	-

Table-28

MANUAL/ANIMAL MACHINE TIME CONSUMED IN CULTIVATION
OF PIGEON PEA IN SAMPLE WATER COURSE RD.70800

Sr. No.	Operations	Head (Area sown: 0.00)						Middle (Area sown: 0.71)						Tail (Area sown: 0.35)						All Places (Area sown: 1.06)					
		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect	Total	Per Hect:	Total	Per Hect:	Total	Per Hect	Total	Per Hect	Total	Per Hect	Total	Per Hect	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	3	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Ploughing	-	-	-	-	-	-	1.34	1.89	0.75	1.06	4.50	6.34	0.43	1.23	-	-	2.00	5.71	1.77	1.67	0.75	0.71	6.50	6.13
2.	Levelling	-	-	-	-	-	-	0.25	0.35	0.25	0.35	-	-	-	-	-	-	-	-	0.25	0.24	0.25	0.24	-	-
3.	Planking	-	-	-	-	-	-	0.25	0.35	0.25	0.35	-	-	-	-	-	-	-	-	0.25	0.24	0.25	0.24	-	-
4.	Sowing	-	-	-	-	-	-	1.05	1.48	0.25	0.35	1.50	2.11	0.36	1.03	-	-	1.00	2.86	1.41	1.33	0.25	0.24	2.50	2.36
5.	Watering	-	-	-	-	-	-	1.14	1.61	-	-	-	-	0.38	2.51	-	-	-	-	2.02	1.91	-	-	-	-
6.	F.Y.Manure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Che:Fertilizer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8.	Hoeing/Weeding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Harvesting	-	-	-	-	-	-	3.25	4.58	-	-	-	-	1.50	4.29	-	-	-	-	4.75	4.48	-	-	-	-
10.	Carriage to threshing	-	-	-	-	-	-	0.50	0.70	-	-	-	-	0.50	1.43	-	-	-	-	4.75	4.48	-	-	-	-
11.	Threshing/ Winnowing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13.	Total	-	-	-	-	-	-	7.78	10.96	1.50	2.11	6.00	8.45	3.67	10.49	-	-	3.00	8.57	11.45	10.80	1.50	1.42	9.00	8.49

Table-29

NUMBER OF FRUIT PLANTS, TREES AND FRUIT PRODUCTION IN SAMPLE WATER COURSE RD.70BOO

Sr. No.	Particulars	Unit	Head (Total sample farmers = 10)											
			Apricot			Plum			Lemon			Loquat		
			In this Water-course	In Other Places	Total	In this Water-course	In Other Places	Total	In this Water-course	In Other Places	Total	In this Water-course	In Other Places	Total
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Sample household	Number	-	2	2	-	1	1	-	1	1	-	1	1
2.	Total Trees:													
	a. Bearing & non-bearing	Number	-	60	60	-	6	6	-	100	100	-	14	14
	b. Fruit bearing	Number	-	-	-	-	-	-	-	-	-	-	-	-
3.	Avg. Number of Tree:													
	a. No.per fruit growing household		-	30	30	-	6	6	-	100	100	-	14	
	i-Bearing & non-bearing non-bearing(2a÷1)	Number	-	30	30	-	6	6	-	100	100	-	14	
	ii-Fruit bearing (2b÷1)	Number	-	-	-	-	-	-	-	-	-	-	-	
	b. No.per h.hold general:													
	i-Bearing & non-bearing		-	6	6	-	0.60	0.60	-	10	10	-	1.40	
	ii-Fruit bearing		-	-	-	-	-	-	-	-	-	-	-	
4.	Total fruit product	Mds	-	-	-	-	-	-	-	-	-	-	-	
5.	Fruit Production household:		-	-	-	-	-	-	-	-	-	-	-	
	a:Fruit growing h.hold		-	3	3	-	0.60	0.60	-	10	10	-	1.40	
	b.Sample h.h in general		-	-	-	-	-	-	-	-	-	-	-	
6.	Gross receipt from of fruit		-	-	-	-	-	-	-	-	-	-	-	
7.	Average sale process:													
	a. per fruit growing h.hold		-	-	-	-	-	-	-	-	-	-	-	
	b. per sample house in general		-	-	-	-	-	-	-	-	-	-	-	

(Contd....)

Table-29

NUMBER OF FRUIT PLANTS, TREES AND FRUIT
PRODUCTION IN SAMPLE WATER COURSE RD.70860

Sr. No.	Particulars	Unit	Middle (Total sample farmers = 10)											
			Apricot			Plum			Lasoon			Loquat		
			In this Water-course	In Other Places	Total	In this Water-course	In Other Places	Total	In this Water-course	In Other Places	Total	In this Water-course	In Other Places	Total
0	1	2	15	16	17	18	19	20	21	22	23	24	25	26
1.	Sample household	Number	-	1	1	-	1	1	-	1	1	-	1	1
2.	Total Trees:													
	a. Bearing & non-bearing	Number	-	2	2	-	12	12	-	4	4	-	40	40
	b. Fruit bearing	Number	-	2	2	-	12	12	-	4	4	-	40	
3.	Avg. Number of Tree:													
	a. No.per fruit growing household		-	2	2	-	12	12	-	4	4	-	40	
	i-Bearing & non-bearing non-bearing(2a÷1)	Number	-	2	2	-	12	12	-	4	4	-	40	
	ii-Fruit bearing (2b÷1)	Number	-	2	2	-	12	12	-	4	4	-	40	
	b. No.per h.hold general:													
	i-Bearing & non-bearing		-	0.20	0.20	-	1.20	1.20	-	0.40	0.40	-	40	
	ii-Fruit bearing		-	0.20	0.20	-	1.20	1.20	-	0.40	0.40	-	40	
4.	Total fruit product	Mds	-	20	20	-	120	120	-	12	12	-	800	
5.	Fruit Production household:													
	a.Fruit growing h.hold		-	0.20	0.20	-	1.20	1.20	-	0.40	0.40	-	4	
	b.Sample h.h in general		-	2.00	2.00	-	12.00	12.00	-	1.20	1.20	-	80	
6.	Gross receipt from of fruit		-	120	120	-	1000	1000	-	60	60	-	2000	
7.	Average sale process:													
	a. per fruit growing h.hold		-	120	120	-	1000	1000	-	60	60	-	2000	
	b. per sample house in general		-	12	12	-	100	100	-	6	6	-	200	

(Contd....)

Table-29

NUMBER OF FRUIT PLANTS, TREES AND FRUIT
PRODUCTION IN SAMPLE WATER COURSE RD.70800

Sr. No.	Particulars	Unit	Tail (Total sample farmers = 10)											
			Apricot			Plum			Lemon			Loquat		
			In this Water-course	In Other Places	Total	In this Water-course	In Other Places	Total	In this Water-course	In Other Places	Total	In this Water-course	In Other Places	Total
0	1	2	27	28	29	30	31	32	33	34	35	36	37	38
1.	Sample household	Number	-	-	-	-	-	-	-	-	-	-	-	-
2.	Total Trees:													
	a. Bearing & non-bearing	Number	-	-	-	-	-	-	-	-	-	-	-	-
	b. Fruit bearing	Number	-	-	-	-	-	-	-	-	-	-	-	-
3.	Avg. Number of Tree:													
	a. No.per fruit growing household		-	-	-	-	-	-	-	-	-	-	-	-
	i-Bearing & non-bearing non-bearing(2a÷1)	Number	-	-	-	-	-	-	-	-	-	-	-	-
	ii-Fruit bearing (2b÷1)	Number	-	-	-	-	-	-	-	-	-	-	-	-
	b. No.per h.hold general:													
	i-Bearing & non-bearing	"	-	-	-	-	-	-	-	-	-	-	-	-
	ii-Fruit bearing		-	-	-	-	-	-	-	-	-	-	-	-
4.	Total fruit product	Mds	-	-	-	-	-	-	-	-	-	-	-	-
5.	Fruit Production household:		-	-	-	-	-	-	-	-	-	-	-	-
	a.Fruit growing h.hold		-	-	-	-	-	-	-	-	-	-	-	-
	b.Sample H.H. in general		-	-	-	-	-	-	-	-	-	-	-	-
6.	Gross receipt from of fruit		-	-	-	-	-	-	-	-	-	-	-	-
7.	Average sale process:													
	a. per fruit growing h.hold		-	-	-	-	-	-	-	-	-	-	-	-
	b. per sample house in general		-	-	-	-	-	-	-	-	-	-	-	-

(Contd....)

Table-29

NUMBER OF FRUIT PLANTS, TREES AND FRUIT PRODUCTION IN SAMPLE WATER COURSE RD.70800

Sr. No.	Particulars	Unit	All Places (Total sample farmers = 10)											
			Apricot			Plum			Lemon			Loquat		
			In this Water-course	In Other Places	Total	In this Water-course	In Other Places	Total	In this Water-course	In Other Places	Total	In this Water-course	In Other Places	Total
0	1	2	39	40	41	42	43	44	45	46	47	48	49	50
1.	Sample household	Number	-	1	1	-	1	1	-	1	1	-	1	1
2.	Total Trees:													
	a. Bearing & non-bearing	Number	-	2	2	-	12	12	-	4	4	-	40	40
	b. Fruit bearing	Number	-	2	2	-	12	12	-	4	4	-	40	
3.	Avg. Number of Tree:													
	a. No.per fruit growing household		-	2	2	-	12	12	-	4	4	-	40	
	i-Bearing & non-bearing non-bearing(2a÷1)	Number	-	2	2	-	12	12	-	4	4	-	40	
	ii-Fruit bearing (2b÷1)	Number	-	2	2	-	12	12	-	4	4	-	40	
	b. No.per h.hold general:													
	i-Bearing & non-bearing		-	0.07	0.07	-	0.40	0.40	-	0.13	0.13	-	1.33	
	ii-Fruit bearing		-	0.07	0.07	-	0.40	0.40	-	0.13	0.13	-	1.33	
4.	Total fruit product	Mds	-	20	20	-	120	120	-	12	12	-	800	
5.	Fruit Production household:		-	-	-	-	-	-	-	-	-	-	-	
	a.Fruit growing h.hold		-	20	20	-	120	120	-	12	12	-	800	
6.	Gross receipt from of fruit		-	0.67	0.67	-	4.00	4.00	-	0.40	0.40	-	26.67	
7.	Average sale process:													
	a. per fruit growing h.hold		-	120	120	-	1000	1000	-	60	60	-	2000	
	b. per sample house in general		-	4	4	-	33.33	33.33	-	2	2	-	66.67	

(Concluded...)

Table-30

LIVESTOCK HOLDINGS OF SAMPLE HOUSEHOLDS IN
SAMPLE WATER COURSE RD.70800

Sr. No.	Kind of Livestock	No. of H.hold who possess these:	Number of livestock possessed Head											
			Minor			Adult			Total			In-milk		
			a	b	c	a	b	c	a	b	c	a	b	c
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Buffalo	7	8	1.14	0.80	10.0	1.43	1.00	18	2.57	1.80	9	1.29	0.90
2.	Cow	2	-	-	-	-	2.00	0.20	2	1.00	2.00	-	-	-
3.	Goat	1	4	4.00	0.40	4.0	4.00	0.40	8	8.00	0.80	-	-	-
4.	Sheep	5	2	0.40	0.20	13.0	2.60	1.30	15	3.00	1.50	-	-	-
5.	Bullock	2	-	-	-	4.0	2.00	0.40	4	2.00	0.40	-	-	-
6.	He Buffalo	2	1	0.50	0.10	2.0	0.10	0.20	3	1.50	0.30	-	-	-
7.	Horse/Mule	-	-	-	-	-	-	-	-	-	-	-	-	-
8.	Donkey	7	1	0.14	0.10	6.0	0.86	0.60	7	1.00	0.70	-	-	-
9.	Camel	-	-	-	-	-	-	-	-	-	-	-	-	-
10.	Total	26	16	0.62	1.60	41	1.58	4.10	57	2.19	5.70	9	0.35	0.90
11.	Poultry	10	15	1.50	1.50	56	5.60	5.60	71	7.10	7.10	-	-	-

(Contd....)

Total Household: 30
Head: 10
Middle: 10
Tail: 10

a. Total animal
b. Number per owner
c. Number per sample household in general

Table-30

LIVESTOCK HOLDINGS OF SAMPLE HOUSEHOLDS IN
SAMPLE WATER COURSE RD.70800

Sr. No.	Kind of Livestock	No. of H.hold who possess these:	Number of livestock possessed											
			Middle											
			Minor			Adult			Total			In-milk		
			a	b	c	a	b	c	a	b	c	a	b	c
0	0	15	16	17	19	19	20	21	22	23	24	25	26	27
1.	Buffalo	7	6	0.86	0.60	8	1.14	0.80	14	2.00	1.40	5	0.71	0.50
2.	Cow	2	2	1.00	0.20	2	1.00	0.20	4	2.00	0.40	1	0.50	0.10
3.	Goat	2	-	-	-	3	1.50	0.30	3	1.50	0.30	-	-	-
4.	Sheep	2	-	-	-	5	2.50	0.50	5	2.50	0.50	-	-	-
5.	Bullock	-	-	-	-	2	2.00	0.20	2	2.00	0.20	-	-	-
6.	He-Buffalo	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Horse/Mule	-	-	-	-	-	-	-	-	-	-	-	-	-
8.	Donkey	5	-	-	-	5	1.00	0.50	5	1.00	0.50	-	-	-
9.	Camel	-	-	-	-	-	-	-	-	-	-	-	-	-
10.	Total	19	8	0.42	0.80	25	1.32	2.50	33	1.74	3.30	6	0.32	0.60
11.	Poultry	8	15	1.88	1.50	65	8.13	6.50	80	10.00	8.00	-	-	-

Total Household:94
Head:10
Middle:50
Tail:10

a. Total animal
b. Number per owner
c. Number per sample household in general

(Contd....)

Table-30

LIVESTOCK HOLDINGS OF SAMPLE HOUSEHOLDS
IN SAMPLE WATER COURSE RD.70800

Sr. No.	Kind of Livestock	No. of H.hold who possess these:	Number of livestock possessed											
			Tail											
			Minor			Adult			Total			In-milk		
			a	b	c	a	b	c	a	b	c	a	b	c
0	0	28	29	30	31	32	33	34	35	36	37	38	39	40
1.	Buffalo	4	7	1.75	0.70	7	1.75	0.70	14	3.50	1.40	4	1.00	0.40
2.	Cow	3	2	0.67	0.20	3	1.00	0.30	5	1.67	0.50	1	0.33	0.10
3.	Goat	3	4	1.33	0.40	5	1.67	0.50	9	3.00	0.90	1	0.33	0.10
4.	Sheep	1	2	2.00	0.20	2	2.00	0.20	4	4.00	0.40	1	1.00	0.10
5.	Bullock	1	-	-	-	2	2.00	0.20	2	2.00	0.20	-	-	-
6.	He-Buffalo	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Horse/Mule	-	-	-	-	-	-	-	-	-	-	-	-	-
8.	Donkey	3	-	-	-	3	1.00	0.30	3	1.00	0.30	-	-	-
9.	Camel	-	-	-	-	-	-	-	-	-	-	-	-	-
10.	Total	15	15	1.00	1.50	22	1.47	2.20	37	2.47	3.70	7	0.47	0.70
11.	Poultry	9	32	3.56	3.20	64	7.11	6.40	96	10.67	9.60	-	-	-

(Contd....)

Total Household:30
Head:10
Middle:10
Tail:10

a. Total animal
b. Number per owner
c. number per sample household in general

Table-30

LIVESTOCK HOLDING OF SAMPLE HOUSEHOLDS
IN SAMPLE WATER COURSE [illegible]

Sr. No.	Kind of Livestock	No. of household who possess these				Number of livestock possessed											
						All places											
						Minor			Adult			Total			Poultry		
		Head	Middle	Tail	All Places	a	b	c	a	b	c	a	b	c	a	b	c
0	0	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
1.	Buffalo	7	7	4	18	21	1.17	0.70	85	1.39	0.93	46	2.56	1.53	19	1.06	0.63
2.	Cow	2	2	3	7	4	0.57	0.13	7	[illegible]	0.22	11	1.57	0.37	2	0.29	0.07
3.	Goat	1	2	3	6	8	1.33	0.27	12	2.00	0.40	20	3.33	0.67	1	0.33	0.07
4.	Sheep	5	2	1	8	4	0.50	0.13	20	2.50	0.67	24	3.00	0.80	1	0.13	0.03
5.	Bullock	2	1	1	4	-	-	-	8	2.00	0.27	8	2.00	0.27	-	-	-
6.	He-Buffalo	2	-	-	2	1	0.50	0.03	2	1.00	0.07	3	1.50	0.10	-	-	-
7.	Horse/Mule	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8.	Donkey	7	5	3	15	1	0.07	0.03	14	0.93	0.47	15	1.00	0.50	-	-	-
9.	Camel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.	Total	26	19	15	60	39	0.65	1.30	83	1.47	2.93	127	2.12	4.23	24	0.40	0.80
11.	Poultry	10	8	9	27	62	2.30	2.07	185	6.85	[illegible]	247	9.15	8.22	-	-	-

Total Household:30
Head:10
Middle:10
Tail:10

a. Total animal Concluded
b. Number per owner
c. Number per sample household in general

Table-31

MILK PRODUCTION AND UTILIZATION IN SAMPLE
WATER COURSE RD. 70800

Sr. No.	Particulars	Unit	Head (Total sample farmers = 10)					Middle (Total sample farmers= 10)				
			Buffalo	Cow	Goat	Sheep	Total	Buffalo	Cow	Goat	Sheep	Total
0	1	2	3	4	5	6	7	8	9	10	11	12
1.	In milk animals	Number	9.00	-	-	-	9	5	1	-	-	6
2.	Number of owners	Number	7.00	-	-	-	7	5	1	-	-	6
3.	Avg.Daily milk production	Litre	4.29	-	-	-	4.29	2.80	3	-	-	5.30
4.	Avg.Monthly milk Production (1 x 3 x 30)	Litre	1158.30	-	-	-	1158.30	420	90	-	-	51[illegible]
5.	Avg.Monthly sale (in normal in-milk state)	Litre	-	-	-	-	-	-	-	-	-	-
6.	5 as %age of 4 (5÷4x100)	%age	-	-	-	-	-	-	-	-	-	
7.	Lactation period	Days	305.00	-	-	-	305.00	305	200	90	90	68[illegible]
8.	Total Production per lactation period (1x3x7)	Litre	11776.05	-	-	-	11776.05	42[illegible]	600	-	-	49[illegible]
9.	Estimated sale per lactation period(6x8)		-	-	-	-	-	-	-	-	-	-
10.	Price per litre	Rs.	-	-	-	-	-	-	-	-	-	-
11.	Estimated receipt from sales per lactation period (9x10)	Rs.	-	-	-	-	-	-	-	-	-	-
12.	Avg. annual sale proceeds:											
	a. per owner household (11÷2)	Rs.	-	-	-	-	-	-	-	-	-	-
	b. per sample household in general	Rs.	-	-	-	-	-	-	-	-	-	-

(Contd....)

Table-31

MILK PRODUCTION AND UTILIZATION IN SAMPLE
WATER COURSE RD.70800

Sr. No.	Particulars	Unit	Tail (Total sample farmers = 10)					A.Places(Total Sample Farmers= 30)				
			Buffalo	Cow	Goat	Sheep	Total	Buffalo	Cow	Goat	Sheep	Total
0	1		13	14	15	16	17	18	19	20	21	22
1.	In Milk Animal	Number	4	1	1	1	7	18	2	1	1	22
2.	Number of Owner	Number	2	1	1	1	5	14	2	1	1	18
3.	Avg.Daily Milk Production	Litre	4	3	0.50	0.50	8	11.09	6	0.50	0.50	18.09
4.	Avg. Monthly Milk Production (1 x 3x30)	Litre	480	90	15.00	15.00	600	5988.60	360	15	15	6378
5.	Avg. Monthly sale (in normal in-milk state)	Litre	-	-	-	-	-	-	-	-	-	-
6.	5 as %age if 4(5÷4x100)	%age	-	-	-	-	-	-	-	-	-	-
7.	Lactation Period	Day	305	200	90	90	685	305	200	90	90	685
8.	Total Production per lactation period (1x3x7)	Litre	4880	600	45	45	5570	60984.10	2400	45	45	63374.10
9.	Estimated sale per lactation period(6x8)÷100		-	-	-	-	-	-	-	-	-	-
10.	Price per litre	Rs.	-	-	-	-	-	-	-	-	-	-
11.	Estimated receipt from sales per lactation period (9x11)	Rs.	-	-	-	-	-	-	-	-	-	-
12.	Avg. Annual sale Proceed:											
	a: per owner household (11 ÷ 2)	Rs.	-	-	-	-	-	-	-	-	-	-
	b: per sample household in general	Rs.	-	-	-	-	-	-	-	-	-	-

(Concluded)

Table-32

INCOME FROM SALE OF DAIRY PRODUCTS (OTHER THAN MILK)
DURING SIX MONTHS PRECEDING INTERVIEW OF SAMPLE HOUSEHOLDS
IN KHARIF 1987 IN SAMPLE WATER COURSE RD.45800

(NOT APPLICABLE)

Table - 33

INCOME FROM HIRING OUT OF LIVESTOCK IN
SAMPLE WATER COURSE RD. 70800

(NOT APPLICABLE)

Table-34

INCOME FROM SELECTED SOURCES DURING SIX MONTHS BEFORE INTERVIEW IN KHARIF 1987 IN SAMPLE WATER COURSE RD. 70800

Sr. No.	Particulars	Unit	Sources: Rent of Land	Rent of other property	Trade	Industry	Foreign remittances	Home remittances	Other
0	1	2	3	4	5	6	7	8	9
1.	H.holds reporting income:	No							
	Head		-	-	-	1	-	-	-
	Middle		-	-	-	-	-	-	-
	Tail		-	-	-	1	-	-	-
	All Places		-	-	-	2	-	-	-
2.	Total Income:	Rs.							
	Head		-	-	-	3600	-	-	-
	Middle		-	-	-	-	-	-	-
	Tail		-	-	-	6000	-	-	-
	All Places	Rs.	-	-	-	9600	-	-	-
3.	Avg. Income of Recipients:	Rs.							
	Head		-	-	-	3600	-	-	-
	Middle			-	-	-	-	-	-
	Tail		-	-	-	6000	-	-	-
	All Places	Rs.	-	-	-	4800	-	-	-
4.	Avg. Income of sample households in General:	Rs.							
	Head		-	-	-	360	-	-	-
	Middle		-	-	-	-	-	-	-
	Tail		-	-	-	600	-	-	-
	All Places	Rs.	-	-	-	320	-	-	-

Household:
1. Head 10
2. Middle 10
3. Tail 10
4. Total 30

Table-35

PERMANENT LABOUR ON FARM IN SAMPLE WATER COURSE RD.70800

(NOT APPLICABLE)

Table-1

AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS IN SAMPLE WATERCOURSE RD.70800

Sr. No.	Crops	Location	Area	Main Product			By Product		
				Unit	Total	Per Hectare	Unit	Total	Per Hectare
0	1	2	3	4	5	6	7	8	9
1.	Wheat	Head	8.09	Mds	171.80	21.17	Mds	358	44.25
		Middle	4.25	Mds	73.50	17.29	Mds	140	32.94
		Tail	5.82	Mds	70.05	12.04	Mds	146	25.09
		Total	18.16	Mds	314.85	17.34	Mds	644	35.46
2.	Barley Grain	Head	0.61	Mds	9.00	14.75	Mds	18	29.51
		Middle	-	Mds	-	-	Mds	-	-
		Tail	0.40	Mds	5.50	13.75	Mds	11	27.50
		Total	1.01	Mds	14.50	14.36	Mds	29	28.71
3.	Barley Fodder	Head	-		-	-		-	-
		Middle	-		-	-		-	-
		Tail	-		-	-		-	-
		Total	-		-				-
4.	Berseem	Head	2.83	Rs.	12200.00	4310.95	Rs.	-	-
		Middle	0.20	Rs.	1200.00	6000.00	Rs.	-	-
		Tail	0.81	Rs.	1250.00	1543.21	Rs.	-	-
		Total	3.84	Rs.	14650.00	3815.10	Rs.	-	-
5.	Pea	Head	2.32	Mds	69.00	29.74	Mds	-	-
		Middle	0.40	Mds	16.50	41.25	Mds	-	-
		Tail	1.01	Mds	40.00	39.60	Mds	-	-
		Total	3.73	Mds	125.50	33.65	Mds	-	-
6.	Spinach	Head	-		-	-		-	-
		Middle	-		-	-		-	-
		Tail	-		-	-		-	-
		Total	-		-	-		-	-

Table-2

AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS OUTSIDE SAMPLE WATERCOURSE RD.70800

Sr. No.	Crops	Location	Area	Main Product			By Product		
				Unit	Total	Per Hectare	Unit	Total	Per Hectare
0	1	2	3	4	5	6	7	8	9
1.	Wheat	Head	3.44	Mds	58.00	16.86	Mds	120	34.88
		Middle	1.42	Mds	50.00	35.21	Mds	107	75.35
		Tail	1.72	Mds	13.00	7.56	Mds	25	14.53
		Total	6.58	Mds	121.00	18.39	Mds	252	38.30
2.	Barley Grain	Head	-	Mds	-	-		-	-
		Middle	-	Mds	-	-		-	-
		Tail	-	Mds	-	-		-	-
		Total	-	Mds	-	-		-	-
3.	Barley Fodder	Head	-		-	-		-	-
		Middle	-		-	-		-	-
		Tail	-		-	-		-	-
		Total	-		-	-		-	-
4.	Berseem	Head	1.21	Rs.	5200.00	4297.52		-	-
		Middle	0.61	Rs.	3600.00	5901.64		-	-
		Tail	1.11	Rs.	5000.00	4504.50		-	-
		Total	2.93	Rs.	13800.00	4709.90		-	-
5.	Pea	Head	1.42	Mds.	55.00	38.73		-	-
		Middle	1.11	Mds.	33.00	29.73		-	-
		Tail	3.29	Mds.	55.00	16.72		-	-
		Total	5.82	Mds.	143.00	24.75		-	-
6.	Spinach	Head	-		-	-		-	-
		Middle	-		-	-		-	-
		Tail	-		-	-		-	-
		Total	-		-	-		-	-

Table-3

DISPOSAL OF MAIN PRODUCTS IN SAMPLE WATER COURSE RD. 70800

Sr. No.	Crop of mode disposal	Wheat (Mds)								Barley (Mds)							
		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places	
		Qty.	%	Qty.	%	Qty	%	Qty.	%	Qty	%	Qty	%	Qty	%	Qty	%
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
I	Total Output	229.30	100.00	123.5	100.00	83.05	100.00	435.85	100.00	9.0	100.0	-	-	5.5	100	14.5	100.00
II.	Disposal																
	1.Retained for H.use	163.15	71.15	94.0	76.11	50.40	60.69	307.50	70.56	4.5	50.0	-	-	-	-	4.5	31.03
	2.Sold	-	-	-	-	2.25	2.71	2.25	0.52	-	-	-	-	5.5	100	5.5	37.93
	3.Landlord's Share	23.75	10.36	18.5	14.98	16.00	19.27	58.25	13.36	4.5	50.0	-	-	-	-	4.5	31.03
	4.Artisan's dues	3.80	1.66	2	1.62	2.3	2.77	8.1	1.86	-	-	-	-	-	-	-	
	5.Given to Labourers	12.3	5.36	3	2.43	4.3	5.18	19.6	4.50	-	-	-	-	-	-	-	-
	6.Seed	6	2.62	2	1.62	1	1.20	9	2.06	-	-	-	-	-	-	-	-
	7.Usher/Charity	14.8	6.45	4	3.24	4.5	5.42	23.35	5.35	-	-	-	-	-	-	-	-
	8.Other Specify	5.5	2.40	-	-	2.3	2.77	7.8	1.79	-	-	-	-	-	-	-	-
III.	Total =All Uses	229.3	100	123.5	100.00	83.05	100.00	435.85	100.00	9.0	100.0	-	-	5.5	100	14.5	100.00

(Contd....)

Table-3

DISPOSAL OF MAIN PRODUCTS IN SAMPLE WATER COURSE RD.70800

Sr. No.	Crop mode of disposal	Berseem (Rs)								Pea (Mds)								Spinach (Mds)							
		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places	
		Rs.	%	Rs.	%	Rs.	%	Rs.	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%
C	1	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
I	Total Output	17400	100	4800	100	6250	100	28450	100	124	100	49.50	100	95	100	268.5	100	-	-	-	-	-	-	-	-
II.	Disposal																								
	1.Retained for H.use	1700	97.70	4800	100	6250	100	28050	98.59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.Sold	400	2.30	-	-	-	-	400	1.41	121.5	97.98	48.5	97.98	84	88.42	254	94.60	-	-	-	-	-	-	-	-
	3.Landlord's Share	-	-	-	-	-	-	-	-	-	-	-	-	10	10.53	10	3.72	-	-	-	-	-	-	-	-
	4.Artisan's dues	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5.Given to Labourers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6.Seed	-	-	-	-	-	-	-	-	2.5	2.02	1.0	2.02	1	1.05	4.5	1.68	-	-	-	-	-	-	-	-
	7.Usher/Charity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8.Other Specify	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
III.	Total =All Uses	17400	100	4800	100	6250	100	28450	100	124	100	49.50	100	95	100	268.5	100	-	-	-	-	-	-	-	-

(Concluded).

Table-4

DISPOSAL OF BY-PRODUCTS IN SAMPLE WATER COURSE RD. 70800

Sr. No.	Crop Mode of Disposal	Wheat (Mds)								Barley (Mds)							
		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places	
		Qty.	%	Qty.	%	Qty	%	Qty.	%	Qty.	%	Qty.	%	Qty.	%	Qty.	%
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
I	Total Output	478	100	247	100	171	100	896	100	18	100	-	-	11	100	29	100
II.	Disposal																
	1.Retained for H.use	386	80.75	207	83.81	146	85.38	739	82.48	18	100	-	-	11	100	29	100
	2.Sold	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3.Landlord's Share	92	19.25	40	16.19	25	14.62	157	17.52	-	-	-	-	-	-	-	-
	4.Artisan's dues	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5.Given to Labourers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6.Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7.Usher/Charity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8.Other Specify	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
III.	Total =All Uses	478	100	247	100	171	100	896	100	18	100	-	-	11	100	29	100

(Contd..)

Table-4

DISPOSAL OF BY-PRODUCTS IN SAMPLE WATER COURSE RD. 70800

Sr. No.	Crop mode of disposal	Berseem (Rs)								Pea (Mds)								Spinach (Mds)							
		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places	
		Rs.	%	Rs.	%	Rs.	%	Rs.	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	
0	1	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	4.
I Total Output		-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
II. Disposal																									
1.Retained for H.use		-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-	-	-
2.Sold		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
3.Landlord's Share		-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
4.Artisan's dues		-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		-	-	-	-		-	-
5.Given to Labourers		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.Seed		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.Usher/Charity		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8.Other Specify		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
III.Total =All Uses		-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-

Table-5

MODE OF SALE OF WHEAT IN SAMPLE WATER COURSE RD. 70800

Sr. No.	Mode of sale	Head		Middle		Tail		All Places	
		Qty	%	Qty	%	Qty	%	Qty	%
0	1	2	3	4	5	6	7	8	9
I.	In Village	-	-	-	-	2.25	100	2.25	100
	1. To Beoparis	-	-	-	-	-	-	-	-
	2. To Shop Keepers	-	-	-	-	-	-	-	-
	3. To others	-	-	-	-	2.25	100	2.25	100
II.	In other villages	-	-	-	-	-	-	-	-
	1. To Beoparis	-	-	-	-	-	-	-	-
	2. To Shop Keepers	-	-	-	-	-	-	-	-
	3. To others	-	-	-	-	-	-	-	-
III.	In Peshawar	-	-	-	-	-	-	-	-
	1. Through Commission Agents	-	-	-	-	-	-	-	-
	2. To whole sellers	-	-	-	-	-	-	-	-
	3. To others	-	-	-	-	-	-	-	-
IV.	In Other urban centres	-	-	-	-	-	-	-	-
V.	Total sales	-	-	-	-	2.25	100	2.25	100

Table-6

MODE OF SALE OF BARLEY IN SAMPLE WATER COURSE RD.70800

Sr. No.	Mode of sale	Head		Middle		Tail		All Places	
		Qty	%	Qty	%	Qty	%	Qty	%
0	1	2	3	4	5	6	7	8	9
I.	In Village	-	-	-	-	5.5	100	5.5	100
	1. To Beoparis	-	-	-	-	-	-	-	-
	2. To Shop Keepers	-	-	-	-	-	-	-	-
	3. To others	-	-	-	-	5.5	100	5.5	100
II.	In other Villages	-	-	-	-	-	-	-	
	1. To Beoparis	-	-	-	-	-	-	-	-
	2. To Shop Keepers	-	-	-	-	-	-	-	-
	3. To others	-	-	-	-	-	-	-	-
III.	In Peshawar	-	-	-	-	-	-	-	-
	1. Through Commission Agents	-	-	-	-	-	-	-	-
	2. To whole sellers	-	-	-	-	-	-	-	-
	3. To others	-	-	-	-	-	-	-	-
IV.	In other urban centres	-	-	-	-	-	-	-	-
V.	Total sales	-	-	-	-	5.5	100	5.5	100

Table-7

MODE OF SALE OF BERSEEM IN SAMPLE WATER COURSE RD.70800

Sr. No.	Mode of sale	Head		Middle		Tail		All Places	
		Qty	%	Qty	%	Qty	%	Qty	%
0	1	2	3	4	5	6	7	8	9
I.	In Village	400	100	-	-	-	-	400	100
	1. To Beoparis	-	-	-	-	-	-	-	-
	2. To Shop Keepers	-	-	-	-	-	-	-	-
	3. To others	400	100	-	-	-	-	400	100
II.	In other Villages	-	-	-	-	-	-	-	-
	1. To Beoparis	-	-	-	-	-	-	-	-
	2. To Shop Keepers	-	-	-	-	-	-	-	-
	3. To others	-	-	-	-	-	-	-	-
III.	In Peshawar	-	-	-	-	-	-	-	-
	1. Trough Commission Agents	-	-	-	-	-	-	-	-
	2. To whole sellers	-	-	-	-	-	-	-	-
	3. To Other	-	-	-	-	-	-	-	-
IV.	In other urban centres	-	-	-	-	-	-	-	-
V.	Total sales	400	100	-	-	-	-	400	100

Table-8

MODE OF SALE OF PEA IN SAMPLE WATER COURSE RD.70800

Sr. No.	Mode of sale	Head		Middle		Tail		All Places	
		Qty	%	Qty	%	Qty	%	Qty	%
0	1	2	3	4	5	6	7	8	9
I.	In Village	-	-	-	-	-	-	-	-
	1. To Beoparis	-	-	-	-	-	-	-	-
	2. To Shop Keepers	-	-	-	-	-	-	-	-
	3. To others	-	-	-	-	-	-	-	-
II.	In other Villages	-	-	-	-	-	-	-	-
	1. To Beoparis	-	-	-	-	-	-	-	-
	2. To Shop Keepers	-	-	-	-	-	-	-	-
	3. To others	-	-	-	-	-	-	-	-
III.	In Peshawar	121.5	100	48.5	100	84	100	254	100
	1.Trough Commission Agents	121.5	100	48.5	100	84	100	254	100
	2. To whole sellers	-	-	-	-	-	-	-	-
	3. To other	-	-	-	-	-	-	-	-
IV.	In other urban centres	-	-	-	-	-	-	-	-
V.	Total sales	121.5	100	48.5	100	84	100	254	100

Table-9

MODE OF SALE OF SPINACH IN SAMPLE WATER COURSE RD.70800

(NOT APPLICABLE)

Table-10

NUMBER OF FARMERS REPORTING CONSUMPTION OF CHEMICAL FERTILIZERS IN SAMPLE WATER COURSE RD.70800

Sr. No.	Location of farm	Total farmers growing this crop No(=100)	Farmers using fertilizers: Urea		D A P		N P K		N P		Ammonium Sulphate		Ammonium Nitrate		P.Sulphate	
			No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
I.	WHEAT															
	a.Head of W.C.	8	13.50	59.26	8	59.26	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	6	8.75	68.57	3	34.29	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	9	14.00	64.29	3	21.43	-	-	-	-	-	-	-	-	-	-
	d.All Places	23	36.25	63.45	14	38.62	-	-	-	-	-	-	-	-	-	-
II.	BARLEY															
	a.Head of W.C.	2	0.50	400.00	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	3	0.50	600.00	-	-	-	-	-	-	-	-	-	-	-	-
III.	BERSEEM															
	a.Head of W.C.	6	1.50	400.00	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	2	0.50	400.00	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	3	2.00	150.00	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	11	4.00	275.00	-	-	-	-	-	-	-	-	-	-	-	-
IV.	P E A															
	a.Head of W.C.	5	3.75	133.33	1	26.67	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	4	1.00	400.00	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	3	2.00	200.00	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	12	6.25	192.00	1	16.00	-	-	-	-	-	-	-	-	-	-
V.	SPINACH															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-11

QUANTITY OF CHEMICAL FERTILIZERS USED BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD.70800

Sr. No.	Location farm	Area sown (Hectare)	Quantity of fertilizer used: (KG)													
			Urea		D A P		N P K		N P		Ammonium Sulphate		Ammonium Nitrate		P.Sulphate	
			Total	Per Hect-are	Total	Per Hect-are	Total	Per Hect-are	Total	Per Hect-are	Total	Per Hect-are	Total	Per Hect-are	Total	Per Hect-are
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
I.	WHEAT															
	a.Head of W.C.	8.09	675.0	83.44	400	49.44	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	4.25	437.5	102.94	150	35.29	-	-	-	-	-		-	-	-	-
	c.Tail of W.C.	5.82	700.0	120.27	150	25.77	-	-	-	-			-	-	-	-
	d.All Places	18.16	1812.5	99.81	700	38.55	-	-	-	-	-	-	-	-	-	-
II.	BARLEY															
	a.Head of W.C.	0.61	25.0	40.98	-	-	-	-	-	-				-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-		-	-	-	-
	c.Tail of W.C.	0.40	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	1.01	25.0	24.75	-	-	-	-	-	-	-	-	-	-	-	-
III.	BERSEEM															
	a.Head of W.C.	2.83	75.0	26.50	-	-	-		-	-			-		-	
	b.Middle of W.C.	0.20	25.0	125.00	-	-	-	-	-				-	-	-	
	c.Tail of W.C.	0.81	100.0	123.46	50	61.73	-	-	-	-		-	-	-	-	-
	d.All Places	3.84	200.0	52.08	50	13.02	-	-	-	-	-	-	-	-	-	-
IV.	P E A															
	a.Head of W.C.	2.32	187.5	80.82	50	21.55	-	-	-	-			-	-	-	-
	b.Middle of W.C.	0.40	50.0	125.00	-	-	-	-	-	-			-	-	-	-
	c.Tail of W.C.	1.01	75.0	74.26	-	-	-	-	-	-			-	-	-	-
	d.All Places	3.73	312.5	83.78	50	13.40	-	-	-	-	-	-	-	-	-	-
V.	SPINACH															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-		-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-			-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-			-	-	-	-
	d.All Places	-	-	-	-	-	-	-	-	-		-	-	-	-	-

Table-12

CONSUMPTION OF FARM YARD MANURE IN
SAMPLE WATER COURSE RD.70800

Sr. No.	Location of farm	Total farmers growing this crop	Farmers using Farm Yard Manure No.	Farmers using Farm Yard Manure %	Area Sown (Hectare)	Quantity used (KG) Total	Quantity used (KG) Per Hectare
0	1	2	3	4	5	6	7
I.	WHEAT						
	a.Head of W.C.	8	-	-	8.09	-	-
	b.Middle of W.C.	6	1	16.67	4.25	4478.40	1053.74
	c.Tail of W.C.	9	1	11.11	5.82	2985.60	512.99
	d.All Places	23	2	8.70	18.16	7464.00	411.01
II.	BARLEY						
	a.Head of W.C.	2	-	-	0.61	-	-
	b.Middle of W.C.	-	-	-	-	-	-
	c.Tail of W.C.	1	-	-	0.40	-	-
	d.All Places	3	-	-	1.01	-	-
III.	BERSEEM						
	a.Head of W.C.	6	-	-	2.83	-	-
	b.Middle of W.C.	2	-	-	0.20	-	-
	c.Tail of W.C.	3	-	-	0.81	-	-
	d.All Places	11	-	-	3.84	-	-
IV.	PEA						
	a.Head of W.C.	5	4	80.00	2.32	8956.80	3860.69
	b.Middle of W.C.	4	2	50.00	0.40	3732.00	9330.00
	c.Tail of W.C.	3	2	66.67	1.01	4478.40	4434.06
	d.All Places	12	8	66.67	3.73	17167.20	4602.47
V.	SPINACH						
	a.Head of W.C.	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-

Table-13

NUMBER OF SAMPLE FARMERS WHO USED INSECTICIDES/ PESTICIDES/WEEDICIDES IN SAMPLE WATER COURSE RD.70800

Sr. No.	Location of farm	Total farmers growing this crops No(=100)	Farmers who used:Insect:/ Pesticides		Farmers who used: Weedicides	
			No.	%	No.	%
0	1	2	3	4	5	6
I.	WHEAT					
	a. Head of W.C.	8	-	-	-	-
	b. Middle of W.C.	6	-	-	-	-
	c. Tail of W.C.	9	-	-	-	
	d. All places	23	-	-	-	-
II.	BARLEY					
	a. Head of W.C.	2	-	-	-	-
	b. Middle of W.C.	-	-		-	-
	c. Tail of W.C.	1	-	-	-	-
	d. All places	3	-	-	-	-
III.	BERSEEM					
	a. Head of W.C.	6	-	-	-	-
	b. Middle of W.C.	2	-	-	-	-
	c. Tail of W.C.	3	-	-	-	-
	d. All places	11	-	-	-	-
IV.	PEA					
	a. Head of W.C.	5	-	-	-	-
	b. Middle of W.C.	4	-	-	-	-
	c. Tail of W.C.	3	-	-	-	-
	d. All places	12	-	-	-	-
V.	SPINACH					
	a.Head of W.C.	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-
	d.All Places	-	-	-	-	-

Table-14

QUANTITY OF SEED USED BY SAMPLE FARMERS
IN SAMPLE WATER COURSE RD.70800

Sr. No.	Crop	Total Area (Hectare)	Head Quantity used			Middle Quantity used			Tail Quantity used			All Places Quantity used		
			Impr-oved	Local	Total	Impr-oved	Local	Total	Impr-oved	Local	Total	Impr-oved	Local	Total
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Wheat	18.16	-	770.00	770.00	-	368.5	368.5	-	556.5	556.5	-	1695.00	1695.0
2.	Barley	1.01	-	56.00	56.00	-	-	-	-	40.0	40.0	-	96.00	96.0
3.	Berseem	3.84	-	52.25	52.25	-	8.0	8.0	-	17.0	17.0	-	77.25	77.25
4.	P e a	3.73	-	102.00	102.00	-	42.0	42.0	-	54.0	54.0	-	198.00	198.00
5.	Spinach	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-15

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD.70800

Crop: Wheat Area: 18.16 ha. i) Head : 8.09 ha ii) Middle: 4.25 ha. iii) Tail: 5.82 ha.

Sr. No.	Physical Input	Head: Purchased Total	Head: Purchased Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (2+4) Total	Head: Total (2+4) Per Hect.	Middle: Purchased Total	Middle: Purchased Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (8+10) Total	Middle: Total (8+10) Per Hect.	Tail: Purchased Total	Tail: Purchased Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (14+16) Total	Tail: Total (14+16) Per Hect.	All Places: Purchased (2+8+14) Total	All Places: Purchased (2+8+14) Per Hect.	All Places: Self Suppl.ed (4+10+16) Total	All Places: Self Suppl.ed (4+10+16) Per Hect.	All Places: Total Total	All Places: Total Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Seed	659	81	1285	159	1944	240	191	45	778	183	969	228	554	95	973	167	1527	262	1404	77	3036	167	4440	244
2.	Farm Yard Manure	-	-	-	-	-	-	-	-	720	169	720	169	320	55	-	-	320	55	320	18	720	40	1040	57
3.	Chemical Fertilizer	3070	379	-	-	3070	379	1680	395	-	-	1680	395	2340	402	-	-	2340	402	7990	390	-	-	7090	390
4.	Insecticide/ Pesticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Water Charges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	Dues of Artisans	-	-	380	47	380	47	-	-	200	47	200	47	-	-	230	40	230	40	-	-	810	45	810	45
7.	Total	3729	461	1665	206	5394	667	1871	440	1698	400	3569	840	3214	552	1203	207	4417	759	8814	485	4566	251	13380	737

Table-16

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.70200

Crop: Wheat — Area: 18.16 ha. — i) Head : 9.09 ha. — ii) Middle: 4.25 ha. — iii) Tail: 5.82 ha.

Sr. No.	Operations	Labour inputs	Head: Paid Total	Head: Paid Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (3+5) Total	Head: Total (3+5) Per Hect.	Middle: Paid Total	Middle: Paid Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect.	Tail: Paid Total	Tail: Paid Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect.	All Places: Paid (3+9+15) Total	All Places: Paid Per Hect.	All Places: Self Suppl (5+11+17) Total	All Places: Self Suppl Per Hect.	All Places: Total (21+23) Total	All Places: Total Per Hect.
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	[illegible]	20	21	22	23	24	25	26
1. Ploughing		i.Manual	-	-	975	121	975	121	-	-	115	27	115	27	-		317	54	317	54	-	-	1407	77	1407	77
		ii.Animal	-	-	995	123	995	123	-	-	-	-	-	-	-	-	245	42	245	42	-	-	1240	68	1240	68
		iii.Machine	2825	349	-	-	2825	349	2100	494	-	-	2100	494	1600	275	-	-	[illegible]	275	6525	359	-	-	6525	359
		iv.Total	2825	349	1970	244	4795	590	2100	494	115	27	2215	521	1600	275	562	97	[illegible]	371	6525	359	2647	145	9172	505
2. Levelling		i.Manual	-	-	60	7	60	7	-	-		-	-	-		-	-		-	-	-	-	60	3	60	3
		ii.Animal	-	-	80	10	80	10	-	-	-	-	-	-	-	-	35	6	35	6	-	-	115	6	115	6
		iii.Machine	-	-	-		-		-	-			-	-		-	-				-	-	-		-	-
		iv.Total	-	-	140	17	140	17	-	-	-	-	-	-	-	-	35	6	35	6	-	-	175	9	175	9
3. Planking		i.Manual	-	-	62	9	62	8	-		3	1	3	1	-	-	30	5	30	5	-	-	95	5	95	5
		ii.Animal	-	-	80	10	80	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	80	4	80	4
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	142	18	142	18	-	-	3	1	3	1	-	-	30	5	30	5	-	-	175	10	175	10
4. Sowing		i.Manual	-	-	444	55	444	55	-	-	124	29	124	29	-	-	385	66	385	66	-	-	952	52	952	52
		ii.Animal	-	-	355	44	355	44	-	-	-	-	-	-	-		365	63	365	63	-	-	720	40	720	40
		iii.Machine	1100	136	-	-	1100	136	1175	276	-	-	1175	276	675	116	-	-	675	116	2950	162	-	-	2950	162
		iv.Total	1100	136	799	99	1899	235	1175	276	124	29	1299	306	675	116	750	129	1425	245	2950	162	1672	92	4622	255
5. Watering		i.Manual	-	-	254	31	254	31	-	-	72	17	72	71	-	-	78	13	78	13	-	-	403	22	403	22
6. F.Y.Manual		i.Manual	-	-	-	-	-	-	-	-	50	12	50	12	60	10	-	-	60	10.	60	3	50	3	110	6

(Contd....)

Table-16

LABOUR INPUT COST IN SAMPLE WATER COURSE RC.70800

Crop Wheat — Area: 19.16 ha. — i) Head : 3.09 ha. — ii) Middle: 4.25 ha. — iii) Tail: 5.82 ha.

Sr. No.	Operations	Self Labour Inputs	Head: Paid Total	Head: Paid Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (3+5) Total	Head: Total (3+5) Per Hect.	Middle: Paid Total	Middle: Paid Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect.	Tail: Paid Total	Tail: Paid Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect.	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect.	All Places: Self Supp: (5+11+17) Total	All Places: Self Supp: (5+11+17) Per Hect.	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
7. Chemical		i.Manual	-	-	87	11	87	11	-	-	52	12	52	12	-	-	49	8	49	8	-	-	188	10	188	10
8. Hoeing/Weed:		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9. Harvesting		i.Manual	90	11	2940	363	3030	375	330	79	1395	328	1792	406	90	15	1410	242	1500	258	510	23	5745	271	6255	344
10.Carriage to Threshing Yard		i.Manual	-	-	360	44	360	44	-	-	248	58	248	58	-	-	110	19	110	19	-	-	718	40	718	40
		ii.Animal	320	40	102	13	422	52	35	8	218	51	253	60	-	-	150	26	150	26	355	20	470	22	825	45
		iii.Machine	100	12	-	-	100	12	-	-		-	-	-	-	-		-	-	-	100	5	-	-	100	5
		iv.Total	420	52	462	57	882	109	35	8	466	110	501	118	-	-	260	45	260	45	200	26	1188	65	1643	90
11.Threshing/ Winnowing		i.Manual	-	-	600	74	600	74	-	-	405	95	405	95	-	-	290	50	290	50	-	-	1295	71	1295	71
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii.Machine	1700	210	-	-	1700	210	755	178	-	-	755	178	650	112	-	-	650	112	3105	171	-	-	3105	171
		iv.Total	1700	210	600	74	2300	284	755	173	405	95	1160	273	650	112	290	50	940	162	3105	171	1295	71	4400	242
12.Total		i.Manual	90	11	5781	715	5371	726	330	78	2462	579	2792	657	150	26	2669	459	2919	484	570	31	10912	601	11482	632
		ii.Animal	320	40	1612	199	1932	239	35	8	218	51	253	60	-	-	795	137	795	137	355	20	2625	145	2980	164
		iii.Machine	5725	708	-	-	5725	708	4030	948	-	-	4030	948	2925	503	-	-	2925	503	12630	698	-	-	12680	698
		iv.Total	6135	746	7393	914	13529	1672	4395	1034	2680	631	7075	1665	3075	528	3464	595	6539	1124	13605	749	13537	745	27142	1495

(Concluded)

Table-17

PHYSICAL INPUT COST IN SAMPLE WATER COURSE PD.708000

Crop: Barley Area: 1.01 ha i) Head : 0.61 ha ii) Middle : 0.00 ha iii) Tail: 0.40 ha

Sr. No.	Physical Input	Head: Purchased Total	Head: Purchased Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (2+4) Total	Head: Total (2+4) Per Hect.	Middle: Purchased Total	Middle: Purchased Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (8+10) Total	Middle: Total (8+10) Per Hect.	Tail: Purchased Total	Tail: Purchased Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (14+16) Total	Tail: Total (14+16) Per Hect.	All Places: Purchased (2+8+14) Total	All Places: Purchased (2+8+14) Per Hect.	All Places: Self Supplied (4+10+16) Total	All Places: Self Supplied (4+10+16) Per Hect.	All Places: Total Total	All Places: Total Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Seed	112	184	-	-	112	184	-	-	-	-	-	-	120	300	-	-	120	300	232	230	-	-	232	230
2.	Farm Yard Manure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.	Chemical Fertilizer	70	115	-	-	70	115	-	-	-	-	-	-	-	-	-	-	-	-	70	69	-	-	70	69
4.	Insecticide/ Pesticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Water Charges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	Dues of Artisans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Total	182	298	-	-	182	298	-	-	-	-	-	-	120	300	-	-	120	300	302	299	-	-	302	299

Table-18

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.70800

Crop : Barley Area: 1.01 Head : 0.61 ha ii) Middle: 0.00 ha iii) Tail: 0.30 ha

Sr. No.	Operations	Labour inputs	Head: Paid Total	Head: Paid Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (3+5) Total	Head: Total (3+5) Per Hect.	Middle: Paid Total	Middle: Paid Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect.	Tail: Paid Total	Tail: Paid Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect.	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect.	All Places: Self Supp. (5+11+17) Total	All Places: Self Supp. (5+11+17) Per Hect.	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Ploughing	i.Manual																									
	ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iii.Machine	150	246	-	-	150	246	-	-	-	-	-	-	100	250	-	-	100	250	250	248	-	-	250	248
	iv.Total	150	246		-	150	246	-	-	-	-	-	-	100	250	-	-	100	250	250	248	-	-	250	248
2. Leveling	i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3. Planking	i.Manual						-																		
	ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4. Sowing	i.Manual	-	-	12	19	12	19	-	-	-	-	-	-	-	-	6	15	6	15	-	-	18	18	18	18
	ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total	-	-	12	19	12	19	-	-	-	-	-	-	-	-	6	15	6	15	-	-	18	18	18	18
5. Watering	i.Manual	-	-	23	37	23	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23	23	23	23
6. F.Y.Manure	i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(Contd...)

Table-18

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.70900

Crop : Barley Area: 1.01 ha. i) Head : 0.61 ha ii) Middle : 0.00 ha iii) Tail: 0.40 ha

Sr. No.	Operations	Labour inputs	Head						Middle						Tail						All Places					
			Paid		Self Supplied		Total (3+5)		Paid		Self Supplied		Total (9+11)		Paid		Self Supplied		Total (15+17)		Paid (3+9+15)		Self Supp: (5+11+17)		Total (21+23)	
			Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
7. Chemical		i.Manual	-	-	12	19	12	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	12	12
8. Hoeing/Weed:		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9. Harvesting		i.Manual	-	-	240	393	240	393	-	-	-	-	-	-	-	-	240	600	240	600	-	-	480	475	480	475
10.Carriage to Threshing yard		i.Manual	-	-	15	25	15	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15	15	15	15
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	15	25	15	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15	15	15	15
11.Threshing/ Winnowing		i.Manual	-	-	150	246	150	246	-	-	-	-	-	-	-	-	30	75	30	75	-	-	180	178	180	178
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii.Machine	95	156	-	-	95	156	-	-	-	-	-	-	80	200	-	-	80	200	175	173	-	-	175	173
		iv.Total	95	156	150	246	245	402	-	-	-	-	-	-	80	200	30	75	110	275	175	173	180	178	355	351
12. Total		i.Manual	-	-	451	740	451	740	-	-	-	-	-	-	-	-	276	690	276	690	-	-	727	720	727	720
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii.Machine	245	402	-	-	245	402	-	-	-	-	-	-	180	450	-	-	180	450	425	421	-	-	425	421
		iv.Total	245	402	451	740	696	1141	-	-	-	-	-	-	180	450	276	690	456	1140	425	421	727	720	1152	1141

(Concluded)

Table-19

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD.70600

Crop: Berseem Area: 3.84 ha. i) Head : 2.33 ha. ii) Middle : 0.20 ha. iii) Tail: 0.81 ha.

Sr. No.	Physical Input	Head						Middle						Tail						All Places					
		Purchased		Self Supplied		Total (2+4)		Purchased		Self Supplied		Total (6+10)		Purchased		Self Supplied		Total (14+16)		Purchased (2+8+14)		Self Supplied (14+10+16)		Total	
		Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Seed	928	328	32	11	960	339	45	225	100	500	145	725	261	322	-	-	261	322	1234	321	132	34	1366	356
2.	Farm Yard Manure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.	Chemical Fertilizer	210	74	-	-	210	74	70	350	-	-	70	350	420	519	-	-	420	519	700	182	-	-	700	182
4.	Insecticide/ Pesticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Water Charges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	Dues of Artisans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Fuel Charge	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8.	Rent of crushing Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Total	1138	402	32	11	1170	414	115	575	100	500	215	1075	681	841	-	-	681	841	1934	504	132	34	2066	538

Table-20

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.70800

Crop : Berseem — Area: 3.94 ha. — i) Head : 2.83 ha. — ii) Middle: 0.20 ha. — iii) Tail: 0.91 ha.

Sr. No.	Operations	Labour Inputs	Head: Paid Total	Head: Paid Per Hect:	Head: Self Supplied Total	Head: Self Supplied Per Hect:	Head: Total (3+5) Total	Head: Total (3+5) Per Hect:	Middle: Paid Total	Middle: Paid Per Hect:	Middle: Self Supplied Total	Middle: Self Supplied Per Hect:	Middle: Total(9+11) Total	Middle: Total(9+11) Per Hect:	Tail: Paid Total	Tail: Paid Per Hect:	Tail: Self Supplied Total	Tail: Self Supplied Per Hect:	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect:	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect:	All Places: Self Supp: (5+11+17) Total	All Places: Self Supp: (5+11+17) Per Hect:	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Ploughing		i.Manual	-	-	214	76	214	76	-	-	60	300	60	300	-	-	40	49	40	49	-	-	314	82	314	82
		ii.Animal	-	-	200	71	200	71	-	-	70	350	70	350	-	-	40	49	40	49	-	-	310	81	310	81
		iii.Machine	850	300	-	-	850	300	-	-	-	-	-	-	200	247	-	-	200	247	1050	273	-	-	1050	273
		iv.Total	850	300	414	146	1264	447	-	-	130	650	130	650	200	247	81	99	280	346	1050	273	624	162	1674	436
2. Leveling		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3. Planking		i.Manual	-	-	15	5	15	5	-	-	9	38	9	38	-	-	3	4	3	4	-	-	26	7	26	7
		ii.Animal	-	-	20	7	20	7	-	-	9	44	9	44	5	6	-	-	5	6	5	1	29	7	34	9
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	35	12	35	12	-	-	18	81	18	81	5	6	3	4	8	10	5	1	55	14	59	15
4. Sowing		i.Manual	-	-	113	40	113	40	-	-	45	225	45	225	-	-	55	68	55	68	-	-	213	55	213	55
		ii.Animal	-	-	38	13	38	13	-	-	35	175	35	175	40	49	-	-	40	49	40	10	73	19	113	29
		iii.Machine	788	278	-	-	788	278	-	-	-	-	-	-	200	247	-	-	200	247	988	257	-	-	988	257
		iv.Total	788	278	151	53	938	331	-	-	80	400	80	400	240	296	55	68	295	364	1028	268	286	74	1313	342
5. Watering		i.Manual	-	-	154	54	154	54	-	-	15	75	15	75	-	-	23	28	23	28	-	-	192	50	192	50
6. F.Y.Manure		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(Contd...)

Table-20

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.70800

Crop : Berseem Area: 3.84 ha. i) Head : 2.83 ha. ii) Middle : 0.20 ha. iii) Tail: 0.81 ha.

Sr. No.	Operations	Labour Inputs	Head: Paid Total	Head: Paid Per Hect:	Head: Self Supplied Total	Head: Self Supplied Per Hect:	Head: Total (3+5) Total	Head: Total (3+5) Per Hect:	Middle: Paid Total	Middle: Paid Per Hect:	Middle: Self Supplied Total	Middle: Self Supplied Per Hect:	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect:	Tail: Paid Total	Tail: Paid Per Hect:	Tail: Self Supplied Total	Tail: Self Supplied Per Hect:	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect:	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect:	All Places: Self Supp: (5+11+17) Total	All Places: Self Supp: (5+11+17) Per Hect:	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
7. Chemical		i.Manual	-	-	5	2	5	2	-	-	2	2	2	2	-	-	11	14	11	14	-	-	18	5	18	5
8. Hoeing/Weed:		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9. Harvesting		i.Manual	360	127	1530	541	1890	668	-	-	180	900	180	900	-	-	280	346	280	346	360	94	1890	518	2350	612
10.Carriage to Threshing yard		i.Manual	-	-	960	339	960	339	-	-	600	300	60	300	-	-	140	173	140	173	-	-	1160	302	1160	302
		ii.Animal	-	-	1[illegible]	392	1[illegible]	392	-	-	70	350	70	350	-	-	165	204	165	204	-	-	1345	350	1345	350
		iii.Machine	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	207[illegible]	731	2[illegible]70	731	-	-	130	650	130	650	-	-	305	377	305	377	-	-	2505	652	2505	652
11.Threshing/ Winnowing		i.Manual	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii.Animal	-	-	-	-	-	-	-		-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12. Total		i.Manual	360	127	2990	1057	3350	1184	-	-	369	1846	369	1846	-	-	552	681	552	681	360	94	3911	1019	4271	1112
		ii.Animal	-	-	13[illegible]3	483	1368	483	-	-	184	919	184	919	45	56	205	253	250	309	45	12	1757	457	1802	469
		iii.Machine	1638	579	-	-	1638	579	-	-	-	-	-	-	400	494	-	-	400	494	2038	531	-	-	2038	531
		iv.Total	1998	706	4358	1540	6356	2246	-	-	553	2765	553	2765	445	549	757	935	1202	1484	2443	636	5668	1476	8111	2112

(Concluded)

Table-21

PHYSICAL INPUT COST IN SAMPLE WATER COURSE NO.70800

Crop: Pea Area: 3.73 ha. (i) Head : 2.32 ha. (ii) Middle : 0.40 ha. (iii) Tail: 1.01 ha.

Sr. No.	Physical Input	Head						Middle						Tail						All Places					
		Purchased		Self Supplied		Total (2+4)		Purchased		Self Supplied		Total (8+10)		Purchased		Self Supplied		Total (14+16)		Purchased (2+8+14)		Self Supplied (4+10+16)		Total	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Seed	3300	1422	1600	690	4900	2112	1620	4050	600	1500	2220	5550	2700	2673	-	-	2700	2673	7620	2043	2200	590	9820	2633
2.	Farm Yard Manure	530	228	360	155	890	384	-	-	200	500	200	500	480	475	-	-	480	475	1010	271	560	150	1570	421
3.	Chemical Fertilizer	685	295	-	-	685	295	140	350	-	-	140	350	210	208	-	-	210	208	1035	277	-	-	1035	277
4.	Insecticide/ Pesticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Water Charges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	Dues of Artisans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Fuel Charge	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8.	Rent of crushing Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Total	4515	1946	1960	845	6475	2791	1760	4400	800	2000	2560	6400	3390	3356	-	-	3390	3356	9665	2591	2760	740	12425	3331

Table-22

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.70800

Crop: Pea | Area: 3.73 ha. | ii) Head : 2.22 ha. | iii Middle: 0.40 ha. | Tail: 1.01 ha.

Sr. No.	Operations	Labour Inputs	Head: Paid Total	Head: Paid Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (3+5) Total	Head: Total (3+5) Per Hect.	Middle: Paid Total	Middle: Paid Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect.	Tail: Paid Total	Tail: Paid Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect.	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect.	All Places: Self Supp: (5+11+17) Total	All Places: Self Supp: (5+11+17) Per Hect.	All Places: Total 21+23) Total	All Places: Total 21+23) Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Ploughing	i.Manual		-	-	38	16	38	16	-	-	14	36	14	36	-	-	61	60	61	60	-	-	113	30	113	30
	ii.Animal		-	-	-	-	-	-	-	-	-	-	-	-	-	-	75	74	75	74	-	-	75	20	75	20
	iii.Machine		1000	431	-	-	1000	431	150	375	-	-	150	375	300	297	-	-	300	297	1450	389	-	-	1450	389
	iv.Total		1000	431	38	16	1038	447	150	375	14	36	164	411	300	297	136	134	436	431	1450	389	188	50	1638	439
2. Leveling	i.Manual		-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	7	8	7	-	-	8	2	8	2
	ii.Animal		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iii.Machine		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total		-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	7	8	7	-	-	8	2	8	2
3. Planking	i.Manual		-	-	-	-	-	-	-	-	4	10	4	10	-	-	-	-	-	-	-	-	4	1	4	1
	ii.Animal		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iii.Machine		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total		-	-	-	-	-	-	-	-	4	10	4	10	-	-	-	-	-	-	-	-	4	1	4	1
4. Sowing	i.Manual		360	155	600	259	960	414	-	-	140	350	140	350	-	-	390	386	390	386	360	97	1130	303	1490	399
	ii.Animal		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iii.Machine		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total		360	155	600	259	960	414	-	-	140	350	140	350	-	-	390	386	390	386	360	97	1130	303	1490	399
5. Watering	i.Manual		-	-	151	65	151	65	-	-	48	119	48	119	-	-	90	89	90	89	-	-	238	77	288	77
6. F.Y.Manure	i.Manual		-	-	25	11	25	11	-	-	43	106	43	106	-	-	90	89	90	89	-	-	158	42	158	42

(Contd...)

Table-22

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.70800

Crop: Pea			Area: 3.73 ha.								i) Head : 2.32 ha.						ii) Middle : 0.40 ha.				Tail: 1.01 ha.					
			Head						Middle						Tail						All Places					
Sr. No.	Operations	Labour Inputs	Paid		Self Supplied		Total (3+5)		Paid		Self Supplied		Total (9+11)		Paid		Self Supplied		Total (15+17)		Paid (3+9+15)		Self Supp: (5+11+17)		Total (21+23)	
			Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
7. Chemical		i.Manual	-	-	48	21	48	21	-	-	-	-	-	-	-	-	8	8	8	8	-	-	56	15	56	15
8. Hoeing/Weed:		i.Manual	-	-	1620	698	1620	698	-	-	120	300	120	300	-	-	90	376	390	376	-	-	2120	568	2120	568
9. Harvesting		i.Manual	240	103	1545	666	1785	769	-	-	480	1200	480	1200	-	-	1440	1277	1290	1277	240	64	3315	889	3555	953
10.Carriage to Threshing yard		i.Manual	-	-	270	116	270	116	-	-	25	63	25	63	-	-	78	77	78	77	-	-	373	100	373	100
		ii.Animal	20	9	30	13	50	22	-	-	-	-	-	-	-	-	105	104	105	104	20	5	135	36	155	42
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	20	9	300	129	320	138	-	-	25	63	25	63	-	-	183	181	183	181	20	5	508	136	528	141
11.Threshing/ Winnowing		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12. Total		i.Manual	600	259	4297	1852	4897	2111	-	-	973	2184	973	2184	-	-	2393	2370	2393	2370	600	161	7563	2028	8163	2188
		ii.Animal	20	9	30	13	50	22	-	-	-	-	-	-	-	-	180	178	180	178	20	5	210	56	210	56
		iii.Machine	1000	431	-	-	1000	431	150	375	-	-	150	375	300	297	-	-	300	297	1450	389	-	-	1450	389
		iv.Total	1620	698	4327	1865	5947	2563	150	375	873	2184	1023	2559	300	297	2573	2548	2873	2845	2070	555	7773	2084	9843	2639

(Concluded)

Table-23

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD.70800
(SPINACH)

(NOT APPLICABLE)

Table-24

LABOUR INPUT COST IN SAMPLE WATER COURSE RD. 70800
(SPINACH)

(NOT APPLICABLE)

Table-25

PRODUCTION COST AND PROFIT IN SAMPLE WATER COURSE RD.70800

Sr. No.	Crops	Location	Area (Hectare)	Total Output: Main Product (Mds)	Total Output: By-product Unit	Total Output: By-product Total Output	Market Price per unit (ex-farm): MP	Market Price per unit (ex-farm): BP	Total value of output: MP	Total value of output: BP	Total value of output: Total	Value per hectare: MP	Value per hectare: BP	Value per hectare: Total	Total Farming cost: Physical inputs	Total Farming cost: Labour cost	Total Farming cost: Total	Cost per hectare	Profit/loss (+) (-): Total	Profit/loss (+) (-): Per hectare	Total Imputed costs: Physical input	Total Imputed costs: Labour	Total Imputed costs: Total	Carry home Income col.19+23: Total	Carry home Income col.19+23: Per hectare
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1. Wheat	Head		3.09	171.30	Mds	358	100	22	17130	11456	28586	5117	1416	3533	5394	13528	[illegible]	2339	5624	1195	-	7393	7393	17057	2108
	Middle		4.25	72.50	Md	140	100	24	7250	2560	10710	1706	791	2520	2569	7075	[illegible]	2504	52	15	-	2680	2680	2746	646
	Tail		5.82	70.05	Mds	146	100	31	7005	4526	11531	1204	778	1981	4417	6539	[illegible]	1882	575	99	-	3454	3454	4039	694
	A.Places		13.16	314.85	Mds	644	100		31485	19542	51027	2394	1485	3879	12380	27142	[illegible]	2331	10315	567	-	13527	13527	23842	1313
2. Barley	Head		0.61	9.00	Mds	18	80	25	720	450	1170	1180	738	1918	182	676	878	1439	322	479	-	451	451	903	1218
	Middle		-	-	Mds	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tail		0.40	5.50	Mds	11	80	25	440	275	715	1100	688	1788	120	456	576	1440	139	348	-	276	276	415	1038
	A.Places		1.01	14.50		29	80	25	1160	725	1885	1149	718	1866	302	1132	1434	1440	431	427	-	727	727	1158	1147
3. Berseem	Head		2.83	Hects	Rs	-	4311	-	12200	-	12200	4311	-	4311	1170	6355	7525	2659	4675	1652	-	4358	4358	9033	3192
	Middle		0.20	Hects	Rs	-	6030	-	1200	-	1200	6030	-	215	553	768	768	3840	432	2160	-	553	553	995	4925
	Tail		0.31	Hects	Rs	-	1543	-	1250	-	1250	1543	-	1543	681	1282	1963	2325	-633	-781	-	757	757	124	153
	A.Places		3.34	Hects	Rs	-	3815	-	14650	-	14650	3815	-	3815	2366	8110	10476	2650	4474	1165	-	5668	5668	10142	2641
4. Pea	Head		2.32	67.00	-	-	167	-	11523	-	11523	4967	-	4967	6475	5947	12422	5354	-899	-388	-	4327	4327	2428	1476
	Middle		0.40	16.50	-	-	140	-	2310	-	2310	5775	-	5775	2560	1023	3583	8958	-1272	-3183	-	873	873	-400	-1000
	Tail		1.01	40.00	-	-	153	-	6120	-	6120	6059	-	6059	3390	2873	6263	6201	-143	-142	-	2573	2573	2430	2406
	A.Places		3.73	125.50	-	-	154	-	19953	-	19953	5349	-	5349	12425	9843	22268	5970	-2315	-621	-	7773	7773	5458	1463
5. Spinach	Head		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Middle		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tail		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	A.Places		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-26

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF WHEAT IN SAMPLE WATER COURSE RD.70800

Sr. No.	Operations	Head (Area sown: 8.09)						Middle (Area sown: 4.25)						Tail (Area sown: 5.82)						All Places (Area sown: 18.16)					
		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours	
		Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Ploughing	32.50	4.02	25.00	3.09	56.50	6.98	5.13	1.21	-	-	38.50	4.06	10.97	1.87	7.00	1.20	32.00	5.50	48.50	2.67	32.00	1.76	127.00	6.99
2.	Levelling	2.00	0.25	2.00	0.25	-	-	-	-	-	-	-	-	-	-	1.00	0.17	-	-	2.00	0.11	3.00	0.17	-	-
3.	Planking	2.08	0.25	2.00	0.25	-	-	0.13	0.03	-	-	-	-	1.00	0.17	-	-	-	-	3.17	0.18	2.00	0.11	-	-
4.	Sowing	15.25	1.89	9.00	1.11	31.00	3.83	4.51	1.06	-	-	20.50	4.82	10.55	1.31	10.00	1.72	13.50	2.32	30.31	1.67	19.00	1.05	65.00	3.58
5.	Watering	9.03	1.12	-	-	-	-	2.56	0.60	-	-	-	-	3.50	0.60	-	-	-	-	15.09	0.83	-	-	-	-
6.	F.Y.Manure	2.00	0.25	-	-	-	-	2.00	0.47	-	-	-	-	-	-	-	-	-	-	4.00	0.22	-	-	-	-
7.	Che:Fertilizer	3.15	0.39	-	-	-	-	1.91	0.45	-	-	-	-	1.77	0.30	-	-	-	-	6.83	0.38	-	-	-	-
8.	Hoeing/Weeding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Harvesting	101.00	12.48	-	-	-	-	57.50	13.53	-	-	-	-	50.00	8.59	-	-	-	-	208.50	11.48	-	-	-	-
10.	Carriage to Threshing	12.00	1.48	11.50	1.42	-	-	8.25	1.94	8.25	1.94	-	-	4.00	0.69	4.00	0.69	-	-	24.25	1.34	23.75	1.31	-	-
11.	Threshing/ Winnowing	21.00	2.60	-	-	-	-	14.50	3.41	-	-	-	-	10.00	1.72	-	-	-	-	45.50	2.51	-	-	-	-
12.	Total	199.99	24.72	49.50	6.12	87.50	10.82	96.49	22.70	8.25	1.94	59.00	13.88	91.69	15.75	22.00	3.78	45.50	7.82	338.17	21.38	79.75	4.39	192.00	10.57

Table-27

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF BARLEY IN SAMPLE WATER COURSE RD.70800

Sr. No.	Operations	Head (Area sown: 0.61)						Middle (Area sown: 0.01)						Tail (Area sown: 0.40)						All Places (Area sown: 1.01)					
		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours	
		Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Ploughing	-	-	-	-	3.00	4.92	-	-	-	-	-	-	-	-	-	-	2.00	5.00	-	-	-	-	-	-
2.	Levelling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.	Planking	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4.	Sowing	0.39	0.64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.39	0.38	-	-	-	-
5.	Watering	0.76	1.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.76	0.75	-	-	-	-
6.	F.Y.Manure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Chem.Fertilizer	0.39	0.64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.39	0.39	-	-	-	-
8.	Hoeing/Weeding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Harvesting	8.00	13.11	-	-	-	-	-	-	-	-	-	-	8.00	20.00	-	-	-	-	16.00	15.84	-	-	-	-
10.	Carriage to threshing	0.50	0.82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.50	0.50	-	-	-	-
11.	Threshing/ Winnowing	5.00	8.20	-	-	1.00	1.64	-	-	-	-	-	-	1.00	2.50	-	-	-	-	-	-	-	-	-	-
12.	Total	15.04	24.66	-	-	4.00	6.56	-	-	-	-	-	-	9.20	23.00	-	-	3.00	7.50	24.24	24.00	-	-	7.00	6.93

Table-28

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF BERSEEM IN SAMPLE WATER COURSE RD.70800

Sr. No.	Operations	Head (Area sown: 0.56)						Middle (Area sown: 0.20)						Tail (Area sown: 0.21)						All Places (Area sown: 3.84)					
		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Ploughing	7.13	2.52	5.00	1.77	17.00	6.01	2.00	10.00	2.00	10.00	-	-	1.50	1.35	1.00	1.23	4.00	4.94	10.63	2.77	9.00	2.08	21.00	5.47
2.	Levelling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.	Planking	0.75	0.27	0.50	0.18	-	-	0.25	1.25	0.25	1.25	-	-	0.13	0.16	0.13	0.16	-	-	1.13	0.29	0.88	0.23	-	-
4.	Sowing	3.25	1.15	1.63	0.58	15.75	5.57	1.25	6.25	1.00	5.00	-	-	2.00	2.47	1.00	1.23	4.00	4.94	6.50	1.69	2.63	0.68	19.75	5.14
5.	Watering	5.13	1.81	-	-	-	-	0.50	2.50	-	-	-	-	0.75	0.94	-	-	-	-	6.39	1.66	-	-	-	-
6.	F.Y.Manure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Chem.Fertilizer	0.32	0.11	-	-	-	-	0.06	0.30	-	-	-	-	0.38	0.47	-	-	-	-	0.76	0.20	-	-	-	-
8.	Hoeing/Weeding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Harvesting	63.00	22.26	-	-	-	-	6.00	30.00	-	-	-	-	10.00	12.35	-	-	-	-	79.00	20.57	-	-	-	-
10.	Carriage to threshing	32.00	11.31	35.00	12.72	-	-	2.00	10.00	2.00	10.00	-	-	5.00	6.17	5.00	6.17	-	-	39.00	10.16	43.00	11.20	-	-
11.	Threshing/ Winnowing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12.	Total	111.58	39.43	42.13	14.89	32.75	11.57	12.06	60.30	5.25	26.25	-	-	19.77	24.41	7.13	9.80	8.00	9.88	143.41	37.35	54.51	14.20	40.75	10.61

Table-29

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF PEA IN SAMPLE WATER COURSE RD.70800

Sr. No.	Operations	Head (Area sown: 2.32)						Middle (Area sown: 0.40)						Tail (Area sown: 1.01)						All Places (Area sown: 3.73)					
		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours	
		Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Ploughing	1.39	0.60	-	-	20.00	8.62	0.52	1.30		-	3.00	7.50	2.54	2.51		-	6.00	5.94	4.45	1.19	-	-	29.00	7.77
2.	Levelling	-	-	-	-	-	-	-	-	-	-	-	-	0.25	0.25	-	-	-	-	0.25	0.07	-	-	-	-
3.	Planking	-	-	-	-	-	-	0.13	0.32	-	-	-	-	-	-	-	-	-	-	0.13	0.03	-	-	-	-
4.	Sowing	32.00	13.79	-	-	-	-	5.00	12.50	-	-	-	-	15.00	14.85	-	-	-	-	52.00	13.94	-	-	-	-
5.	Watering	5.29	2.28	-	-	-	-	1.59	3.93	-	-	-	-	3.42	3.39	-	-	-	-	10.30	2.76	-	-	-	-
6.	F.Y.Manure	3.30	1.42	-	-	-	-	1.53	3.75	-	-	-	-	3.00	2.97	-	-	-	-	7.30	2.09	-	-	-	-
7.	Che:Fertilizer	1.61	0.69	-	-	-	-	-	-	-	-	-	-	0.26	0.26	-	-	-	-	1.87	0.50	-	-	-	-
8.	Hoeing/Weeding	70.00	30.17	-	-	-	-	4.00	10.00	-	-	-	-	14.00	13.86	-	-	-	-	88.00	23.59	-	-	-	-
9.	Harvesting	55.50	23.92	-	-	-	-	36.00	90.00	-	-	-	-	54.00	53.47	-	-	-	-	145.50	39.01	-	-	-	-
10.	Carriage to threshing	9.00	3.88	1.00	0.43	-	-	1.00	2.50	-	-	-	-	3.50	3.47	3.50	3.47	-	-	13.50	3.62	4.50	1.21	-	-
11.	Threshing/ Winnowing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12.	Total	178.09	76.75	1.00	0.43	20.00	8.62	49.74	124.35	-	-	3.00	7.50	95.97	95.02	3.50	3.47	6.00	5.94	323.80	86.81	4.50	1.21	29.00	7.77

Table-30

MANUAL ·ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF SPINACH IN SAMPLE WATER COURSE RD.70800

(NOT APPLICABLE)

STATISTICAL TABLES OF SAMPLE WATER COURSE RD. 115806

719a

APPENDICES OF SCHEDULE-I

NO.	T I T L E	PAGE NO
1.	TENURE STATUS OF SAMPLE FARMERS IN SAMPLE WATER COURSE RD. 115806	727
2.	LITERACY STATUS OF SAMPLE FARMERS IN SAMPLE WATER COURSE RD.115806	727
3.	LEVEL OF EDUCATION OF THE SAMPLE FARMERS IN RD.115806	728
4.	HOUSEHOLD SIZE IN SAMPLE WATER COURSE RD.115806	729
5	HOUSEHOLD SIZE AND COMPOSITION IN SAMPLE WATER COURSE RD.115806	729
6.	LITERACY AND ACTIVITY STATUS OF THE SAMPLE POPULATION IN SAMPLE WATER COURSE RD.115806	730
7.	DISTRIBUTION OF WORKING MEMBERS BY OCCUPATION IN SAMPLE WATER COURSE RD 115806	730
8.	PLACE OF WORK IN SAMPLE WATER COURSE RD 115806	731
9	MONTHLY INCOME (OTHER THAN FARMING) IN SAMPLE WATER COURSE RD.115806	732
10.	LAND HOLDINGS OF SAMPLE HOUSEHOLDS OF SAMPLE WATER COURSE RD. 115806	733
11.	AREA RENTED IN/OUT ON CASH/BATAI IN SAMPLE WATER COURSE RD.115806	734
12.	LAND USE IN SAMPLE WATER COURSE RD.115806	734
13.	IRRIGATED AREA BY MEAN OF IRRIGATION IN SAMPLE WATER COURSE RD.115806	735
14	NUMBER OF TUBEWELLS IN SAMPLE WATER COURSE RD.115806	735
15.	SOURCES OF FINANCE OF TUBEWELL IN SAMPLE WATER COURSE RD.115806	736

NO.	T I T L E	PAGE NO
16.	NUMBER OF WATER TURNS (WARABANDI) PER FIELD IN SAMPLE WATER COURSE RD.115806	736
17.	TIME PER TURN OF WATER SUPPLY (WARABANDI) IN SAMPLE WATER COURSE RD.115806	737
18.	NUMBER OF WARABANDI LOST DURING KHARIF 1987 IN SAMPLE WATER COURSE RD.115806	738
19.	REASON FOR LOSS OF WATER TURN IN SAMPLE WATER COURSE RD.115806	738
20.	INCIDENCE OF EXCHANGE OF WATER WITH OTHER FARMERS IN SAMPLE WATER COURSE RD. 115806	738
21.	NUMBER OF TIMES WATER WAS EXCHANGED DURING KHARIF 1987 IN SAMPLE WATER COURSE RD.115806	739
22.	FREE WATER FOR IRRIGATION OTHER THAN ON EXCHANGE IN SAMPLE WATER COURSE RD.115806	739
23.	TAMPERING OF WATER IN SAMPLE WATER COURSE RD.115806	740
24.	DE-SILTING OF WATER COURSE IN A YEAR IN SAMPLE WATER COURSE RD.1158067	740
25.	WHEN WAS THE WATER COURSE DE-SILTED LAST IN SAMPLE WATER COURSE RD.1158067	741
26.	CANAL WATER PROBLEMS IN SAMPLE WATER COURSE RD.115806	742
27.	MANAGEMENT OF DE-SILTATION OF WATER COURSE: ARE THE FARMERS SATISFIED WITH THE EXISTING ARRANGEMENTS IN SAMPLE WATER COURSE RD.1158067	743
28.	INCIDENCE OF INDEBTEDNESS IN SAMPLE WATER COURSE RD.115806	743
29.	AMOUNT BORROWED BY SOURCE DURING THE TWELVE MONTH IN SAMPLE WATER COURSE RD.115806	744
30.	UTILIZATION OF LOAN IN SAMPLE WATER COURSE RD.115806	745
31.	ANY IMPROVEMENT ON FARM CONTEMPLATED BY THE SAMPLE FARMERS IF THEY COULD GET ADEQUATE LOAN IN SAMPLE WATER COURSE RD.115806	745

NO.	T I T L E	PAGE NO
32.	USE OF SELECTED FARM INPUTS AND SOURCE OF SUPPLY IN SAMPLE WATER COURSE RD.115806	746
33.	USE OF IMPROVED SEED IN SAMPLE WATER COURSE RD.115806	747
34.	INPUTS IN THE SUPPLY OF WHICH PROBLEMS HAVE BEEN REPORTED BY FARMERS IN SAMPLE WATER COURSE RD.115806	750
35.	SOURCE OF AGRICULTURAL INFORMATION OF SAMPLE FARMERS IN RD.115806	751
36.	MEMBERSHIP OF SOCIETIES/ASSOCIATION ETC. IN SAMPLE WATER COURSE RD.115806	752
37.	USE OF TRACTORS BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD. 115806	753
38.	USE OF THRASHER BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD. 115806	753

APPENDICES OF SCHEDULE-II (UHARIE)

1.	AREA AND PRODUCTION OF FRUITS CULTIVATED BY SAMPLE HOUSEHOLDS IN SAMPLE WATER COURSE RD.115806	754
2.	AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS OUTSIDE IN SAMPLE WATER COURSE RD.115806	755
3.	DISPOSAL OF MAIN PRODUCTS OTHER THAN SUGARCANE IN SAMPLE WATER COURSE RD.115806	756
4.	DISPOSAL OF BY-PRODUCTS IN SAMPLE WATER COURSE RD. 115806	757
5.	MODE OF SALE OF MAIZE IN SAMPLE WATER COURSE RD. 115806	758
6.	MODE OF SALE OF SORGHUM IN SAMPLE WATER COURSE RD. 115806	758

NO.	T I T L E	PAGE NO
7.	MODE OF SALE OF PIGEON PEA IN SAMPLE WATER COURSE RD. 115806	758
8.	UTILIZATION OF SUGARCANE IN SAMPLE WATER COURSE RD.115806	759
9.	UTILIZATION OF GUR PRODUCED BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD. 115806	759
10.	NUMBER OF FARMERS REPORTING CONSUMPTION OF CHEMICAL FERTILIZERS IN SAMPLE WATER COURSE RD. 115806	760
11.	QUANTITY OF CHEMICAL FERTILIZERS USED BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD. 115806	761
12.	CONSUMPTION OF FARM YARD MANURE IN SAMPLE WATER COURSE RD. 115806	762
13.	NUMBER OF SAMPLE FARMERS WHO USED INSECTICIDES/PESTICIDES/WEEDICIDES IN SAMPLE WATER COURSE RD.115806	762
14.	QUANTITY OF SEED USED BY SAMPLE FARMERS IN SAMPLE WATERCOURSE RD.115806	763
15.	PHYSICAL INPUT COST OF MAIZE IN SAMPLE WATER COURSE RD.115806	764
16.	LABOUR INPUT COST OF MAIZE IN SAMPLE WATER COURSE RD.115806	765
17.	PHYSICAL INPUT COST OF SORGHUM IN SAMPLE WATER COURSE RD.115806	767
18.	LABOUR INPUT COST OF SORGHUM IN SAMPLE WATER COURSE RD.115806	768
19.	PHYSICAL INPUT COST OF SUGARCANE IN SAMPLE WATER COURSE RD.115806	770
20.	LABOUR INPUT COST OF SUGARCANE IN SAMPLE WATER COURSE RD.115806	771
21.	PHYSICAL INPUT COST OF PIGEON PEA IN SAMPLE WATER COURSE RD.115806	773

NO.	T I T L E	PAGE NO
22.	LABOUR INPUT COST OF PIGEON PEA IN SAMPLE WATER COURSE RD.115806	773
23.	PRODUCTION COST AND PROFIT IN SAMPLE WATER COURSE RD.115806	774
24.	CROPPING PATTERN ON SAMPLE FARMS IN SAMPLE WATER COURSE RD.115806	775
25.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF MAIZE IN SAMPLE WATER COURSE RD.115806	776
26.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF SORGHUM IN SAMPLE WATER COURSE RD.115806	777
27.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF SUGARCANE IN SAMPLE WATER COURSE RD.115806	778
28.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF PIGEON PEA IN SAMPLE WATER COURSE RD.115806	779
29.	NUMBER OF FRUIT PLANTS, TREES AND FRUIT PRODUCTION IN SAMPLE WATER COURSE RD.115806	780
30.	LIVESTOCK HOLDINGS OF SAMPLE HOUSEHOLDS IN SAMPLE WATER COURSE RD.115806	784
31.	MILK PRODUCTION AND UTILIZATION IN SAMPLE WATER COURSE RD. 115806	788
32.	INCOME FROM SALE OF DAIRY PRODUCTS (OTHER THAN MILK) DURING SIX MONTHS PROCEEDING INTERVIEW OF SAMPLE HOUSEHOLDS IN KHARIF 1987 IN SAMPLE WATER COURSE RD.115806	790
33.	INCOME FROM HIRING OUT OF LIVESTOCK IN SAMPLE WATER COURSE RD. 115806	790
34.	INCOME FROM SELECTED SOURCES DURING SIX MONTHS BEFORE INTERVIEW IN KHARIF 1987 IN SAMPLE WATER COURSE RD. 115806	791
35.	PERMANENT LABOUR ON FARM IN SAMPLE WATER COURSE RD.115806	791

APPENDICES OF SCHEDULE-II (RABI)

NO.	T I T L E	PAGE NO
1.	AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS IN SAMPLE WATERCOURSE RD.115806	792
2.	AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS OUTSIDE SAMPLE WATERCOURSE RD.115806	793
3.	DISPOSAL OF MAIN PRODUCTS IN SAMPLE WATER COURSE RD.115806	794
4.	DISPOSAL OF BY-PRODUCTS IN SAMPLE WATER COURSE RD.115806	794
5.	MODE OF SALE OF WHEAT IN SAMPLE WATER COURSE RD.115806	798
6.	MODE OF SALE OF BARLEY IN SAMPLE WATER COURSE RD.115806	799
7.	MODE OF SALE OF BERSEEM IN SAMPLE WATER COURSE RD.115806	799
8.	MODE OF SALE OF PEA IN SAMPLE WATER COURSE RD.115806	[illegible]
9.	MODE OF SALE OF SPINACH IN SAMPLE WATER COURSE RD.115806	799
10.	NUMBER OF FARMERS REPORTING CONSUMPTION OF CHEMICAL FERTILIZERS IN SAMPLE WATER COURSE RD.115806	800
11.	QUANTITY OF CHEMICAL FERTILIZERS USED BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD.115806	801
12.	CONSUMPTION OF FARM YARD MANURE IN SAMPLE WATER COURSE RD.115806	802
13.	NUMBER OF SAMPLE FARMERS WHO USED INSECTICIDES/PESTICIDES/WEEDICIDES IN SAMPLE WATER COURSE RD.115806	802
14.	QUANTITY OF SEED USED BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD.115806	803

T I T L E	PAGE NO
PHYSICAL INPUT COST OF WHEAT IN SAMPLE WATER COURSE RD.115806	804
LABOUR INPUT COST OF WHEAT IN SAMPLE WATER COURSE RD.115806	805
PHYSICAL INPUT COST OF BARLEY IN SAMPLE WATER COURSE RD.115806	807
LABOUR INPUT COST OF BARLEY IN SAMPLE WATER COURSE RD.115806	808
PHYSICAL INPUT COST OF BERSEEM IN SAMPLE WATER COURSE RD.115806	810
LABOUR INPUT COST OF BERSEEM IN SAMPLE WATER COURSE RD.115806	811
PHYSICAL INPUT COST OF PEA IN SAMPLE WATER COURSE RD.115806	813
LABOUR INPUT COST OF PEA IN SAMPLE WATER COURSE RD. 115806	813
PHYSICAL INPUT COST OF SPINACH IN SAMPLE WATER COURSE RD.115806	813
LABOUR INPUT COST OF SPINACH IN SAMPLE WATER COURSE RD. 115806	813
PRODUCTION COST AND PROFIT IN SAMPLE WATER COURSE RD.115806	814
MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF WHEAT IN SAMPLE WATER COURSE RD. 115806	815
MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF BARLEY IN SAMPLE WATER COURSE RD. 115806	816
MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF BERSEEM IN SAMPLE WATER COURSE RD. 115806	817
MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF PEA IN SAMPLE WATER COURSE RD. 115806	818
MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF SPINACH IN SAMPLE WATER COURSE RD. 115806	818

Table-1

TENURE STATUS OF SAMPLE FARMERS IN
SAMPLE WATER COURSE RD. 115806

Sr. No.	Location	Tenure Status: Owner No.	Owner %	Owner cum tenant No	Owner cum tenant %	Tenant No.	Tenant %	Total Farmers No=100
0	1	2	3	4	5	6	7	8
1.	Head of W.C.	10	100	-	-	-	-	10
2.	Middle of W.C.	9	90	1	10	-	-	10
3.	Tail of W.C.	9	90	1	10	-	-	10
4.	Total	28	93	2	07	-	-	30

W.C.= Water Course

Table-2

LITERACY STATUS OF SAMPLE FARMERS
IN SAMPLE WATER COURSE RD.115806

Sr. No.	Location	Literate No.	Literate %	Illiterate No.	Illiterate %	Total No (=100)
0	1	2	3	4	5	6
1.	Head of Water Course	-	-	10	100	10
2.	Middle of Water Course	-	-	10	100	10
3.	Tail of Water Course	1	10	9	90	10
4.	T o t a l :-	1	3	29	97	30

Table-3

LEVEL OF EDUCATION OF THE SAMPLE FARMERS IN SAMPLE WATER COURSE RD. 115806

Sr. No.	Level of Education	Location: Head of W.C		Middle of W.C		Tail of W.C		Total (No.=100)
		No.	%	No.	%	No.	%	
0.	1	2	3	4	5	6	7	8
1.	Class 1-5	-	-	-	-	-	-	-
2.	Class 6-9	-	-	-	-	-	-	-
3.	Matric	-	-	-	-	1	100	1
4.	Intermediate	-	-	-	-	-	-	-
5.	Graduate	-	-	-	-	-		
6.	MA/M.Sc	-	-	-	-	-	-	-
7.	MBBS	-	-	-	-	-	-	-
8.	B.Sc (Eng)	-	-	-	-	-		-
9.	B.Sc (Agri)	-	-	-	-	-	-	-
10.	B.Com/BBA	-	-	-	-	-	-	-
11.	M.Com/MBA	-	-	-	-	-	-	-
12.	Other professional Diploma/Degree	-	-	-	-	-	-	-
13.	Other	-	-	-	-	-	-	-
14.	T o t a l	-	-	-	-	1	100	1

Table-4

HOUSEHOLD SIZE IN SAMPLE WATER COURSE RD.115806

(Number)

Sr. No.	Location	Sample Household	Total Population	Average size of household
0	1	2	3	4
1.	Head of Watercourse	10	153	15.30
2.	Middle of Watercourse	10	126	12.60
3.	Tail of Watercourse	10	90	9.00
4.	Total	30	369	12.30

Table-5

HOUSEHOLD SIZE AND COMPOSITION IN SAMPLE WATER COURSE RD.115806

Sr. No.	Age Group (Years)	Sex	Total Members							
			Head		Middle		Tail		All Places	
			No.	%	No.	%	No.	%	No.	%
0	1	2	3	4	5	6	7	8	9	10
1.	Below 5	Male	22	29.73	20	30.30	11	28.95	53	29.78
		Female	27	34.18	24	40.00	12	23.08	63	32.98
		Both	49	32.03	44	34.92	23	25.56	116	31.44
2.	5 and above	Male	52	70.27	46	69.70	27	71.05	125	70.22
		Female	52	65.82	36	60.00	40	76.92	128	67.02
		Both	104	67.97	82	65.08	67	74.44	253	68.56
3.	All Ages	Male	74	100.00	66	100.00	38	100.00	178	100.00
		Female	79	100.00	60	100.00	52	100.00	191	100.00
		Both	153	100.00	126	100.00	90	100.00	369	100.00

Table-6

LITERACY AND ACTIVITY STATUS OF THE SAMPLE POPULATION IN SAMPLE WATER COURSE RD.115806

Sr. No.	Location	Total Respondents	Sex	Total Members	Literate (excluding students)		At School		Total literates at school	
					No.	%	No.	%	No.	%
0	1	2	3	4	5	6	7	8	9	10
1.	Head of watercourse	10	Male	52	7	13.96	14	26.92	21	40.38
			Female	52	-	-	-	-	-	-
			Both	104	7	6.73	14	13.46	21	20.19
2.	Middle of water course	10	Male	46	10	21.74	11	23.91	21	45.65
			Female	36	-	-	1	2.78	1	2.78
			Both	82	10	12.20	12	14.63	22	26.83
3.	Tail of Watercourse	10	Male	27	1	3.70	4	14.81	5	18.52
			Female	40	-	-	3	7.50	3	7.50
			Both	67	1	1.49	7	10.45	8	11.94
4.	All places	30	Male	125	18	14.40	29	23.20	47	37.60
			Female	128	-	-	4	3.13	4	3.13
			Both	253	18	7.11	33	13.04	51	20.16

Table-7

DISTRIBUTION OF WORKING MEMBERS BY OCCUPATIONS
IN SAMPLE WATER COURSE RD.115806

Sr. No.	Occupation	Location: Head	Middle	Tail	Total
0	1	2	3	4	5
1.	Paid employment	3	1	2	6
	a. On Farm	-	-	-	-
	b. Off Farm	3	1	2	6
2.	Self employed	10	10	10	30
	a. Farming	10	10	10	30
	b. Trade/Industry Transport	-	-	-	-
	c. Artisans	-	-	-	-
	d. Other	-	-	-	-
3.	Grand Total	13	11	12	36

Table-8

PLACE OF WORK IN SAMPLE WATER COURSE RD.115806

Sr. No.	Place of Work	Head	Middle	Tail	Total
0	1	2	3	4	5
1.	Sample W.C and other places in Peshawar Distt.	1	1	1	3
2.	Elsewhere in NWFP	1	-	-	1
3.	Other Province	-	-	1	1
4.	Other Countries	1	-	-	1
5.	All Places	3	1	2	6

Table-9

MONTHLY INCOME (OTHER THAN FARMING)
IN SAMPLE WATER COURSE RD.115806

Sr. No.	Income Group (Rs. per month)	Location	Number	Total Income(Rs)	Average Income(Rs)
0	1	2	3	4	5
1.	Upto Rs. 500	Head	-	-	-
		Middle	-	-	-
		Tail	-	-	-
2.	501 to 1000	Head	2	1600	800.00
		Middle	1	800	800.00
		Tail	-	-	-
3.	1001 to 1500	Head	-	-	-
		Middle	-	-	-
		Tail	1	1100	1100.00
4.	1501 to 2000	Head	-	-	-
		Middle	-	-	-
		Tail	-	-	-
5.	2001 to 2500	Head	-	-	-
		Middle	-	-	-
		Tail	1	2800	2800.00
6.	2501 to 3000	Head	-	-	-
		Middle	-	-	-
		Tail	-	-	-
7.	3001 to 4000	Head	-	-	-
		Middle	-	-	-
		Tail	-	-	-
8.	4001 to 5000	Head	1	1000	1000.00
		Middle	-	-	-
		Tail	-	-	-
9.	Above 5000	Head	-	-	-
		Middle	-	-	-
		Tail	-	-	-

Table-10

LAND HOLDINGS OF SAMPLE HOUSEHOLDS OF SAMPLE WATER COURSE RD. [illegible]

Sr. No.	Locality	Total respondents	Location of Land	Area Owned Total	Area Owned Average	Area Rented in Total	Area Rented in Average	Area Rented Out Total	Area Rented Out Average	Operated Holding Total	Operated Holding Average
0	1	2	3	4	5	6	7	8	9	10	11
1.	Head of W.C	10	a.This water-course	9.31	0.93	-	-	1.52	0.15	7.79	0.78
			b.Other places	19.22	1.92	-	-	1.42	0.14	17.80	1.78
			c. Total	28.53	2.85	-	-	2.94	0.29	25.59	2.56
2.	Middle of W.C.	10	a.This water-course	15.18	1.52	-	-	1.62	0.16	13.56	1.36
			b.Other places	3.44	0.34	-	-	-	-	3.44	0.34
			c. Total	18.62	1.86	-	-	1.62	0.16	17.00	1.70
3.	Tail of W.C.	10	a.This water-course	27.01	2.70	1.21	0.12	5.66	0.57	22.56	2.26
			b.Other places	4.96	0.50	-	-	0.20	0.02	4.76	0.48
			c. Total	31.97	3.20	1.21	0.12	5.86	0.59	27.32	2.73
4.	All Places	30	a.This water-course	51.50	1.72	1.21	0.04	8.80	0.29	43.91	1.46
			b.Other places	27.62	0.92	-	-	1.62	0.05	26.00	0.87
			c. Total	79.62	2.64	1.21	0.04	10.42	0.35	69.91	2.33

Table-11

AREA RENTED IN/OUT ON CASH/BATAI IN
SAMPLE WATER COURSE RD.115806

Sr. No.	Location	Area Rented In			Area Rented Out		
		Batai	Cash Rent	Total	Batai	Cash Rent	Total
0	1	2	3	4	5	6	7
1.	Head of W.C.	-	-	-	1.52	-	1.52
2.	Middle of W.C.	-	-	-	1.62	-	1.62
3.	Tail of W.C.	1.21	-	1.21	5.66	-	5.66
4.	All Places	1.21	-	1.21	8.80	-	8.80

Table-12

LAND USE IN SAMPLE WATER COURSE RD.115806

Sr. No.	Land Use	Head		Middle		Tail		All Places	
		Hec-tare	%	Hec-tare	%	Hec-tare	%	Hec-tare	%
0	1	2	3	4	5	6	7	8	9
1.	Crops	9.31	100	14.67	87.37	24.79	89.11	48.77	90.45
2.	Orchard	-	-	2.12	12.63	0.60	2.16	2.72	5.04
3.	Not available for cultivation	-	-	-	-	2.43	8.73	2.43	4.51
4.	Total Area	9.31	100	16.79	100.00	27.82	100.00	53.92	100.00

Table-13

IRRIGATED AREA BY MEANS OF IRRIGATION
IN SAMPLE WATER COURSE RD.115806

Sr. No.	Means of Irrigation	Head of W.C. Jareeb	%	Middle of W.C Jareeb	%	Tail of W.C Jareeb	%	Total Jareeb	%
0	1	2	3	4	5	6	7	8	9
1.	Canal Only	46	100	80.50	100	98.50	100	225	100
2.	Open well only	-	-	-	-	-	-	-	-
3.	Tube-well only	-	-	-	-	-	-	-	-
4.	Mixed	-	-	-	-	-	-	-	-
5.	Total (All types)	46	100	80.50	100	98.50	100	225	100

Table-14

NUMBER OF TUBEWELLS IN SAMPLE WATER COURSE RD.115806

Sr. No.	Location	Farms with tube-wells		Tube-wells water sold				Total sample farmers
				Yes		No		
		Number	%	No.	%	No.	%	No(=100)
0	1	2	3	4	5	6	7	8
1.	Head of Watercourse	-	-	-	-	10	100	10
2.	Middle of Watercourse	1	10	-	-	10	100	10
3.	Tail of Watercourse	-	-	-	-	10	100	10
4.	All Places	1	3	-	-	30	100	30

Table-15

SOURCES OF FINANCE OF TUBEWELL IN
SAMPLE WATER COURSE RD.115806

(NOT APPLICABLE; NO TUBEWELL HERE)

Table-16

NUMBER OF WATER TURNS (WARABANDI) PER FIELD
IN SAMPLE WATER COURSE RD.115806

Sr. No.	Particulars	Location							
		Head		Middle		Tail		All places	
		No.	%	No.	%	No.	%	No.	%
0	1	2	3	4	5	6	7	8	9
1.	Total Farmers	10	100	10	100	10	100	30	100
2.	One turn per week	-	-	-	-	-	-	-	-
3.	One turn per two weeks.	10	100	10	100	10	100	30	100
4.	Water not yet allotted but drawing once per week.	-	-	-	-	-	-	-	-

Table-17

TIME PER TURN OF WATER SUPPLY (WARABANDI)
IN SAMPLE WATER COURSE RD.115806

Sr. No.	Location	Water drawn (once every)	Distribution of water users by number of hours of water supply: Upto one		1 - 2		2 - 4		4 - 6		6 - 8		More than 2		All cases
			No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No. (=100)
1.	Head Section	13th day	2	20.00	2	20.00	3	30.00	1	10.00	1	10.00	1	10.00	10
2.	Middle Section	13th day	1	10.00	3	30.00	4	40.00	1	10.00	-	-	1	10.00	10
3.	Tail Section	13th day	1	10.00	4	40.00	2	20.00	3	30.00	-	-	-	-	10
4.	All Places	13th day	4	13.33	9	30.00	9	30.00	5	16.67	1	3.33	2	6.67	30

Table-18

NUMBER OF WATER TURNS LOST DURING THE PERIOD
APRIL - DECEMBER 1988 IN SAMPLE WATER COURSE RD.115806

No.	Number of turns lost	Head No.	Head %	Middle No.	Middle %	Tail No.	Tail %	All Places No (=100)
0	1	2	3	4	5	6	7	8
1.	None	-	-	-	-	-	-	-
2.	One	-	-	-	-	-	-	-
3.	Two	-	-	-	-	-	-	-
4.	Three	-	-	-	-	-	-	-
5.	Four	-	-	-	-	-	-	-
6.	Five	-	-	-	-	-	-	-
7.	More than 5	10	33.33	10	33.33	10	33.33	10
8.	All	10	33.33	10	33.33	10	33.33	30

Note: The canal is closed in January every year. In 1988 it was closed also during February and March for repair.

Table-19

REASON FOR LOSS OF WATER TURN IN SAMPLE WATER COURSE RD.115806

Sr. No.	Reason	Turns lost							
		Head		Middle		Tail		All Places	
		No.	%	No.	%	No.	%	No.	%
0	1	2	3	4	5	6	7	6	7
1.	Because there was no water in the main canal.	1	100	-	-	-	-	1	50.00
2.	Because there was no sufficient water in the main canal.	-	-	1	100	-	-	1	50.00
3.		1	100	1	100	-	-	2	100.00

Table - 20

INCIDENCE OF EXCHANGE OF WATER WITH OTHER FARMERS IN SAMPLE WATER COURSE RD.115806

Sr. No.	Location	Is Water exchanged				Total Farmers
		Yes		No		
		No.	%	No.	%	No(=100)
0	1	2	3	4	5	6
1.	Head of W.C.	1	10	9	90	10
2.	Middle of W.C.	-	-	10	100	10
3.	Tail of W.C.	-	-	10	100	10
4.	All places	1	3	29	97	30

Table-21

NUMBER OF TIMES WATER WAS EXCHANGED DURING KHARIF 1985
IN SAMPLE WATER COURSE RD.115806

No.	Number of Times	Borrowed								Lent							
		Head		Middle		Tail		Total		Head		Middle		Tail		Total	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. None		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2. One		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3. Two		1	100	-	-	-	-	1	100	1	100	-	-	-	-	1	100
4. Three		-	-	-	-	-	-	-	-	-	-		-	-	-	-	-
5. Four		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6. Five and above		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7. All cases		1	100	-	-	-	-	1	100	1	100	-	-	-	-	1	100

Table-22

FREE WATER FOR IRRIGATION OTHER THAN ON
EXCHANGE IN SAMPLE WATER COURSE RD.115806

(NO CASE REPORTED)

Table-23

TAMPERING OF WATER IN SAMPLE WATER COURSE RD.115806

Sr. No.	Location	Is sample farmer's share of water tampered ? Yes No.	Yes %	No No.	No %	Total Farmers No(=100)
0	1	2	3	4	5	6
1.	Head of W.C.	-	-	10	100	10
2.	Middle of W.C.	2	20	8	80	10
3.	Tail of W.C.	1	10	9	90	10
4.	All places	3	10	27	90	30

Table-24

DE-SILTING OF WATER COURSE IN A YEAR IN SAMPLE WATER COURSE RD.115806 ?

Sr. No.	Number of De-silting in a year	Head of W.C. No.	Head of W.C. %	Middle of WC No.	Middle of WC %	Tail of W.C No.	Tail of W.C %	All Places No.	All Places %
0	1	2	3	4	5	6	7	8	9
1.	One	5	50	5	50	5	50	15	50
2.	Two	4	40	5	50	5	50	14	47
3.	Three	1	10	-	-	-	-	1	3
4.	Four	-	-	-	-	-	-	-	-
5.	Five or More	-	-	-	-	-	-	-	-
6.	Not reported	-	-	-	-	-	-	-	-
7.	When need	-	-	-	-		-	-	-
8.	All cases	10	100	10	100	10	100	30	100

Table-25

WHEN WAS THE WATER COURSE DE-SILTED LAST
IN SAMPLE WATER COURSE RD.115806?

Sr. No.	Number of De-silting in a year	Head		Middle		Tail		All Places	
		No.	%	No.	%	No.	%	No.	%
0	1	2	3	4	5	6	7	4	5
1.	Rabi 1986-87 (Oct-86 to April-87)	-	-	3	30	2	20	5	17
2	Kharif 1987 (May-Nov.87)	6	60	7	70	9	80	21	70
3.	Rabi 1987-88 (December 87)	-	-	-	-	-	-	-	-
4.	Not cleared during last 12 month	-	-	-	-	-	-	-	-
5.	No Response	1	10	-	-	-	-	1	10
6.	When the canal was dry	3	30	-	-	-	-	-	-
7.	All cases	10	100	10	100	10	100	30	100

Table-26

CANAL WATER PROBLEMS IN SAMPLE WATER COURSE RD.115806

Sr. No.	Problems	Location water course	Is this problems faced Yes No.	Yes %	No No.	No %	Total Farmers No(=100)
0	1	2	3	4	5	6	7
1.	A general shortage of water	Head	10	100	-	-	10
		Middle	10	100	-	-	10
		Tail	10	100	-	-	10
		All points	30	100	-	-	30
2.	Defective slope of the channel	Head	-	-	10	100	10
		Middle	-	-	10	100	10
		Tail	2	20	8	80	10
		All points	2	7	28	93	30
3.	Siltation of the channel	Head	-	-	10	100	10
		Middle	7	70	3	30	10
		Tail	1	10	9	90	10
		All points	8	27	22	73	30
4.	Warabandi defects (in convenient timing)	Head	-	-	10	100	10
		Middle	-	-	10	100	10
		Tail	-	-	10	100	10
		All points	-	-	30	100	30
5.	Theft of water	Head	1	10	9	90	10
		Middle	3	30	7	70	10
		Tail	-	-	10	100	10
		All points	4	13	26	87	30

Table-27

MANAGEMENT OF DE-SILTATION OF WATER COURSE: ARE THE FARMERS SATISFIED WITH THE EXISTING ARRANGEMENTS IN SAMPLE WATER COURSE RD.115806 ?

Sr. No.	Location	Are the farmers satisfied with existing arrangements ? Yes No.	Yes %	No No.	No %	Total Farmers No(=100)
0	1	2	3	4	5	6
1.	Head of W.C.	10	100	-	-	10
2.	Middle of W.C.	10	100	-	-	10
3.	Tail of W.C.	10	100	-	-	10
4.	All points	30	100	-	-	30

Table-28

INCIDENCE OF INDEBTEDNESS IN SAMPLE WATER COURSE RD.115806

Sr. No.	Location course on Water course	Farmers who have ever been indebt No.	%	Farmers in debt on inter-viewed date No.	%	Amount of debt (Rs) Total	Average per Borr-lower	Sample farmer	Total Farmers No(=100)
0	1	2	3	4	5	6	7	8	9
1.	Head of W.C.	-	-	-	-	-	-	-	10
2.	Middle of W.C.	1	10	1	10	100,000	100,000	10,000	10
3.	Tail of W.C.	-	-	-	-	-	-	-	10
4.	All points	1	10	1	10	100,000	100,000	3,333	30

Table-29

AMOUNT BORROWED BY SOURCE IN SAMPLE
WATER COURSE RD.115806

Sr. No.	Source	Amount							
		Head		Middle		Tail		All Places	
		Rs	%	Rs	%	Rs	%	Rs	%
0	1	2	3	4	5	6	7	8	9
1.	Agri. Development Bank	-	-	-	-	-	-	-	-
2.	Commercial Bank	-	-	100,000	100	-	-	100,000	100
3.	Cooperatives Bank	-	-	-	-	-	-	-	-
4.	Traders	-	-	-	-	-	-	-	-
5.	Private money lender	-	-	-	-	-	-	-	-
6.	Relatives	-	-	-	-	-	-	-	-
7.	Friends	-	-	-	-	-	-	-	-
8.	Other	-	-	-	-	-	-	-	-
9.	All cases	-	-	100,000	100	-	-	100,000	100

Table - 30

UTILIZATION OF LOAN IN SAMPLE WATER COURSE RD.115806

No.	Source	Amount							
		Head		Middle		Tail		All Places	
		Rs	%	Rs	%	Rs	%	Rs	%
0	1	2	3	4	5	6	7	8	9
1.	Purchase of farm inputs	-	-	-	-	-	-	-	-
2.	Purchase of farm Machinery	-	-	100,000	100	-	-	100,000	100
3.	Purchase of land	-	-	-	-	-	-	-	-
4.	Repayment of loan	-	-	-	-	-	-	-	-
5.	Business	-	-	-	-	-	-	-	-
6.	Domestic consumption	-	-	-	-	-	-	-	-
7.	Other purposes	-	-	-	-	-	-	-	-
8.	T o t a l :	-	-	100,000	100	-	-	100,000	100

Table-31

ANY IMPROVEMENT ON FARM CONTEMPLATED BY THE SAMPLE FARMERS IF THEY COULD GET ADEQUATE LOAN IN SAMPLE WATER COURSE RD.115806

Sr. No.	Location	Any Improvement contemplated?				Total Farmers
		Yes		No		
		No.	%	No.	%	No(=100)
0	1	2	3	4	5	6
1.	Head of W.C.	-	-	10	100	10
2.	Middle of W.C.	-	-	10	100	10
3.	Tail of W.C.	-	-	10	100	10
4.	All places	-	-	30	100	30

Table-32

USE OF SELECTED FARM INPUTS AND SOURCE OF SUPPLY IN SAMPLE WATER COURSE RD.115806

Sr. No.	Name of Inputs	Location points of farm as W.C	Farms who use is No.	%	Sources of Supply: Villages No.	%	Outside No.	%	Both No.	%	Total Farmers No=(100)
0	1	2	3	4	5	6	7	8	9	10	11
1.	Urea	Head	8	80.00	1	12.50	7	87.50	1	12.50	10
		Middle	9	90.00	3	33.33	6	66.67	1	11.11	10
		Tail	9	90.00	4	44.44	5	55.56	2	22.22	10
		All Places	26	86.67	8	30.77	18	69.23	4	15.38	30
2.	DAP	Head	9	90.00	1	11.11	8	88.89	1	11.11	10
		Middle	6	60.00	1	16.67	5	83.33	1	16.67	10
		Tail	4	40.00	1	25.00	3	75.00	1	25.00	10
		All Places	19	63.33	3	15.79	16	84.21	3	15.79	30
3.	NPK	Head	-	-	-	-	-	-	-	-	10
		Middle	1	10.00	1	100.0	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	10
		All Places	1	3.33	1	100.0	-	-	-	-	30
4.	NP	Head	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	30
5.	Ammonium Sulphate	Head	-	-	-	-	-	-	-	-	10
		Middle	1	10.00	1	100.0	-	-	-	-	10
		Tail	1	10.00	-	-	1	100.0	-	-	10
		All Places	2	6.67	1	50.00	1	50.00	-	-	30
6.	Ammonium Nitrate	Head	-	-	-	-	-	-	-	-	10
		Middle	1	10.00	1	100.0	-	-	-	-	10
		Tail	1	10.00	-	-	1	100.0	-	-	10
		All Places	2	6.67	1	50.00	1	50.00	-	-	30
7.	Insec-ticides/ Pesticides	Head	-	-	-	-	-	-	-	-	10
		Middle	1	10.00	1	100.0	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	10
		All Places	1	3.33	1	100.0	-	-	-	-	30
8.	Weedicides	Head	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	10
		Tail	1	10.00	1	100.0	-	-	-	-	10
		All Places	1	3.33	1	100.0	-	-	-	-	30

Table-33

USE OF IMPROVED SEED IN SAMPLE WATER COURSE RD.115806

Sr. No.	Seed	Location	Farmers who: Know about this		Use this		If used; where purchased: In the village		Own		Other places		Total Farmers
			No.	% of Col.13	No.	% of Col.13	No.	% of Col.5	No.	% of Col.5	No.	% of Col.5	No(=100)
0	1	2	3	4	5	6	7	8	9	10	11	12	13
1.	WHEAT												
		Head	3	30.00	3	30.00	-	-	2	66.67	1	33.33	10
	i- Pak-81	Middle	3	30.00	1	10.00	-	-	1	66.67	-	-	10
		Tail	6	60.00	6	60.00	-	-	3	60.00	3	50.00	10
		All Places	12	40.00	10	33.33	-	-	6	65.00	4	40.00	30
	ii- L-73	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	-	-	30
	iii- Sarhad-82	Head	-	-	-	-	-	-	-	66.67	-	-	10
		Middle	1	10.00	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	1	3.33	-	-	-	-	-	66.67	-	-	30
	iv- Khyber-79	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	-	-	30
	v- Pirsabaq-85	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	-	-	30
	vi- Maxipak	Head	7	70.00	7	70.00	-	-	7	100.00	-	-	10
		Middle	2	20.00	2	20.00	1	50.00	1	50.00	-	-	10
		Tail	3	30.00	3	30.00	2	100.00	-	-	-	-	10
		All Places	12	40.00	11	36.67	3	27.27	8	72.23	-	-	30

(Contd....)

Table-33

USE OF IMPROVED SEED IN SAMPLE WATER COURSE RD.115806

r. No.	Seed	Location	Farmers who: Know about this		[illegible]		If used; where purchased: In the village		Own		Other places		Total Farmers
			No.	% of Col.13	No.	% of Col.13	No.	% of Col.5	No.	% of Col.5	No.	% of Col.5	
0	1	2	3	4	5	6	7	8	9	10	11	12	13
	vii- Khushal	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	-	-	30
	viii- Chanab	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	-	-	30
2.	SUGARCANE												
	i- M-161	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	-	-	30
	ii- CP-48	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	2	20.00	-	-	-	-	-	-	-	-	10
		All Places	2	6.67	-	-	-	-	-	-	-	-	30
	iii- CO-310	Head	1	10.00	1	10.00	0	-	-	-	1	100.00	10
		Middle	6	60.00	5	50.00	3	60.00	1	20.00	1	20.00	10
		Tail	8	80.00	6	80.00	4	50.00	3	37.50	1	12.50	10
		All Places	15	40.00	14	46.67	7	50.00	4	28.57	[illegible]	21.43	30

(Contd.....)

Table-33

USE OF IMPROVED SEED IN SAMPLE WATER COURSE RD.115806

Sr. No.	Seed	Location	Farmers who: Know about this		Use this		If used; where purchased: In the village		Own		Other places		Total Farmers (No.=)
			No.	% of (Col.13)	No.	% of (Col.13)	No.	% of (col.5)	No.	% of (col.5)	No.	% of (col.5)	
0	1	2	3	4	5	6	7	8	9	10	11	12	13
3.	MAIZE	Head	10	100.00	10	100.00	-	-	9	90.00	1	10.00	10
		Middle	3	30.00	2	20.00	-	-	2	100.00	-	-	10
	i- Sarhad Whi..	Tail	5	50.00	5	50.00	1	20.00	3	60.00	1	10.00	10
		All Places	18	60.00	17	56.67	1	5.88	14	82.35	2	11.67	30
	ii-Changaz	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	-	-	30
	iii- Zia	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	-	-	30
	iv- Shaheen	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	-	-	30
	v- Hameshah	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	1	10.00	1	10.00	-	-	1	100.00	-	-	10
		All Places	1	3.33	1	3.33	-	-	1	100.00	-	-	30
4.	RICE	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
	i- Irri-6	Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	-	-	30
	ii- Basmati	Head	-	-	-	-	-	-	-	-	-	-	10
		Middle	-	-	-	-	-	-	-	-	-	-	10
		Tail	-	-	-	-	-	-	-	-	-	-	10
		All Places	-	-	-	-	-	-	-	-	-	-	30

(Conclude

Table-34

INPUTS IN THE SUPPLY OF WHICH PROBLEMS HAVE BEEN
REPORTED BY FARMERS IN SAMPLE WATERCOURSE RD.115806

Sr. No.	Location	Total Farmers No(=100)	Farmers reporting problems in supply of: Fertilizer		Improved seed		Farm Insecticides		Machinery	
			No	%	No	%	No	%	No	%
0	1	2	3	4	5	6	7	8	9	10
1.	Head	10	-	-	2	20	-	-	-	-
2.	Middle	10	2	20	2	20	-	-	-	-
3.	Tail	10	-	-	-	-	-	-	-	-
4.	All Places	30	2	7	4	13	-	-	-	-

Table-35

SOURCE OF AGRICULTURAL INFORMATION OF SAMPLE FARMERS IN RD.115806

Sr No.	Source	Number and percentage* of farmers who took Agri: information from this source								Number and percentage** of sample Farmer who used this:							
		Head of W.C.		Middle of W.C		Tail of W.C		All Places		Head of W.C.		Middle of W.C		Tail of W.C		All Places	
		No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
0	1	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1.	Agriculture Department	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.	Demonstration plots laid by insecticides/ pesticides firms	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.	Radio	-	-	5	50	4	40	9	30	-	-	-	-	3	75	3	33
4.	Television	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Newspaper	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	Landlord	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Other Farmers	-	-	6	60	6	60	12	40	-	-	-	-	4	67	4	33
8.	Input suppliers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Other sources specify)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Total Farmers = 30
Head = 10
Middle = 10
Tail = 10

* of total sample farmers in the section concerns

** of those who took information from a source given in col.1

Table-36

MEMBERSHIP OF SOCIETIES/ASSOCIATIONS ETC.
IN SAMPLE WATER COURSE RD.115806

Sr. No.	Institution	Locality	Are the sample farmers members of of the societies/associations as in col.2						Total Farmers No =(100)
			Yes		No		Not applicable		
			No	%	No	%	No	%	
0	1	2	3	4	5	6	7	8	9
1.	Water Users Association	Head	-	-	1	10	9	90	10
		Middle	-	-	2	20	8	80	10
		Tail	-	-	5	50	5	50	10
		All Places	-	-	8	27	22	73	30
2.	Cooperative Society	Head	-	-	1	10	9	90	10
		Middle	-	-	2	20	8	80	10
		Tail	-	-	5	50	5	50	10
		All Places	-	-	8	27	22	73	30
3.	Union Council	Head	1	10	9	90	-	-	10
		Middle	-	-	10	100	-	-	10
		Tail	1	10	9	90	-	-	10
		All Places	2	7	28	93	-	-	30
4.	Other Societies/ Association	Head	1	10	7	70	2	20	10
		Middle	2	20	7	70	1	10	10
		Tail	-	-	9	90	1	10	10
		All Places	3	10	23	77	4	13	30

Table-37

USE OF TRACTORS BY SAMPLE FARMERS IN
SAMPLE WATER COURSE RD. 115806

Sr. No.	Section	Is tractor used ? Yes No.	Yes % of col.2	No No.	No % of col.4	Total No. (=100)	Ownership Status of tractor used: Own No.	Own % of col.2	Rented in No.	Rented in % of col.2	Source of supply of rented in tractor: Own Village No.	Own Village % of col.9	Other Places No.	Other Places % of col.9	Farmer reporting problems in tractor supply No.	% of col.6
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.	Head	10	100	-	-	10	-	-	10	100.00	8	80.00	2	20.00	4	40.00
2.	Middle	10	100	-	-	10		-	10	100.00	10	100.00		-	3	30.00
3.	Tail	9	90	1	10	10	1	11.11	8	88.89	5	62.50	3	37.50	4	40.00
4.	All Sections	29	97	1	3	30	1	3.45	28	96.55	23	82.14	5	17.86	11	36.67

Table-38

USE OF THRASHER BY SAMPLE FARMERS IN
SAMPLE WATER COURSE RD. 115806

Sr. No.	Section	Is Thrasher used ? Yes No.	Yes % of col.2	No No.	No % of col.2	Total No. (=100)	Ownership Status of Thrasher used: Own No.	Own % of col.2	Rented in No.	Rented in % of col.2	Source of supply of Thrasher: Own Village No.	Own Village % of col.9	Other Places No.	Other Places % of col.9	Farmer reporting problems in Thrasher supply No.	% of col.6
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.	Head	10	100	-	-	10	-	-	10	100.00	6	60.00	4	40.00	4	40.00
2.	Middle	10	100	-	-	10	1	10.00	9	90.00	7	77.78	3	33.33	5	50.00
3.	Tail	10	100	-	-	10	1	10.00	9	90.00	7	77.78	3	33.33	3	30.00
4.	All Sections	30	100	-	-	30	2	6.67	28	93.33	18	64.29	10	35.71	12	40.00

Table-1

AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS IN SAMPLE WATERCOURSE RD.115806

Sr. No.	Crops	Location	Area	Main Product			By Product		
				Unit	Total	Per Hectare	Unit	Total	Per Hectare
0	1	2	3	4	5	6	7	8	9
1.	Maize Grain	Head	0.15	Mds	1.00	6.67	Bundle	50	333.33
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	0.15	Mds	1.00	6.67	Bundle	50	333.33
2.	Maize Fodder	Head	0.10	Bundle	20.00	200.00	-	-	-
		Middle	1.01	Bundle	90.00	89.11	-	-	-
		Tail	2.93	Bundle	230.00	78.50	-	-	-
		Total	4.04	Bundle	340.00	84.16	-	-	-
3.	Sorghum (fodder)	Head	-	Rs.	-	-	-	-	-
		Middle	0.15	Rs.	80.00	533.33	-	-	-
		Tail	0.40	Rs.	-	-	-	-	-
		Total	0.55	Rs.	80.00	145.45	-	-	-
4.	Sugarcane Converted into Gur	Head	0.20	Mds of Gur	4.00	20.00	C.T. Mds	11	55.00
							Bagg: Mds	7	35.00
		Middle	1.06	Mds of Gur	33.00	31.13	C.T. Mds	48	45.28
							Bagg: Mds	87	45.28
		Tail	1.42	Mds of Gur	-	-	C.T. Mds	-	-
							Bagg: Mds	-	-
		Total	2.68	Mds of Gur	37.00	13.81	C.T. Mds	59	22.01
							Bagg: Mds	94	35.07
5.	Sugarcane Sold in field	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	-	-	-	-	-	-	-
6.	Pigeon Pea	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	-	-	-	-	-	-	-

C.T.= Cane Tops Bagg:= Bagasse

Table-2

AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS OUTSIDE SAMPLE WATERCOURSE RD.115806

Sr. No.	Crops	Location	Area	Main Product			By Product		
				Unit	Total	Per Hectare	unit	Total	Per Hectare
0	1	2	3	4	5	6	7	8	9
1.	Maize Grain	Head	-	-	-	-	-	-	-
		Middle	0.40	Mds	2.00	5.00	Bundle	120	300.00
		Tail	-	-	-	-	-	-	-
		Total	0.40	Mds	2.00	5.00	Bundle	120	300.00
2.	Maize Fodder	Head	0.10	Bundle	20.00	200.00	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	0.10	Bundle	20.00	200.00	-	-	-
3.	Sorghum (fodder)	Head	-	-	-	-	-	-	-
		Middle	0.25	Rs.	750.00	3000.00	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	0.25	Rs.	750.00	3000.00	-	-	-
4.	Sugarcane Converted into Gur	Head	-	Mds of Gur	-	-	C.T. Mds	-	-
							Bagg: Mds	-	-
		Middle	0.35	Mds of Gur	1.00	2.86	C.T. Mds	-	-
							Bagg: Mds	-	-
		Tail	-	Mds of Gur	-	-	C.T. Mds	-	-
							Bagg: Mds	-	-
		Total	0.35	Mds of Gur	1.00	2.86	C.T. Mds	-	-
							Bagg: Mds	-	-
5.	Sugarcane Sold in field	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	-	-	-	-	-	-	-
6.	Pigeon Pea	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	-	-	-	-	-	-	-

C.T.= Cane Topes Bagg:= Bagasse

Table-3

DISPOSAL OF MAIN PRODUCTS OTHER THAN SUGARCANE IN SAMPLE WATER COURSE RD.115806

Sr. No.	Crop Mode of Disposal	Maize (Maunds)								Sorghum (Rs)								Sugarcane (Mds)								Pigeon Pea (Bundles)							
		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places		Head		Middle		Tail		All places		Head		Middle		Tail		All Places	
		Qty.	%	Qty.	%	Qty	%	Qty.	%	Rs.	%	Rs.	%	Rs.	%	Rs.	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
I	Total Output	1.00	100	10.00	100	-	-	11.00	100	-	-	830	100	-	-	830	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II.	Disposal																																
	1.Retained for H.use	0.70	70.00	10.00	100	-	-	10.70	97.27	-	-	830	100	-	-	830	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.Sold	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3.Landlord's share	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4.Artisan's dues	0.15	15.00	-	-	-	-	0.15	1.36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5.Given to labourers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6.Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7.Usher/ Charity	0.10	10.00	-	-	-	-	0.10	0.91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8.Other specify	0.05	5.00	-	-	-	-	0.05	0.45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
III.	Total All uses	1.00	100	10.00	100	-	-	11.00	100	-	-	830	100	-	-	830	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-4

DISPOSAL OF BY-PRODUCTS IN SAMPLE WATER COURSE RD. 115806

Sr. No.	Crop Mode of Disposal	Maize (Qty. in Bundles)								Sorghum (Rupees)							
		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places	
		Qty.	%	Qty.	%	Qty	%	Qty.	%	Rs.	%	Rs.	%	Rs.	%	Rs.	%
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
I Total Output		90	100	560	100	230	100	650	100	-	-	-	-	-	-	-	-
II. Disposal																	
1.Retained for H.use		90	100	560	100	230	100	650	100	-	-	-	-	-	-	-	-
2.Sold		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.Landlord's Share		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4.Artisan's dues		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.Given to Labourers		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.Seed		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.Usher/Charity		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8.Other Specify		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
III.Total =All Uses		90	100	560	100	230	100	650	100	-	-	-	-		-	-	-

(Contd....)

Sugarcane (C.T. and Bagg: in Maunds)															
Head				Middle				Tail				All Places			
C.T.	Bagg:	Total	%	C.T.	Bagg:	Total	%	C.T.	Bagg:	Total	%	C.T.	Bagg:	Total	%
18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
11	7	18	100	48	87	135	100	-	-	-	-	59	94	153	100
11	7	18	100	48	87	135	100	-	-	-	-	59	94	153	100
-	-	-	-	-	-	-	-	-	-	-		-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-		-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-		-	-	-	-
11	7	18	100	48	87	135	100	-	-	-	-	59	94	153	100

(Concluded

C.T.= Cane Tops Bagg:= Bagasse

Table-5

MODE OF SALE OF MAIZE IN SAMPLE WATER COURSE RD. 115806

(NOT APPLICABLE)

Table-6

MODE OF SALE OF SORGHUM IN SAMPLE WATER COURSE RD. 115806

(NOT APPLICABLE)

Table-7

MODE OF SALE OF PIGEON PEA IN SAMPLE
WATER COURSE RD. 115806

(NOT APPLICABLE)

Table-8

UTILIZATION OF SUGARCANE IN SAMPLE WATER COURSE RD.115806

Sr. No.	Particulars	Unit	Head	Middle	Tail	All places
0	1	2	3	4	5	6
1.	Sugarcane produced	Mds	54	585	-	639
2.	Sold to sugarmills	Mds	-	-	-	-
3.	Sold to Gur manufacturer	Mds	-	-	-	-
4.	Converted into Gur	Mds	54	585	-	639
5.	Used as seed	Mds	-	-	-	-

Table-9

UTILIZATION OF GUR PRODUCED BY SAMPLE FARMERS
IN SAMPLE WATER COURSE RD. 115806

Sr. No.	Utilization	Head		Middle		Tail		All Places	
		Mds	%	Mds	%	Mds	%	Mds	%
0	1	2	3	4	5	6	7	8	9
1.	Sold	-	-	18	54.54	-	-	18.00	48.65
2.	Self consumed	3.50	87.50	15	45.45	-	-	18.50	50.00
3.	Landlord's share	-	-	-	-	-	-	-	-
4.	Other uses	0.50	12.50	-	-	-	-	0.50	1.35
5.	T o t a l:	4.00	100	33	100	-	-	37.00	100

Table-10

NUMBER OF FARMERS REPORTING CONSUMPTION OF CHEMICAL FERTILIZERS IN SAMPLE WATER COURSE RD. 115806

Sr. No.	Location of farm	Total farmers growing this crop No(=100)	Farmers using fertilizers													
			Urea		D A P		N P K		N P		Ammonium Sulphate		Ammonium Nitrate		P.Sulphate	
			No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
I.	MAIZE															
	a.Head of W.C.	2	2	100.00	-	-	-	-	-	-	-	-	-			-
	b.Middle of W.C.	4	3	75.00	1	25.00	-	-	-		-	-	-	-	-	-
	c.Tail of W.C.	6	3	50.00	1	16.67	-	-	-	-	-	-	-	-	-	-
	d.All Places	12	8	66.67	2	16.67	-	-	-	-	-	-	-	-	-	-
II.	SORGHUM															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	1	-	-	1	100.00	-	-	-		-	-	-	-	-	-
	c.Tail of W.C.	2	-	-	1	50.00	-	-	-	-	-	-	-	-	-	-
	d.All Places	3	-	-	2	66.67	-	-	-	-	-	-	-	-	-	-
III.	SUGARCANE															
	a.Head of W.C.	2	2	100.00	1	50.00	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	3	2	66.67	2	66.67	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	2	2	100.00	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	7	6	85.71	3	42.86	-	-	-	-	-	-	-	-	-	-
IV.	PIGEON PEA															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-		-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	-	-	-		-	-	-	-	-	-	-	-	-	-	-

Table-11

QUANTITY OF CHEMICAL FERTILIZERS USED BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD. 115866

Sr. No.	Location of farm	Area sown (Hectare)	Quantity of fertilizer used: (KG)													
			urea		D A P		N P		N P		Ammonium Sulphate		Ammonium Nitrate		P.Sulphate	
			Total	Per Hectare	Total	Per Hectare	Total	Per Hectare	Total	Per Hectare	Total	Per Hectare	Total	Per Hectare	Total	Per Hectare
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
I.	MAIZE															
	a.Head of W.C.	0.25	37.50	150	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	1.01	200.00	198	50	50	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	2.93	200.00	68	100	34	-	-	-	-	-	-	-	-	-	-
	d.All Places	4.19	437.50	104	150	36	-	-	-	-	-	-	-	-	-	-
II.	SORGHUM															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	0.15	-	-	10	333	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	0.40	-	-	25	63	-	-	-	-	-	-	-	-	-	-
	d.All Places	0.55	-	-	35	63.34	-	-	-	-	-	-	-	-	-	-
III.	SUGARCANE															
	a.Head of W.C.	0.20	87.50	438	25	125	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	1.06	150.00	142	150	142	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	1.42	125.00	88	125	88	-	-	-	-	-	-	-	-	-	-
	d.All Places	2.68	362.50	135	300	112	-	-	-	-	-	-	-	-	-	-
IV.	PIGEON PEA															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-12

CONSUMPTION OF FARM YARD MANURE IN
SAMPLE WATER COURSE RD. 115806

Sr. No.	Location of farm	Total farmers growing this crop	Farmers using Farm Yard Manure		Area Sown (Hec-tare)	Quantity used (KG)	
			No.	%		Total	Per Hectare
0	1	2	3	4	5	6	7
I.	MAIZE						
	a.Head of W.C.	2	1	50.00	0.25	746.40	2986
	b.Middle of W.C.	3	3	100.00	1.01	13435.20	13302
	c.Tail of W.C.	6	2	33.33	2.93	14928.00	5095
	d.All Places	11	6	54.55	4.19	29109.60	6947
II.	SORGHUM						
	a.Head of W.C.	-	-	-	-	-	-
	b.Middle of W.C.	1	-	-	0.15	-	-
	c.Tail of W.C.	2	-	-	0.40	-	-
	d.All Places	3	-	-	0.55	-	-
III.	SUGARCANE						
	a.Head of W.C.	2	1	50.00	0.20	3732.00	18660
	b.Middle of W.C.	3	1	33.33	1.06	2985.60	2817
	c.Tail of W.C.	1	-	-	1.42	-	-
	d.All Places	6	2	33.33	2.68	6717.60	2507
IV.	PIGEON PEA						
	a.Head of W.C.	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-

Table-13

NUMBER OF SAMPLE FARMERS WHO USED INSECTICIDES/
PESTICIDES/WEEDICIDES IN SAMPLE WATERCOURSE RD.115806

(NOT APPLICABLE)

Table-14

QUANTITY OF SEED USED BY SAMPLE FARMERS IN SAMPLE WATERCOURSE RD.115806

(Kg)

Sr. No.	Crop	Total Area (Hectare)	Head Quantity used			Middle Quantity used			Tail Quantity used			All Places Quantity used		
			Impr-oved	Local	Total	Impr-oved	Local	Total	Impr-oved	Local	Total	Impr-oved	Local	Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Maize	4.60	-	10	10	-	72	72	-	146	146	-	228	228
2.	Sorghum	0.55	-	10	10	-	15	15	-	50	50	-	75	75
3.	Sugarcane	2.12	746.40	-	746.40	1866	-	1866	5075.52	-	5075.52	7687.92	-	7687.92
4.	Pigeon Pea	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-15

PHYSICAL INPUT COST IN SAMPLE WATER RD.115806

Crop: Maize Area: 4.19 ha. i) Head : 0.25 ha ii) Middle: 1.01 ha Tail: 2.93 ha

Sr. No.	Physical Input	Head						Middle						Tail						All Places					
		Purchased		Self Supplied		Total (2+4)		Purchased		Self Supplied		Total (8+10)		Purchased		Self Supplied		Total (14+16)		Purchased (2+8+14)		Self Supplied (14+10+16)		Total	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Seed	39	156	-	-	39	156	195	193	-	-	195	193	454	155	-	-	454	155	628	164	-	-	688	164
2.	Farm Yard Manure	-	-	60	240	60	240	-	-	1320	1307	1320	1307	-	-	1150	392	1150	392	-	-	2530	604	2530	604
3.	Chemical Fertilizer	101	404	-	-	101	404	664	657	-	-	664	657	810	276	-	-	810	276	1575	376	-	-	1575	376
4.	Insecticide/ Pesticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Water Charges	15	60	-	-	15	60	60	59	-	-	60	59	174	59	-	-	174	59	248	59	-	-	248	59
6.	Dues of Artisans	-	-	53	210	53	210	-	-	-	-	-	-	-	-	100	34	100	34	-	-	153	36	153	36
7.	Total	155	620	113	450	267	1070	918	909	1320	1307	2238	2216	1438	491	1250	427	2688	917	2511	599	2683	640	5193	1239

Table-16

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.115806

Crop: Maize | Area: 4.19 ha. | i) Head : 0.25 ha | ii) Middle: 1.01 ha | iii) Tail: 2.93 ha

Sr. No.	Operations	Labour inputs	Head: Paid Total	Head: Paid Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (3+5) Total	Head: Total (3+5) Per Hect.	Middle: Paid Total	Middle: Paid Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect.	Tail: Paid Total	Tail: Paid Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect.	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect.	All Places: Self Supp: (5+11+17) Total	All Places: Self Supp: (5+11+17) Per Hect.	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Ploughing	i.Manual		-	-	6	24	6	24	15	15	150	149	165	163	-	-	1352	461	1352	461	15	4	1508	360	1523	364
	ii.Animal		-	-	-	-	-	-	-	-	250	248	250	248	-	-	1325	452	1325	452	-	-	1575	376	1575	376
	iii.Machine		105	420	-	-	105	420	225	223	-	-	225	223	270	92	-	-	270	92	600	143	-	-	600	143
	iv.Total		105	420	6	24	111	444	240	238	400	396	640	634	270	92	2677	914	2947	1006	615	147	3083	736	3698	883
2. Levelling	i.Manual		-	-	3	11	3	11	-	-	23	22	23	22	-	-	135	46	135	46	-	-	160	38	160	38
	ii.Animal		-	-	-	-	-	-	-	-	38	37	38	37	-	-	225	77	225	77	-	-	263	63	263	63
	iii.Machine		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total		-	-	3	11	3	11	-	-	61	59	60	59	-	-	360	123	360	123	-	-	423	101	423	101
3. Planking	i.Manual		-	-	6	22	6	22	-	-	23	22	23	22	-	-	248	84	248	84	-	-	276	66	276	66
	ii.Animal		-	-	-	-	-	-	-	-	38	37	38	37	-	-	538	183	538	183	-	-	575	137	575	137
	iii.Machine		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total		-	-	6	22	6	22	-	-	61	59	61	59	-	-	786	267	786	267	-	-	851	203	851	203
4. Sowing	i.Manual		-	-	3	11	3	11	-	-	83	82	83	82	-	-	135	46	135	46	-	-	220	53	220	53
	ii.Animal		-	-	-	-	-	-	100	99	-	-	100	99	476	162	-	-	476	162	576	137	-	-	576	137
	iii.Machine		50	200	-	-	50	200	90	89	-	-	90	89	90	31	-	-	90	31	230	55	-	-	230	55
	iv.Total		50	200	3	11	53	211	190	189	83	82	273	270	566	193	135	46	701	239	806	192	220	53	1026	245
5. Watering	i.Manual		-	-	14	55	14	55	15	15	15	15	30	29	-	-	38	13	38	13	15	4	66	16	81	19
6. F.Y.Manure	i.Manual		-	-	23	90	23	90	90	89	30	30	120	119	-	-	248	84	248	84	90	21	300	72	390	93

(Contd....)

Table-16

LABOUR INPUT COST IN SAMPLE WATERS PLASE RD.115806

Crop: Maize			Head: 4.19 ha						i) Middle: 0.25 ha						ii) Middle: 1.01 ha						iii) Tail: 2.93 ha					
			Head						Middle						Tail						All Places					
Sr. No.	Operations	Labour inputs	Paid		Self Supplied		Total (3+5)		Paid		Self Supplied		Total(9+11)		Paid		Self Supplied		Total (15+17)		Paid (3+9+15)		Self Supp: (5+11+17)		Total (21+23)	
			Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
7. Chemical		i.Manual	-	-	6	22	6	22	-	-	30	30	30	30	-	-	80	27	80	27	-	-	115	27	115	27
8. Hoeing/Weed:		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9. Harvesting		i.Manual	-	-	38	150	38	150	-	-	150	149	150	149	-	-	90	31	90	31	-	-	278	66	278	66
10.Carriage to Threshing Yard		i.Manual	-	-	-	-	-	-	-	-	120	119	120	119	-	-	-	-	-	-	-	-	120	29	120	29
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	-	-	-	-	-	-	120	119	120	119	-	-	-	-	-	-	-	-	120	29	120	29
11.Threshing/ Winnowing		i.Manual	-	-	23	90	23	90	-	-	120	119	120	119	-	-	-	-	-	-	-	-	143	34	143	34
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	23	90	23	90	-	-	120	119	120	119	-	-	-	-	-	-	-	-	143	34	143	34
12.Total		i.Manual	-	-	119	476	119	[illegible]	120	119	742	735	862	854	-	-	2324	793	2324	793	120	29	3185	760	3305	789
		ii.Animal	-	-	-	-	-	-	100	99	325	322	425	421	476	162	2088	712	2564	875	576	137	2413	576	2989	713
		iii.Machine	155	620	-	-	155	620	315	312	-	-	315	312	360	123	-	-	360	123	830	198	-	-	830	198
		iv.Total	155	620	119	476	274	1096	535	530	1067	1057	1062	1586	836	285	4411	1506	5247	1791	1526	364	5598	1336	7124	1700

(Concluded)

Table-17

PHYSICAL INPUT COST IN SAMPLE WATER RD.115806

Crop: Sorghum Area: 0.55 ha i) Head : 0.00 ha ii) Middle: 0.15 ha iii) Tail: 0.40 ha

Sr. No.	Physical Input	Head						Middle						Tail						All Places					
		Purchased		Self Supplied		Total (2+4)		Purchased		Self Supplied		Total (8+10)		Purchased		Self Supplied		Total (14+16)		Purchased (2+8+14)		Self Supplied (14+10+16)		Total	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Seed	-	-	-	-	-	-	60	400	-	-	60	400	225	563	-	-	225	563	285	518	-	-	285	518
2.	Farm Yard Manure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.	Chemical Fertilizer	-	-	-	-	-	-	150	1000	-	-	150	1000	72	180	-	-	72	180	222	404	-	-	222	404
4.	Insecticide/ Pesticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Water Charges	-	-	-	-	-	-	7	43	-	-	7	43	17	44	-	-	17	44	24	43	-	-	24	43
6.	Dues of Artisans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Total	-	-	-	-	-	-	217	1443	-	-	217	1443	314	786	-	-	314	786	531	965	-	-	531	965

Table-18

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.115806

Crop: Sorghum Area: 0.55 i) Head : 0.30 ha ii) Middle: 0.15 ha iii) Tail: 0.40 ha

Sr. No.	Operations	Labour inputs	Head: Paid Total	Head: Paid Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (3+5) Total	Head: Total (3+5) Per Hect.	Middle: Paid Total	Middle: Paid Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect.	Tail: Paid Total	Tail: Paid Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect.	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect.	All Places: Self Supp. (5+11+17) Total	All Places: Self Supp. (5+11+17) Per Hect.	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Ploughing		i.Manual	-	-	-	-	-	-	-	-	30	200	30	200	-	-	240	600	240	600	-	-	270	491	270	491
		ii.Animal	-	-	-	-	-	-	-	-	63	417	63	417	-	-	400	1000	400	1000	-	-	463	1417	463	1417
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	-	-	-	-	-	-	93	617	93	617	-	-	640	1600	640	1600	-	-	733	1333	733	1333
2. Leveling		i.Manual	-	-	-	-	-	-	-	-	3	20	3	20	-	-	15	38	15	38	-	-	18	33	18	33
		ii.Animal	-	-	-	-	-	-	-	-	5	33	5	33	-	-	25	63	25	63	-	-	30	55	30	55
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	-	-	-	-	-	-	8	53	8	53	-	-	40	100	40	100	-	-	48	88	48	88
3. Planking		i.Manual	-	-	-	-	-	-	-	-	3	20	3	20	-	-	30	75	30	75	-	-	33	60	33	60
		ii.Animal	-	-	-	-	-	-	-	-	5	33	5	33	-	-	38	94	38	94	-	-	43	77	43	77
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	-	-	-	-	-	-	8	53	8	53	-	-	68	169	68	169	-	-	76	137	76	137
4. Sowing		i.Manual	-	-	-	-	-	-	-	-	8	56	8	56	-	-	68	169	68	169	-	-	76	138	76	138
		ii.Animal	-	-	-	-	-	-	-	-	13	83	13	83	-	-	100	250	100	250	-	-	113	205	113	205
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	-	-	-	-	-	-	21	139	21	139	-	-	168	419	168	419	-	-	189	343	189	343
5. Watering		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	9	4	9	-	-	4	7	4	7
6. F.Y.Manure		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(Contd...)

Table-18

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.115806

Crop: Sorghum | Area: 0.55 | i) Head : 0.00 ha | ii) Middle: 0.15 ha | iii) Tail: 0.40 ha

Sr. No.	Operations	Labour Inputs	Head: Paid Total	Head: Paid Per Hect:	Head: Self Supplied Total	Head: Self Supplied Per Hect:	Head: Total (3+5) Total	Head: Total (3+5) Per Hect:	Middle: Paid Total	Middle: Paid Per Hect:	Middle: Self Supplied Total	Middle: Self Supplied Per Hect:	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect:	Tail: Paid Total	Tail: Paid Per Hect:	Tail: Self Supplied Total	Tail: Self Supplied Per Hect:	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect:	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect:	All Places: Self Supp: (5+11+17) Total	All Places: Self Supp: (5+11+17) Per Hect:	All Places: Total (7+23) Total	All Places: Total (7+23) Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
7. Chemical	i.Manual		-	-	-	-	-	-	-	-	3	20	3	20	-	-	3	19	8	19	-	-	11	19	11	19
8. Hoeing/Weed:	i.Manual		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9. Harvest:	i.Manual		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.Carriage to Threshing yard	i.Manual		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ii.Animal		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iii.Machine		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11.Threshing/ Winnowing	i.Manual		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ii.Animal		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iii.Machine		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12. Total	i.Manual		-	-	-	-	-	-	-	-	47	316	47	316	-	-	364	909	364	909	-	-	411	448	411	448
	ii.Animal		-	-	-	-	-	-	-	-	85	567	85	567	-	-	563	1406	563	1406	-	-	648	1177	648	1177
	iii.Machine		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total		-	-	-	-	-	-	-	-	132	883	132	883	-	-	926	2316	926	2316	-	-	1059	1925	1059	1925

(Concluded)

Table-19

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD.115806

Crop: Sugarcane Area: 2.68 ha i) Head : 0.20 ha ii) Middle: 1.06 ha iii) Tail: 1.42 ha

Sr. No.	Physical Input	Head: Purchased Total	Head: Purchased Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (2+4) Total	Head: Total (2+4) Per Hect.	Middle: Purchased Total	Middle: Purchased Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (8+10) Total	Middle: Total (8+10) Per Hect.	Tail: Purchased Total	Tail: Purchased Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (14+16) Total	Tail: Total (14+16) Per Hect.	All Places: Purchased (2+8+14) Total	All Places: Purchased (2+8+14) Per Hect.	All Places: Self Supplied (4+10+16) Total	All Places: Self Supplied (4+10+16) Per Hect.	All Places: Total Total	All Places: Total Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Seed	360	1800	-	-	360	1800	1075	104	-	-	1075	1014	2340	2000	-	-	2340	2000	4275	1595	-	-	4275	1595
2.	Farm Yard Manure	-	-	225	1125	225	1125	-	-	240	226	240	226	-	-	-	-	-	-	-	-	465	174	465	174
3.	Chemical Fertilizer	270	1350	-	-	270	1350	840	792	-	-	840	792	325	229	-	-	325	229	1435	535	-	-	1435	535
4.	Insecticide/ Pesticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Water Rate	41	204	-	-	41	204	104	98	-	-	104	98	289	204	-	-	289	204	434	162	-	-	434	162
6.	Dues of Artisans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Fuel Charges	-	-	120	600	120	600	-	-	930	877	930	877	-	-	1290	908	1290	908	-	-	2340	873	2340	873
8.	Rent of crushing Machine	35	175	-	-	35	175	231	218	-	-	231	218	336	237	-	-	336	237	602	225	-	-	602	225
9.	Gur Making	210	1050	-	-	210	1050	1620	1528	-	-	1620	1528	1920	1352	-	-	1920	1352	3780	1410	-	-	3780	1410
10.	Total	916	4579	345	1725	1261	6304	3870	3651	1170	1104	5040	4755	5710	4021	1290	908	7000	4930	10526	3927	2805	1047	13331	4974

Table-20

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.115806

Crop: Sugarcane Area: 2.68 ha i) Head : 0.20 ha ii) Middle: 1.06 ha iii) Tail: 1.42 ha

Sr. No.	Operations	Labour inputs	Head						Middle						Tail						All Places					
			Paid		Self Supplied		Total (3+5)		Paid		Self Supplied		Total (9+11)		Paid		Self Supplied		Total (15+17)		Paid (3+9+15)		Self Supp: (5+11+17)		Total (21+23)	
			Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Ploughing	i.Manual		-	-	8	38	8	38	-	-	450	425	450	425	-	-	840	592	840	592	-	-	1298	484	1298	484
	ii.Animal		-	-	-	-	-	-	-	-	750	708	750	708	-	-	1400	986	1400	986	-	-	2150	802	2150	802
	iii.Machine		100	500	-	-	100	500	-	-	-	-	-	-	-	-	-	-	-	-	100	37	-	-	100	37
	iv.Total		100	500	8	38	138	538	-	-	1200	1133	1200	1133	-	-	2240	1577	2440	1577	100	37	3448	1286	3548	1323
2. Levelling	i.Manual		-	-	-	-	-	-	-	-	34	32	34	32	-	-	8	5	8	5	-	-	41	15	41	15
	ii.Animal		-	-	-	-	-	-	-	-	56	53	56	53	-	-	13	9	13	9	-	-	69	26	69	26
	iii.Machine		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total		-	-	-	-	-	-	-	-	90	85	90	85	-	-	21	14	21	14	-	-	110	41	110	41
3. Planking	i.Manual		-	-	-	-	-	-	-	-	46	43	46	43	-	-	15	11	15	11	-	-	61	23	61	23
	ii.Animal		-	-	-	-	-	-	-	-	75	71	75	71	-	-	25	18	25	18	-	-	100	37	100	37
	iii.Machine		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total		-	-	-	-	-	-	-	-	121	114	121	112	-	-	40	29	41	29	-	-	161	60	161	60
4. Sowing	i.Manual		-	-	120	600	120	600	-	-	758	715	758	715	-	-	1050	739	1050	739	-	-	1928	819	1928	719
	ii.Animal		-	-	-	-	-	-	-	-	263	249	263	249	-	-	350	246	350	246	-	-	613	229	613	229
	iii.Machine		50	250	-	-	50	250	-	-	-	-	-	-	-	-	-	-	-	-	50	19	-	-	50	19
	iv.Total		50	250	120	600	170	850	-	-	1020	963	1020	963	-	-	1400	985	1400	985	50	19	2541	948	2591	967
5. Watering	i.Manual		-	-	15	75	15	75	-	-	107	101	107	101	-	-	190	134	190	134	-	-	312	117	312	117
6. F.Y.Manure	i.Manual		-	-	30	150	30	150	-	-	98	92	98	92	-	-	-	-	-	-	-	-	128	48	128	48

(Contd..)

Table-20

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.115806

Crop: Sugarcane — Area: 2.28 ha — i) Head 0.20 ha — ii) Middle: 1.06 ha — iii) Tail: 1.42 ha

Sr. No.	Operations	Labour inputs	Head: Paid Total	Head: Paid Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (3+5) Total	Head: Total (3+5) Per Hect.	Middle: Paid Total	Middle: Paid Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect.	Tail: Paid Total	Tail: Paid Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect.	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect.	All Places: Self Supp: (5+11+17) Total	All Places: Self Supp: (5+11+17) Per Hect.	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
7. Chemical		i.Manual	-	-	5	24	5	24	-	-	-	-	-	-	-	-	137	62	188	132	-	-	192	72	192	72
8. Hoeing/Weed:		i.Manual	-	-	120	600	120	600	-	-	-	-	-	-	-	-	60	42	60	42	-	-	180	67	180	67
9. Harvesting		i.Manual	-	-	120	600	120	600	-	-	85	425	450	425	-	-	-	-	-	-	-	-	570	213	570	213
10.Carriage to Threshing yard/Sani		i.Manual	-	-	-	-	-	-	-	-	60	57	60	57	-	-	225	158	225	158	-	-	285	106	285	106
		ii.Animal	80	400	-	-	80	400	-	-	220	208	220	208	-	-	-	-	-	-	80	30	220	82	300	112
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	80	400	-	-	80	400	-	-	280	265	280	265	-	-	225	158	225	158	80	30	505	188	585	218
11.Threshing/ Winnowing/ Cane Crushing		i.Manual	-	-	45	225	45	225	-	-	330	311	330	311	-	-	480	338	480	338	-	-	855	319	855	319
		ii.Animal	-	-	105	525	105	525	-	-	770	726	770	726	-	-	1120	789	1120	789	-	-	1995	744	1995	744
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	150	750	150	750	-	-	1100	1038	1100	1038	-	-	1600	1127	1600	1127	-	-	2850	1063	2850	1063
12.Gur Making		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13. Total		i.Manual	-	-	462	2312	462	2312	-	-	2332	2200	2332	2200	-	-	3055	2151	3055	2151	-	-	5849	2183	5849	2183
		ii.Animal	80	400	105	525	185	925	-	-	2134	2013	2134	2013	-	-	2908	2048	2908	2048	80	30	5146	1920	5226	1950
		iii.Machine	150	750	-	-	150	750	-	-	-	-	-	-	-	-	-	-	-	-	150	56	-	-	150	56
		iv.Total	230	1150	567	2837	797	3987	-	-	4466	4213	4466	4213	-	-	5962	4199	5962	4199	230	86	10995	4103	11225	4189

(Concluded)

Table-21

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD.115806
(PIGEON PEA)

(NOT APPLICABLE)

Table-22

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.115806
(PIGEON PEA)

(NOT APPLICABLE)

Table-23

PRODUCTION COST AND PROFIT IN SAMPLE WATER COURSE RD.115866

Sr. No.	Crops	Location	Area (Hectare)	Total Output: Main Product (Mds)	Total Output: By-product Unit	Total Output: Total Output	Market Price per unit (ex-farm): MP (Rs)	Market Price per unit (ex-farm): BP (Rs)	Total value of output: MP	Total value of output: BP	Total value of output: Total	Value per Hectare: MP	Value per Hectare: BP	Value per Hectare: Total	Total Farming cost: Physical inputs	Total Farming cost: Labour cost	Total Farming cost: Total	Cost per hectare	Profit/loss (+) (-): Total	Profit/loss (+) (-): Per Hectare	Total Imputed costs: Physical input	Total Imputed costs: Labour	Total Imputed costs: Total	Carry home Income =col.19+23: Total	Carry home Income =col.19+23: Per Hectare
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1. Maize	Head		0.25	1	Bundles	70	100	2.00	100	140	240	400	560	960	267	274	541	2165	-301	-1205	-	119	119	-182	-730
	Middle		1.01	-	Bundles	90	-	2.33	-	210	210	-	208	208	2238	1565	3803	3765	-3593	-3558	-	1067	1067	-2526	-2501
	Tail		2.93	-	Bundles	230	-	2.25	-	518	518	-	177	177	2688	5247	7935	2708	-7418	-2532	-	4411	4411	-3006	-1026
	A.Places		4.19	1	Bundles	390	100		100	867	967	24	207	231	5193	7386	12580	8931	-11312	-2700	-	5598	5598	-5715	-1364
2. Sorghum	Head		-	Hect:	Rs.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Middle		0.15	Hect:	Rs.	-	533	-	80	-	80	533	-	533	217	132	349	2326	-267	-1793	-	132	132	-137	-910
	Tail		0.40	Hect:	Rs.	-	-	-	-	-	-	-	-	-	314	926	1241	3102	-1241	-3102	-	926	926	-314	-785
	A.Places		0.55	Hect:	Rs.	-	533	-	80	-	80	145	-	145	531	1059	1590	2890	-1510	-2745	-	1059	1059	-451	-820
3. Sugar-cane (Gur)	Head		0.20	4	Mds.C.T.	11	360	5	1440	55	1579	7395	2751	7895	1261	797	2058	10290	-479	-2395	-	567	567	88	441
					Mds.Bagg:	7		12		84			4201												
	Middle		1.06	33	Mds.C.T.	130	375	5	12375	6501	14069	11675	6131	13273	5040	4466	9505	8967	4564	4305	-	4466	4466	9029	8518
					Mds.Bagg:	87		12		1041		-	9851												
	Tail		1.42	-	Mds.C.T.	-	-	-	-	-	-	-	-	-	7000	5962	12963	9129	-12963	-9129	-	5962	5962	-7000	-4930
					Mds.Bagg:	-	-	-	-	-	-	-	-												
	A.Places		2.68	37	Mds.C.T.	141			13815	7051	15648	5155	2531	5839	13301	11225	24526	9151	-8878	-3313	-	10995	10995	2117	790
					Mds.Bagg:	94				11281		-	4211												
4. Pigeon Pea	Head		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Middle		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tail		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	A.Places		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

C.T.= Cane Tops Bagg: Bagasse

Table-24

CROPPING PATTERN ON SAMPLE FARMS IN SAMPLE WATER COURSE RD.115806

Sr. No.	Crops	Area											
		Head			Middle			Tail			All Places		
		Hect-are	% of season	% of year	Hect-are	% of season	% of year	Hect-are	% of season	% of year	Hect-are	% of season	% of year
0	1	2	3	4	5	6	7	8	9	10	11	12	13
I.	Kharif 1987												
	1. Maize	0.25	55.56	4.46	1.01	45.50	10.24	2.93	61.68	24.15	4.19	56.47	15.19
	2. Sorghum	-	-	-	0.15	6.76	1.52	0.40	8.42	3.30	0.55	7.41	1.99
	3. Sugarcane	0.20	44.44	3.57	1.06	47.75	10.75	1.42	29.89	11.76	2.68	36.12	9.71
	4. Pigeon Pea	-	-	-	-	-	-	-	-	-	-	-	-
	5. All Kharif Crops	0.45	100.00	8.04	2.22	100.00	22.52	4.75	100.00	39.16	7.42	100.00	26.89
II.	Rabi 1987-88												
	1. Wheat	4.65	90.29	83.04	6.78	88.74	68.76	6.17	83.60	50.86	17.60	87.26	63.79
	2. Barley	0.50	9.71	8.93	0.86	11.26	8.72	1.21	16.40	9.98	2.57	12.74	9.31
	3. Berseem	-	-	-	-	-	-	-	-	-	-	-	-
	4. Spinach	-	-	-	-	-	-	-	-	-	-	-	-
	5. All Rabi Crops	5.15	100.00	91.96	7.64	100.00	77.48	7.38	100.00	60.84	20.17	100.00	73.10
III.	Kharif + Rabi	5.60	-	100.00	9.86	-	100.00	12.13	-	100.00	27.59	-	100.00

Table-25

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF MAIZE IN SAMPLE WATER COURSE RD.115806

Sr. No.	Operations	Head (Area sown: 0.25)						Middle (Area sown: 1.[illegible])						Tail (Area sown: 2.93)						All Places (Area sown: 4.19)					
		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	3	7	8	9	1[illegible]	11	12	13	14	15	16	17	18	19	30	21	22	23	24	25
1.	Ploughing	0.20	0.80	-	-	2.00	8.00	5.50	5.45	5.00	4.95	4.50	4.46	45.07	15.38	44.50	15.19	4.50	1.54	50.77	12.12	49.50	11.81	11.00	2.63
2.	Levelling	0.09	0.37	-	-	-	-	0.25	0.25	0.75	[illegible]	-	-	4.50	1.54	4.50	1.54	-	-	5.84	1.16	5.25	1.25	-	-
3.	Planking	0.19	0.75	-	-	-	-	0.75	0.74	0.75	0.74	-	-	8.25	2.82	8.25	2.82	-	-	9.19	2.19	9.00	2.15	-	-
4.	Sowing	.09	0.37	-	-	0.90	3.60	2.75	2.72	2.00	1.98	1.50	1.49	4.50	1.53	11.50	3.92	1.50	0.51	7.34	1.75	13.50	3.22	3.90	0.93
5.	Watering	0.46	1.82	-	-	-	-	0.82	0.81	-	-	-	-	1.25	0.43	-	-	-	-	2.53	0.60	-	-	-	-
6.	F.Y.Manure	0.75	3.00	-	-	-	-	4.00	3.96	-	-	-	-	8.25	2.82	-	-	-	-	13.00	3.10	-	-	-	-
7.	Che:Fertilizer	0.19	0.76	-	-	-	-	1.00	0.99	-	-	-	-	2.63	0.90	-	-	-	-	3.82	0.91	-	-	-	-
8.	Hoeing/Weeding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Harvesting	1.25	5.00	-	-	-	-	5.00	4.95	-	-	-	-	3.00	1.02	-	-	-	-	9.25	2.21	-	-	-	-
10.	Carriage to threshing	-	-	-	-	-	-	4.00	3.96	-	-	-	-	-	-	-	-	-	-	4.00	0.95	-	-	-	-
11.	Threshing/ Winnowing	0.75	3.00	-	-	-	-	4.00	3.96	-	-	-	-	-	-	-	-	-	-	4.75	1.13	-	-	-	-
12.	Total	3.97	15.87	-	-	2.90	11.60	28.07	27.79	8.50	8.42	6.00	5.94	77.45	26.43	68.75	23.46	6.00	2.05	110.48	26.13	77.25	18.44	14.90	3.56

Table-26

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF SORGHUM IN SAMPLE WATER COURSE RD.115E06

Sr. No.	Operations	Head (Area sown: 0.30)						Middle (Area sown: 0.05)						Tail (Area sown: 0.40)						All Places (Area sown: 0.45)					
		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours	
		Total	Per Hects	Total	Per Hects	Total	Per Hects	Total	Per Hects	Total	Per Hects	Total	Per Hects	Total	Per Hects	Total	Per Hects	Total	Per Hects	Total	Per Hects	Total	Per Hects	Total	Per Hects
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Ploughing	-	-	-	-	-	-	1.00	20.00	1.00	20.00	-	-	3.00	20.00	3.00	20.00	-	-	4.00	20.00	4.00	20.00	-	-
2.	Levelling	-	-	-	-	-	-	1.00	20.00	1.00	20.00	-	-	0.50	1.25	0.50	1.25	-	-	1.50	3.33	1.50	3.33	-	-
3.	Planking	-	-	-	-	-	-	0.10	2.00	0.10	2.00	-	-	1.00	2.50	0.75	1.88	-	-	1.10	2.44	0.85	1.88	-	-
4.	Sowing	-	-	-	-	-	-	0.25	5.00	0.25	5.00	-	-	2.25	5.63	2.00	5.00	-	-	2.50	5.56	2.25	5.00	-	-
5.	Watering	-	-	-	-	-	-	-	-	-	-	-	-	0.13	0.31	-	-	-	-	0.13	0.28	-	-	-	-
6.	F.Y.Manure	-	-	-	-	-	-	-	-	-	-	-	-	1.00	2.50	1.00	2.50	-	-	1.00	2.22	1.00	2.22	-	-
7.	Chem.Fertilizer	-	-	-	-	-	-	0.10	2.00	-	-	-	-	0.35	0.88	-	-	-	-	0.35	0.78	-	-	-	-
8.	Weeding Hoeing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Harvesting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.	Carriage to threshing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11.	Threshing/ Winnowing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12.	Total	-	-	-	-	-	-	3.45	49.00	1.45	27.00	-	-	8.18	32.88	3.35	21.63	-	-	15.6[illegible]	34.67	1.[illegible]	33.44	-	-

Table-27

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF SUGARCANE IN SAMPLE WATER COURSE RD.115306

Sr. No.	Operations	Head (Area sown: 2.20)						Middle (Area sown: 1.06)						Tail (Area sown: 1.41)						All Places (Area sown: 2.67)					
		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect	Total	Per Hect:	Total	Per Hect:	Total	Per Hect	Total	Per Hect	Total	Per Hect	Total	Per Hect	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	3	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Ploughing	0.25	1.25	-	-	2.00	10.00	15.00	14.15	15.00	15.15	-	-	23.00	19.86	23.00	19.86	-	-	43.25	16.20	43.00	16.10	2.00	0.75
2.	Levelling	-	-	-	-	-	-	1.12	1.06	1.00	0.94	-	-	0.25	0.18	0.25	0.18	-	-	1.37	0.51	1.25	0.47	-	-
3.	Planking	-	-	-	-	-	-	1.50	1.42	1.50	1.42	-	-	0.50	0.35	0.50	0.35	-	-	2.00	0.75	2.00	0.75	-	-
4.	Sowing	4.00	20.00	-	-	1.00	5.00	25.25	23.82	5.25	4.95	-	-	35.00	24.82	7.00	4.96	-	-	64.25	24.06	12.25	4.59	1.00	0.37
5.	Watering	0.50	2.50	-	-	-	-	3.41	3.22	-	-	-	-	6.33	4.49	-	-	-	-	10.24	3.84	-	-	-	-
6.	F.Y.Manure	1.00	5.80	1.00	5.00	-	-	3.25	3.07	1.25	1.18	-	-	-	-	2.00	1.42	-	-	4.25	1.59	4.25	1.59	-	-
7.	Che:Fertilizer	0.16	0.80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16	0.06	-	-	-	-
8.	Hoeing/Weeding	4.00	20.00	-	-	-	-	-	-	-	-	-	-	2.00	1.42	-	-	-	-	6.00	2.25	-	-	-	-
9.	Harvesting	4.00	20.00	-		-	-	17.00	16.04	-	-	-	-	-	-	-	-	-	-	21.00	7.87	-	-	-	-
10.	Carriage to Threshing/cane crushing	2.00	10.00	2.00	10.00	-	-	8.50	8.02	5.50	5.19	-	-	-	-	-	-	-	-	10.50	3.93	7.50	2.81	-	-
11.	Threshing/Winnowing/Y.Gani	1.50	7.50	1.50	7.50	-	-	11.00	10.38	11.00	10.38	-	-	15.00	11.35	16.00	11.35	-	-	28.50	10.67	28.50	10.67	-	-
12.	Gur Making	7.00	35.00	-	-	-	-	54.00	50.94	-	-	-	-	65.00	46.10	-	-	-	-	126.00	47.19	-	-	-	-
13.	Total	24.41	122.05	4.50	22.50	3.00	15.00	140.03	132.10	40.50	38.21	-	-	153.08	108.57	53.75	38.12	-	-	317.52	118.92	98.75	36.99	3.00	1.12

Table-28

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF PIGEON PEA IN SAMPLE WATER COURSE RD.115806

Sr. No.	Operations	Head (Area sown: 0.00)						Middle (Area sown: 0.00)						Tail (Area sown: 0.00)						All Places (Area sown: 0.00)					
		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect	Total	Per Hect:	Total	Per Hect:	Total	Per Hect	Total	Per Hect	Total	Per Hect	Total	Per Hect	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Ploughing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.	Levelling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.	Planking	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4.	Sowing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Watering	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	F.Y.Manure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Che:Fertilizer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8.	Hoeing/Weeding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Harvesting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.	Carriage to threshing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11.	Threshing/ Winnowing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12.	Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-29

NUMBER OF FRUIT PLANTS, TREES AND FRUIT
PRODUCTION IN SAMPLE WATER COURSE RD.115806

Sr. No.	Particulars	Unit	Head (Total sample farmers = 10)											
			Apricot			Plum			Guava			Peach		
			In this Water-course	In Other Places	Total	In this Water-course	In Other Places	Total	In this Water-course	In Other Places	Total	In this Water-course	In Other Places	Total
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Sample household	Number	-	-	-	-	-	-	-	-	-	-	-	-
2.	Total Trees:													
	a. Fearing & non-bearing	Number	-	-	-	-	-	-	-	-	-	-	-	-
	b. Fruit bearing	Number	-	-	-	-	-	-	-	-	-	-	-	-
3.	Avg. Number of Tree:													
	a. No.per fruit growing household		-	-	-	-	-	-	-	-	-	-	-	-
	i-Bearing & non-bearing non-bearing(2a÷1)	Number	-	-	-	-	-	-	-	-	-	-	-	-
	ii-Fruit bearing (2b÷1)	Number	-	-	-	-	-	-	-	-	-	-	-	-
	b. No.per h.hold general:													
	i-Bearing & non-bearing		-	-	-	-	-	-	-	-	-	-	-	-
	ii-Fruit bearing		-	-	-	-	-	-	-	-	-	-	-	-
4.	Total fruit product	kg	-	-	-	-	-	-	-	-	-	-	-	-
5.	Fruit Production H.hold.													
	a.Fruit growing h.hold		-	-	-	-	-	-	-	-	-	-	-	-
	b.Sample H.hold in general		-	-	-	-	-	-	-	-	-	-	-	-
6.	Gross receipt from of fruit	Rs.	-	-	-	-	-	-	-	-	-	-	-	-
7.	Average sale process:													
	a. per fruit growing h.hold		-	-	-	-	-	-	-	-	-	-	-	-
	b. per sample house in general		-	-	-	-	-	-	-	-	-	-	-	-

(Contd....)

Table-29

NUMBER OF FRUIT PLANTS, TREES AND FRUIT PRODUCTION IN SAMPLE WATER COURSE RD.115B06

Sr. No.	Particulars	Unit	Middle (Total sample farmers = 10)											
			Apricot			Plum			Guava			Peach		
			In this Water-course	In Other Places	Total	In this Water-course	In Other Places	Total	In this Water-course	In Other Places	Total	In this Water-course	In Other Places	Total
0	1	2	15	16	17	18	19	20	21	22	23	24	25	26
1.	Sample household	Number	-	-	-	1	-	1	-	-	-	-	-	-
2.	Total Trees:													
	a. Bearing & non-bearing	Number	-	-	-	120	-	-	-	-	-	-	-	-
	b. Fruit bearing	Number	-	-	-	60	-	60	-	-	-	-	-	
3.	Avg. Number of Tree:													
	a. No.per fruit growing household													
	i-Bearing & non-bearing non-bearing(2a‡1)	Number	-	-	-	120	-	120	-	-	-	-	-	
	ii-Fruit bearing (2b‡1)	Number	-	-	-	60	-	60	-	-	-	-	-	
	b. No.per h.hold general:													
	i-Bearing & non-bearing		-	-	-	12	-	12	-	-	-	-	-	
	ii-Fruit bearing		-	-	-	6	-	6	-	-	-	-	-	
4.	Total fruit product	Kg	-	-	-	500	-	500	-	-	-	-	-	
5.	Fruit Production household:													
	a.Fruit growing h.hold		-	-	-	500	-	500	-	-	-	-	-	
	b.Sample H.hold in general		-	-	-	50	-	50	-	-	-	-	-	
6.	Gross receipt from of fruit		-	-	-	1000	-	1000	-	-	-	-	-	
7.	Average sale process:													
	a. per fruit growing h.hold		-	-	-	1000	-	1000	-	-	-	-	-	
	b. per sample house in general		-	-	-	100	-	100	-	-	-	-	-	

Table-29

NUMBER OF FRUIT PLANTS, TREES AND FRUIT
PRODUCTION IN SAMPLE WATER COURSE RD.115806

Sr. No.	Particulars	Unit	Tail (Total sample farmers = 10)											
			Apricot			Plum			Guava			Peach		
			In this Water-course	In Other Places	Total	In this Water-course	In Other Places	Total	In this Water-course	In Other Places	Total	In this Water-course	In Other Places	Total
0	1	2	27	28	29	30	31	32	33	34	35	36	37	38
1.	Sample household	Number	-	-	-	1	-	1	-	-	-	-	-	-
2.	Total Trees:													
	a. Bearing & non-bearing	Number	-	-	-	260	-	260	-	-	-	-	-	-
	b. Fruit bearing	Number	-	-	-	-	-	-	-	-	-	-	-	-
3.	Avg. Number of Tree:													
	a. No.per fruit growing household		-	-	-	260	-	260	-	-	-	-	-	-
	i-Bearing & non-bearing non-bearing(2a÷1)	Number	-	-	-	260	-	260	-	-	-	-	-	-
	ii-Fruit bearing (2b÷1)	Number	-	-	-	-	-	-	-	-	-	-	-	-
	b. No.per h.hold general:													
	i-Bearing & non-bearing		-	-	-	260	-	260	-	-	-	-	-	-
	ii-Fruit bearing		-	-	-	-	-	-	-	-	-	-	-	-
4.	Total fruit product	Mds	-	-	-	-	-	-	-	-	-	-	-	-
5.	Fruit Production household:		-	-	-	-	-	-	-	-	-	-	-	-
	a.Fruit growing h.hold		-	-	-	-	-	-	-	-	-	-	-	-
	b.Sample H.hold in general		-	-	-	-	-	-	-	-	-	-	-	-
6.	Gross receipt from of fruit		-	-	-	-	-	-	-	-	-	-	-	-
7.	Average sale process:													
	a. per fruit growing h.hold		-	-	-	-	-	-	-	-	-	-	-	-
	b. per sample house in general		-	-	-	-	-	-	-	-	-	-	-	-

Table-29

NUMBER OF FRUIT PLANTS, TREES AND FRUIT
PRODUCTION IN SAMPLE WATER COURSE RD.70800

Sr. No.	Particulars	Unit	All Places (Total sample farmers = 10)											
			Apricot			Plum			Guava			Peach		
			In this Water-course	In Other Places	Total	In this Water-course	In Other Places	Total	In this Water-course	In Other Places	Total	In this Water-course	In Other Places	Total
0	1	2	39	40	41	42	43	44	45	46	47	48	49	50
1.	Sample household	Number	-	-	-	2	-	2	-	-	-	-	-	-
2.	Total Trees:													
	a. Bearing & non-bearing	Number	-	-	-	380	-	380	-	-	-	-	-	-
	b. Fruit bearing	Number		-	-	60	-	60	-	-	-	-	-	-
3.	Avg. Number of Tree:													
	a. No.per fruit growing household													
	i-Bearing & non-bearing non-bearing(2a÷1)	Number	-	-	-	190	-	190	-	-	-	-	-	-
	ii-Fruit bearing (2b÷1)	Number	-	-	-	30	-	30	-	-	-	-	-	-
	b. No.per h.hold general:													
	i-Bearing & non-bearing		-	-	-	13	-	13	-	-	-	-	-	-
	ii-Fruit bearing		-	-	-	2	-	2	-	-	-	-	-	-
4.	Total fruit product	Kg	-	-	-	500	-	500	-	-	-	-	-	-
5.	Fruit Production household:													
	a.Fruit growing h.hold	Kg	-	-	-	250	-	250	-	-	-	-	-	-
	b.Sample H.hold in general		-	-	-	17	-	17	-	-	-	-	-	-
6.	Gross receipt from of fruit		-	-	-	1000	-	1000	-	-	-	-	-	-
7.	Average sale process:													
	a. per fruit growing h.hold		-	-	-	500	-	500	-	-	-	-	-	-
	b. per sample house in general		-	-	-	33	-	33	-	-	-	-	-	-

(Concluded...)

Table-30

LIVESTOCK HOLDINGS OF SAMPLE HOUSEHOLDS IN SAMPLE WATER COURSE RD.115806

Sr. No.	Kind of Livestock	No. of H.hold who possess these:	Number of livestock possessed Head											
			Minor			Adult			Total			In-milk		
			a	b	c	a	b	c	a	b	c	a	b	c
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Buffalo	3	2	0.67	0.20	4	1.33	0.40	6	2.00	0.60	1	0.33	0.10
2.	Cow	5	6	1.20	0.60	6	1.20	0.60	12	2.40	1.20	4	0.80	0.40
3.	Goat	2	2	1.00	0.20	5	2.50	0.50	7	3.50	0.70	3	1.50	0.30
4.	Sheep	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Bullock	2	-	-	-	2	1.00	0.20	2	1.00	0.20	-	-	-
6.	He Buffalo	-	-	-	-	-	-	-	-	-	-	-		-
7.	Horse/Mule	-	-	-	-	-	-	-	-	-	-	-	-	-
8.	Donkey	8	-	-	-	12	1.50	1.20	12	1.50	1.20	-	-	-
9.	Camel	-	-	-	-	-	-	-	-	-	-	-	-	-
10.	Total	20	10	0.50	1.00	29	1.45	2.90	39	1.95	3.90	8	0.40	0.80
11.	Poultry	9	20	2.22	2.00	65	7.22	6.50	65	7.22	6.50	-	-	-

(Contd....)

Total Household: 30
Head: 10
Middle: 10
Tail: 10

a. Total animal
b. Number per owner
c. Number per tagible household in general

Table-30

LIVESTOCK HOLDINGS OF SAMPLE HOUSEHOLDS IN
SAMPLE WATER COURSE RD.115806

Sr. No.	Kind of Livestock	No. of H.hold who possess these:	Number of livestock possessed											
			Middle											
			Minor			Adult			Total			In-milk		
			a	b	c	a	b	c	a	b	c	a	b	c
0	0	15	16	17	18	19	20	21	22	23	24	25	26	27
1.	Buffalo	4	3	0.75	0.30	[illegible]	1.00	0.40	7	1.75	0.70	4	1.00	0.40
2.	Cow	6	2	0.33	0.20	6	1.00	0.60	8	1.33	0.80	1	0.17	0.10
3.	Goat	4	3	0.75	0.30	50	12.50	5.00	53	13.25	5.30	-	-	-
4.	Sheep	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Bullock	2	-	-	-	4	2.00	0.40	4	2.00	0.40	-	-	-
6.	He Buffalo	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Horse/Mule	-	-	-	-	-	-	-	-	-	-	-	-	-
8.	Donkey	8	-	-	-	10	1.25	1.00	10	1.25	1.00	-	-	-
9.	Camel	-	-	-	-	-	-	-	-	-	-	-	-	-
10.	Total	24	8	0.33	0.80	74	3.08	7.40	82	3.42	8.20	5	0.21	0.50
11.	Poultry	6	2	0.33	0.20	40	6.67	4.00	42	7.00	4.20	-	-	-

(Contd....

Total Household:30
Head:10
Middle:10
Tail:10

a. Total animal
b. Number per owner
c. Number per sample household in general

Table-30

LIVESTOCK HOLDINGS OF SAMPLE HOUSEHOLDS
IN SAMPLE WATER COURSE RD.115806

Sr. No.	Kind of Livestock	No. of H.hold who possess these:	Number of livestock possessed											
			Tail											
			Minor			Adult			Total			In-milk		
			a	b	c	a	b	c	a	b	c	a	b	c
0	0	28	29	30	31	32	33	34	35	36	37	38	39	40
1.	Buffalo	1	-	-	-	1	1.00	0.10	1	1.00	0.10	1	1.00	0.10
2.	Cow	7	3	0.43	0.30	9	1.29	0.90	12	1.71	1.20	5	0.71	0.50
3.	Goat	2	-	-	-	3	1.50	0.30	3	1.50	0.30	2	1.00	0.20
4.	Sheep	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Bullock	1	-	-	-	4	4.00	0.40	4	4.00	0.40	-	-	-
6.	He Buffalo	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Horse/Mule	-	-	-	-	-	-	-	-	-	-	-	-	-
8.	Donkey	8	-	-	-	9	1.13	0.90	9	1.13	0.90	-	-	-
9.	Camel	-	-	-	-	-	-	-	-	-	-	-	-	-
10.	Total	19	3	0.16	0.30	26	1.37	2.60	29	1.53	2.90	8	0.42	0.80
11.	Poultry	8	7	0.88	0.70	68	8.50	6.80	75	9.38	7.50	-	-	-

(Contd....)

Total Household:30
Head:10
Middle:10
Tail:10

a. Total animal
b. Number per owner
c. number per sample household in general

Table-30

LIVESTOCK HOLDING OF SAMPLE HOUSEHOLDS
IN SAMPLE WATER COURSE RD.115806

Sr. No.	Kind of Livestock	No. of household who possess these:				Number of livestock possessed											
						All places											
						Minor			Adult			Total			In-#1		
		Head	Middle	Tail	All Places	a	b	c	a	b	c	a	b	c	a	b	c
0	0	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
1.	Buffalo	3	4	1	8	5	0.63	0.17	9	1.13	0.30	14	1.75	0.47	5	0.75	0.20
2.	Cow	5	6	7	18	11	0.61	0.37	21	1.17	0.70	32	1.78	1.07	10	0.56	0.33
3.	Goat	2	4	2	8	5	0.63	0.17	58	7.25	1.93	63	7.88	2.10	5	0.63	0.17
4.	Sheep	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Bullock	2	2	1	5	-	-	-	10	2.00	0.33	10	2.00	0.33	-	-	-
6.	He Buffalo	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Horse/Mule	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8.	Donkey	8	8	8	24	-	-	-	31	1.29	1.03	31	1.29	1.03	-	-	-
9.	Camel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.	Total	20	24	19	63	21	0.33	0.70	129	2.05	4.30	150	2.38	5.00	21	0.33	0.70
11.	Poultry	9	6	8	23	-	-	-	182	7.52	6.07	182	7.52	6.07	-	-	-

(Concluded)

Total Household:30
Head:10
Middle:10
Tail:10

a. Total animal
b. Number per owner
c. Number per sample household in general

Table-31

MILK PRODUCTION AND UTILIZATION IN SAMPLE WATER COURSE RD. 115806

Sr. No.	Particulars	Unit	Head (Total sample farmers = 10.00)					Middle (Total sample farmers= 10)				
			Buffalo	Cow	Goat	Sheep	Total	Buffalo	Cow	Goat	Sheep	Total
0	1	2	3	4	5	6	7	8	9	10	11	12
1.	In milk animals	Number	1.00	4.00	3.00	-	8.00	3.00	2	-	-	5
2.	Number of owners	Number	1.00	4.00	2.00	-	7.00	3.00	2	-	-	5
3.	Avg.Daily milk production	Litre	4.00	3.75	1.33	-	5.08	5.30	4	-	-	9.30
4.	Avg.Monthly milk Production (1 x 3 x 30)	Litre	120.00	450.00	119.70	-	689.70	477.00	240	-	-	717.00
5.	Avg.Monthly sale (in normal in-milk state)	Litre	-		-	-	-	-	-	-	-	-
6.	5 as %age of 4 (5÷4x100)	%age	-	-	-	-	-	-	-	-	-	-
7.	Lactation period	Day	305.00	200.00	90.00	90	685.00	503.00	200	90	90	
8.	Total Production per lactation period (1x3x7)	Litre	1220.00	3000.00	359.10	-	7997.70	1600.00	-	-	-	-
9.	Estimated sale per lactation period (6x8)÷100	"	-	-	-	-	-	-	-	-	-	-
10.	Price per litre	Rs.	-	-	-	-	-	-	-	-	-	-
11.	Estimated receipt from sales per lactation period (9x10)	Rs.	-	-	-	-	-	-	-	-	-	-
12.	Avg. annual sale proceed:											
	a. per owner household (11÷2)	Rs.	-	-	-	-	-	-	-	-	-	-
	b. per sample household in general	Rs.	-	-	-	-	-	-	-	-	-	-

(Contd....)

Table-31

MILK PRODUCTION AND UTILIZATION IN SAMPLE
WATER COURSE RD.115906

Sr. No.	Particulars	Unit	Tail (Total sample farmers = 10.00)					A.Places(Total Sample Farmers= 30				
			Buffalo	Cow	Goat	Sheep	Total	Buffalo	Cow	Goat	Sheep	Total
0	1		13	14	15	16	17	18	19	20	21	22
1.	In Milk Animal	Number	1	5	-	-	6	5	11	3	-	19
2.	Number of Owner	Number	1	4	-	-	5	[illegible]	[illegible]	2	-	17
3.	Avg.Daily Milk Production	Litre	4	2.25	-	-	6.25	[illegible]	5.3	[illegible]	-	30.6[illegible]
4.	Avg. Monthly Milk Production (1 x 3 x 30)	Litre	120	337.50	-	-	457.50	645.[illegible]	[illegible]	119.[illegible]		-
5.	Avg. Monthly sale (in normal in-milk state)	Litre	-	-	-	-	-	-	-	-	-	-
6.	5 as %age if 4(5÷4x100)	%age	-	-	-	-	-	-	-	-	-	-
7.	Lactation Period	Day	305	200	90	90	-	305	200	90	9[illegible]	-
8.	Total Production per lactation period (1x3x7)	Litre	1220	2250	-	-	-	6557.[illegible]	7240	359.10	-	-
9.	Estimated sale per lactation period(6x8) ÷ 100=		-	-	-	-	-	-	-	-	-	-
10.	Price per litre	Rs.	-	-	-	-	-	-	-	-	-	-
11.	Estimated receipt from sales per lactation period (9x10)	Rs.	-	-	-	-	-	-	-	-	-	-
12.	Avg. Annual sale Proceed:											
	a: per owner household (11 ÷ 2)	Rs.	-	-	-	-	-	-	-	-	-	-
	b: per sample household in general	Rs.	-	-	-	-	-	-	-	-	-	-

(Concluded)

Table-32

INCOME FROM SALE OF DAIRY PRODUCTS (OTHER THAN MILK)
DURING SIX MONTHS PRECEEDING INTERVIEW OF SAMPLE HOUSEHOLDS
IN KHARIF 1987 IN SAMPLE-WATER COURSE RD.115806

Sr. No.	Item	Household reporting sales: Head	Middle	Tail	All places	Gross income (Rs)	Average income: Per selling H.hold (Rs)	Per sample household in general (Rs)
0	1	2	3	4	5	6	7	8
1.	Butter	-	-	-	-	-	-	-
2.	Ghee	-	-	-	-	-	-	-
3.	Eggs	-	-	-	-	-	-	-
4.	Poultry	-	-	-	-	-	-	-
5.	Animals	-	-	-	-	-	-	-
6.	Hides	-	-	-	-	-	-	-
7.	Skins	-	1	-	1	160	160	5.33
8.	Wool	-	-	-	-	-	-	-
9.	Hair	-	-	-	-	-	-	-
10.	Manure	-	-	-	-	-	-	-
11.	Total	-	1	-	1	160	160	-

Households:

1. Head	10
2. Middle	10
3. Tail	10
4. Total	30

Table - 33

INCOME FROM HIRING OUT OF LIVESTOCK IN
SAMPLE WATER COURSE RD. 115806

(NOT APPLICABLE)

Table-34

INCOME FROM SELECTED SOURCES DURING SIX MONTHS BEFORE INTERVIEW IN KHARIF 1987 IN SAMPLE WATER COURSE RD. 115806

Sr. No.	Particulars	Unit	Sources: Rent of Land	Rent of other property	Trade	Industry	Foreign remittances	Home remittances	Other
0	1	2	3	4	5	6	7	8	9
1.	H.holds reporting income:	No							
	Head		-	-	-	-	-	-	-
	Middle		-	-	-	-	-	-	1
	Tail		-	-	-	-	-	-	-
	All Places		-	-	-	-	-	-	1
2.	Total Income:	Rs.							
	Head		-	-	-	-	-	-	-
	Middle		-	-	-	-	-	-	18000
	Tail		-	-	-	-	-	-	-
	All Places	Rs.	-	-	-	-	-	-	18000
3.	Avg. Income of Recipients:	Rs.							
	Head		-	-	-	-	-	-	-
	Middle		-	-	-	-	-	-	18000
	Tail		-	-	-	-	-	-	-
	All Places	Rs.	-	-	-	-	-	-	18000
4.	Avg.Income of sample households in General:	Rs.							
	Head		-	-	-	-	-	-	-
	Middle		-	-	-	-	-	-	1800
	Tail		-	-	-	-	-	-	-
	All Places	Rs.	-	-	-	-	-	-	600

Household:

1. Head 10
2. Middle 10
3. Tail 10
4. Total 30

Table-35

PERMANENT LABOUR ON FARM IN SAMPLE WATER COURSE RD.115806

(NOT APPLICABLE)

Table-1

AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS IN SAMPLE WATERCOURSE RD.115806

Sr. No.	Crops	Location	Area	Main Product			By Product		
				Unit	Total	Per Hectare	Unit	Total	Per Hectare
0	1	2	3	4	5	6	7	8	9
1.	Wheat	Head	4.65	Mds	79.00	16.99	Mds	160.5	34.52
		Middle	6.78	Mds	149.50	22.05	Mds	294.5	43.44
		Tail	6.17	Mds	103.50	16.77	Mds	210.0	34.04
		Total	17.60	Mds	332.00	18.86	Mds	665.0	37.78
2.	Barley Grain	Head	0.40	Mds	9.50	23.75	-	18.5	46.25
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	0.40	Mds	9.50	23.75	Mds	18.5	46.25
3.	Barley Fodder	Head	0.10	-	-	-	Rs.	225.0	2250.00
		Middle	0.86	-	-	-	Rs.	1800.0	2093.02
		Tail	1.21	-	-	-	Rs.	2000.0	1652.89
		Total	2.17	-	-	-	Rs.	4025.0	1854.84
4.	Berseem	Head	0.46	Rs.	950.00	2065.22	-	-	-
		Middle	0.30	Rs.	675.00	2250.00	-	-	-
		Tail	0.20	Rs.	200.00	1000.00	-	-	-
		Total	0.96	Rs.	1825.00	1901.04	-	-	-
5.	Pea	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	-	-	-	-	-	-	-
6.	Spinach	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	-	-	-	-	-	-	-

Table-2

AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS OUTSIDE SAMPLE WATERCOURSE RD.115806

Sr. No.	Crops	Location	Area	Main Product			By Product		
				Unit	Total	Per Hectare	Unit	Total	Per Hectare
0	1	2	3	4	5	6	7	8	9
1.	Wheat	Head	4.76	Mds	60.50	12.71	Mds	116	24.37
		Middle	2.02	Mds	43.00	21.29	Mds	86	42.57
		Tail	-	-	-	-	-	-	-
		Total	6.78	Mds	103.50	15.27	Mds	202	29.79
2.	Barley Grain	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	-	-	-	-	-	-	-
3.	Barley Fodder	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	-	-	-	-	-	-	-
4.	Berseem	Head	0.30	Rs.	225.00	750.00	Rs.	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	0.30	Rs.	225.00	750.00	-	-	-
5.	Pea	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	-	-	-	-	-	-	-
6.	Spinach	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	-	-	-	-	-	-	-

Table-3

DISPOSAL OF MAIN PRODUCTS IN SAMPLE WATER COURSE RD.115806

Sr. No.	Crop Mode of Disposal	Wheat Mds								Barley Mds							
		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places	
		Qty.	%	Qty.	%	Qty	%	Qty.	%	Qty.	%	Qty	%	Qty.	%	Qty.	%
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
I	Total Output	139.5	100.00	192.50	100.00	103.50	100.00	435.50	100.00	9.50	100.00	-	-	-	-	9.50	100.00
II.	Disposal																
	1.Retained for H.use	57.25	41.04	121.50	63.12	91.88	88.77	270.60	62.14	9.50	100.00	-	-	-	-	9.50	100.00
	2.Sold	60.50	43.37	43.00	22.34	-	-	103.50	23.77	-	-	-	-	-	-	-	-
	3.Landlord's Share	4.00	2.87	7.50	3.90	4.00	3.86	15.50	3.56	-	-	-	-	-	-	-	-
	4.Artisan's dues	3.50	2.51	4.50	2.34	4.00	3.86	12.00	2.76	-	-	-	-	-	-	-	-
	5.Given to Labourers	1.00	0.72	-	-	1.50	1.45	2.50	0.57	-	-	-	-	-	-	-	-
	6.Seed	10.00	7.17	9.00	4.68	-	-	19.00	4.36	-	-	-	-	-	-	-	-
	7.Usher/Charity	2.50	1.79	6.50	3.38	-	-	9.00	1.93	-	-	-	-	-	-	-	-
	8.Other Specify	0.75	0.54	0.50	0.26	0.12	0.12	1.37	0.31	-	-	-	-	-	-	-	-
III.	Total =All Uses	139.5	100.00	192.50	100.00	103.50	100.00	435.50	100.00	9.50	100.00	-	-	-	-	9.50	100.00

(Contd...)

Table-3

DISPOSAL OF MAIN PRODUCTS IN SAMPLE WATERCOURSE RD.115606

Sr. No.	Crop Mode of Disposal	Sesame Fai								Pea (Mda								Spinach Mdai							
		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places	
		Qty.	%	Qty.	%	Qty.	%	Qty.	%	Qty.	%	Qty	%	Qty.	%	Qty.	%	Qty.	%	Qty	%	Qty	%	Qty.	%
1	1	18	19	2	2	33	33	94	25	[illegible]	27	28	29	30	31	32	33	34	25	36	37	38	39	40	41
I	Total Output	950	100	675	100	200	100	1825	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II.	Disposal																								
	1.Retained for House	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.Sold	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3.Landlord's Share	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4.Artisan's dues	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5.Given to Labourers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6.Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7.Usher/Charity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8.Other Specify	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
III.	Total =All Uses	950	100	675	100	200	100	1825	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(Concluded)

Table-4

DISPOSAL OF BY-PRODUCTS IN SAMPLE WATER COURSE RD.115806

Sr. No.	Crop Mode of Disposal	Wheat Mds								Barley (Rs)							
		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places	
		Qty.	%	Qty.	%	Qty	%	Qty.	%	Rs.	%	Rs.	%	Rs.	%	Rs.	%
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
I Total Output		276.5	100.00	380.5	[illegible]	210.00	100.00	867.00	100.00	688.0	100.0	1800	100	2000	100.00	4488	100.00
II. Disposal																	
1.Retained for House		263.5	95.30	364.5	95.80	155.00	74.24	786.00	90.66	688.0	100.0	1800	100	1550	77.50	4038	99.00
2.Sold		-	-	-	-	45.00	21.43	45.00	5.19	-	-	-	-	-	-	-	-
3.Landlord's Share		9.5	3.44	16.0	4.2[illegible]	7.00	3.33	32.50	3.75	-	-	-	-	450	22.50	450	1.00
4.Artisan's dues		3.5	1.27	-	-	-	-	3.50	0.40	-	-	-	-	-	-	-	-
5.Given to Labourers		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.Seed		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.Usher/Charity		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8.Other Specify		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
III.Total =All Uses		276.5	100.00	380.5	100.00	210.00	100.00	867.00	100.00	688.0	100.0	1800	100	2000	100.00	4488	100.00

(Contd....)

Table-4

DISPOSAL OF BY-PRODUCTS IN SAMPLE WATER COURSE NO. 115806

Sr. No.	Crop Mode of Disposal	Berseem (Rs)								Pea (Mds)								Spinach (Mds)							
		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places	
		Rs.	%	Rs.	%	Rs.	%	Rs.	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%
0	1	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
I	Total Output	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II.	Disposal																								
	1.Retained for H.use	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.Sold	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3.Landlord's Share	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4.Artisan's dues	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5.Given to Labourers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6.Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7.Usher/Charity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8.Other Specify	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
III.	Total =All Uses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(Concluded..)

Table-5

MODE OF SALE OF WHEAT IN SAMPLE WATER COURSE RD.115806

Sr. No.	Mode of Sale	Head		Middle		Tail		All Places	
		Qty.	%	Qty	%	Qty	%	Qty	%
0	1	2	3	4	5	6	7	8	9
I.	In Village	60.5	100	43	100	-	-	103.5	100
	1. To Beoparis	-	-	-	-	-	-	-	-
	2. To Shop Keepers	-	-	-	-	-	-	-	-
	3. To others	60.5	100	43	100	-	-	103.5	100
II.	In other Villages	-	-	-	-	-	-	-	-
	1. To Beoparis	-	-	-	-	-	-	-	-
	2. To Shop Keepers	-	-	-	-	-	-	-	-
	3. To others	-	-	-	-	-	-	-	-
III.	In Peshawar	-	-	-	-	-	-	-	-
	1. Through Commission Agents	-	-	-	-	-	-	-	-
	2. To whole sellers	-	-	-	-	-	-	-	-
	3. To others	-	-	-	-	-	-	-	-
IV.	In other urban centres	-	-	-	-	-	-	-	-
V.	Total sales	60.5	100	43	100	-	-	103.5	100

Table-6

MODE OF SALE OF BARLEY IN SAMPLE WATER COURSE RD.115806

(NOT APPLICABLE)

Table-7

MODE OF SALE OF BERSEEM IN SAMPLE WATER COURSE RD.115806

(NOT APPLICABLE)

Table-8

MODE OF SALE OF PEA IN SAMPLE WATER COURSE RD.115806

(NOT APPLICABLE)

Table-9

MODE OF SALE OF SPINACH IN SAMPLE WATER COURSE RD.115806

(NOT APPLICABLE)

Table-10

NUMBER OF FARMERS REPORTING CONSUMPTION OF CHEMICAL FERTILIZERS IN SAMPLE WATER COURSE RD.115806

Sr. No.	Location of farm	Total farmers growing this crop No(=100)	Farmers using fertilizers													
			Urea		D A P		N P K		N P		Ammonium Sulphate		Ammonium Nitrate		F.Sulphate	
			No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
I.	WHEAT															
	a.Head of W.C.	10	8	125.00	1	12.50	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	4	3	133.33	2	33.33	-	-	-	-	-	-	-	-	-	
	c.Tail of W.C.	9	7	128.57	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	27	21	128.57	3	14.29	-	-	-	-	-	-	-	-	-	-
II.	BARLEY															
	a.Head of W.C.	3	1	300.00	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	4	4	100.00	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	3	1	300.00	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	10	6	166.67	-	-	-	-	-	-	-	-	-	-	-	-
III.	BERSEEM															
	a.Head of W.C.	3	3	100.00	1	33.33	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	2	1	200.00	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	1	1	100.00	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	6	5	120.00	1	20.00	-	-	-	-	-	-	-	-	-	-
IV.	P E A															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V.	SPINACH															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-11

QUANTITY OF CHEMICAL FERTILIZERS USED BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD.115806

Sr. No.	Location of farm	Area sown (Hectare)	Quantity of fertilizer used: (KG)													
			Urea		D A P		N P K		N P		Ammonium Sulphate		Ammonium Nitrate		P.Sulphate	
			Total	Per Hect-are	Total	Per Hect-are	Total	Per Hect-are	Total	Per Hect-are	Total	Per Hect-are	Total	Per Hect-are	Total	Per Hect-are
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
I.	WHEAT															
	a.Head of W.C.	4.65	575.0	123.66	25.0	5.38	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	6.78	625.0	92.16	250.0	36.87	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	6.17	675.0	109.40	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	17.60	1875.0	106.53	275.0	15.63	-	-	-	-	-	-	-	-	-	-
II.	BARLEY															
	a.Head of W.C.	0.50	12.5	109.40	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	0.86	100.0	116.28	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	1.21	50.0	41.32	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	2.57	162.5	63.23	-	-	-	-	-	-	-	-	-	-	-	-
III.	BERSEEM															
	a.Head of W.C.	0.46	87.5	190.22	12.5	27.17	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	0.30	50.0	166.67	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	0.20	50.5	250.00	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	0.96	187.5	195.31	12.5	13.02	-	-	-	-	-	-	-	-	-	-
IV.	P E A															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V.	BERSEEM															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-12

CONSUMPTION OF FARM YARD MANURE IN
SAMPLE WATER COURSE RD.115806

Sr. No.	Location of farm	Total farmers growing this crop	Farmers using Farm Yard Manure No.	%	Area Sown (Hec-tare)	Quantity used (KG) Total	Per Hectare
0	1	2	3	4	5	6	7
I.	WHEAT						
	a.Head of W.C.	10	2	20.00	4.65	5971.00	1284
	b.Middle of W.C.	8	3	57.50	6.78	7091.00	1046
	c.Tail of W.C.	9	4	44.44	6.17	12316.00	1996
	d.All Places	27	9	33.33	17.60	25378.00	1442
II.	BARLEY						
	a.Head of W.C.	3	-	-	-	-	-
	b.Middle of W.C.	4	-	-	-	-	-
	c.Tail of W.C.	3	-	-	-	-	-
	d.All Places	10	-	-	-	-	-
III.	BERSEEM						
	a.Head of W.C.	3	2	66.67	0.46	2239.00	4867
	b.Middle of W.C.	2	1	50.00	0.30	1493.00	4977
	c.Tail of W.C.	1	1	100.00	0.20	2239.00	11195
	d.All Places	6	4	66.67	0.96	5971.00	6220
IV.	PEA						
	a.Head of W.C.	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-
V.	SPINACH						
	a.Head of W.C.	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-

Table-13

NUMBER OF SAMPLE FARMERS WHO USED INSECTICIDES/
PESTICIDES/WEEDICIDES IN SAMPLE WATER COURSE RD.115806

(NOT APPLICABLE)

Table-14

QUANTITY OF SEED USED BY SAMPLE FARMERS
IN SAMPLE WATER COURSE RD.115806

Sr. No.	Crop	Total Area (Hectare)	Head Quantity used			Middle Quantity used			Tail Quantity used			All Places Quantity used		
			Improved	Local	Total	Improved	Local	Total	Improved	Local	Total	Improved	Local	Total
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Wheat	17.60	-	496	496	-	655	655	-	584	584	-	1735	1735
2.	Barley	2.57	-	50	50	-	62	62	-	120	120	-	232	232
3.	Berseem	0.96	-	9	9	-	18	18	-	4	4	-	31	31
4.	Pea	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Spinach	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-15

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD.115806

Crop: Wheat Area: 17.60 ha. i) Head : 4.65 ha ii) Middle: 5.79 ha. iii) Tail: 6.17 ha.

Sr. No.	Physical Input	Head: Purchased Total	Head: Purchased Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (2+4) Total	Head: Total (2+4) Per Hect.	Middle: Purchased Total	Middle: Purchased Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (8+10) Total	Middle: Total (8+10) Per Hect.	Tail: Purchased Total	Tail: Purchased Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (14+16) Total	Tail: Total (14+16) Per Hect.	All Places: Purchased (2+8+14) Total	All Places: Purchased (2+8+14) Per Hect.	All Places: Self Supplied (4+10+16) Total	All Places: Self Supplied (4+10+16) Per Hect.	All Places: Total Total	All Places: Total Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Seed	1210	260	-	-	1210	260	1485	319	34	4	1519	323	1223	199	-	-	1223	198	3918	223	24	1	3942	224
2.	Farm Yard Manure	-	-	480	103	480	103	-	-	600	89	600	89	-	-	990	160	990	160	-	-	2070	118	2070	118
3.	Chemical Fertilizer	1615	347	-	-	1615	347	2395	353	-	-	1830	293	1830	297	-	-	1830	293	5840	332	-	-	5840	332
4.	Insecticide/ Pesticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Water Charges	276	59	-	-	276	59	402	59	-	-	402	59	366	59	-	-	366	59	1044	59	-	-	1044	59
6.	Dues of Artisans	700	151	-	-	700	151	350	52	-	-	350	52	350	57	-	-	350	57	1400	80	-	-	1400	80
7.	Total	3801	817	480	103	4281	921	4632	683	624	92	5256	775	3769	611	990	160	4759	771	12202	693	2094	119	14296	812

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.115806

Crop: Wheat | Area:17.60 ha. | i) Head : 4.65 ha. | ii) Middle: 6.78 ha. | iii. Tail: 6.17 ha.

Sr. No.	Operations	Labour inputs	Head: Paid Total	Head: Paid Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (3+5) Total	Head: Total (3+5) Per Hect.	Middle: Paid Total	Middle: Paid Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect.	Tail: Paid Total	Tail: Paid Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect.	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect.	All Places: Self Supp: (5+11+17) Total	All Places: Self Supp: (5+11+17) Per Hect.	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Ploughing	i.Manual	-	-	328	70	328	70	-	-	1844	193	1844	193	-	-	529	86	529	86	-	-	2100	119	2100	119
	ii.Animal	200	43	-	-	200	43	360	53	1280	189	1640	242	-	-	480	78	480	78	560	32	1760	100	2320	132
	iii.Machine	2125	457	-	-	2125	457	1060	156	-	-	1060	156	2110	342	-	-	2110	342	5295	301	-	-	5295	301
	iv.Total	2325	500	328	70	2653	570	1420	209	3124	382	3544	582	2110	342	1009	164	3119	506	5855	333	3860	219	9715	552
2. Levelling	i.Manual	-	-	-	-	-	-	-	-	20	2	20	2	-	-	30	5	30	5	-	-	50	3	50	3
	ii.Animal	-	-	-	-	-	-	-	-	40	5	40	5	-	-	-	-	-	-	-	-	40	2	40	-
	iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total	-	-	-	-	-	-	-	-	60	9	60	9	-	-	30	5	30	5	-	-	90	5	90	5
3. Planking	i.Manual	-	-	30	7	30	7	-	-	163	24	163	24	-	-	54	9	54	9	-	-	247	14	247	14
	ii.Animal	20	4	-	-	20	4	-	-	240	35	240	35	20	3	40	7	60	10	40	2	280	16	320	18
	iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	25	4	-	-	25	4	-	-	25	1	25	1
	iv.Total	20	4	30	7	50	11	-	-	403	59	403	59	45	7	94	16	139	23	40	2	527	30	592	34
4. Sowing	i.Manual	-	-	263	57	263	57	-	-	664	98	664	98	-	-	344	56	344	56	-	-	1270	73	1270	73
	ii.Animal	-	-	100	22	100	22	-	-	820	121	820	121	-	-	240	39	240	39	-	-	1160	66	1160	66
	iii.Machine	1050	226	-	-	1050	226	645	95	-	-	645	95	1005	163	-	-	1005	163	2770	153	-	-	2770	153
	iv.Total	1050	226	363	78	1413	304	645	95	1484	219	2129	314	1005	163	584	95	1589	258	2770	153	2430	138	5130	292
5. Watering	i.Manual	-	-	41	9	41	9	-	-	41	6	41	6	-	-	6	1	6	1	-	-	89	5	89	5
6. F.Y.Manure	i.Manual	-	-	105	23	105	23	-	-	108	16	108	16	-	-	165	27	165	27	-	-	378	21	378	21

(Contd....)

Table-16

148009 INPUT COST IN SAMPLE WATER COPSE RL.115806

Crop: Wheat			Area: 17.60 ha.						i) Head: 4.65 ha.								ii) Middle: 6.73 ha.						iii) Tail: 6.17 ha.			
			Head						Middle								Tail						All Places			
Sr. No.	Operations	Labour inputs	Paid		Self Supplied		Total (3+5)		Paid		Self Supplied		Total (9+11)		Paid		Self Supplied		Total (15+17)		Paid (3+9+15)		Self Supplied (5+11+17)		Total (21+23)	
			Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.
1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
7. Chemical	i.Manual	-	-	49	11	49	10	-	-	77	11	77	11	-	-	50	8	50	8	-	-	175	16	175	16
8. Hoeing/Weed	i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9. Harvesting	i.Manual	270	58	930	200	1200	258	[illegible]	62	1875	277	2295	339	-	-	2180	353	2180	353	690	39	4950	283	5670	322
10.Carriage to Threshing Yard	i.Manual	-	-	270	58	270	58	-	-	280	41	280	41	-	-	260	42	260	42	-	-	810	46	810	46
	ii.Animal	170	37	180	39	350	75	200	30	165	24	365	54	170	28	120	19	290	47	540	31	465	26	1005	57
	iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total	170	37	450	97	620	133	200	30	445	65	645	95	170	28	380	62	550	89	540	31	1275	72	1815	103
11.Threshing/ Winnowing	i.Manual	-	-	615	132	615	132	-	-	450	66	450	66	-	-	630	102	630	102	-	-	1695	96	1695	96
	ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iii.Machine	610	131	-	-	610	131	1500	221	-	-	1500	221	1030	167	-	-	1030	167	3140	178	-	-	3140	178
	iv.Total	610	131	615	132	1225	263	1500	221	450	66	1950	288	1030	167	630	102	1660	269	3140	178	1695	96	4835	275
12.Total	i.Manual	270	58	2630	566	2900	624	420	62	4920	726	5340	788	-	-	4248	689	4248	689	690	39	11798	670	12488	710
	ii.Animal	390	84	280	60	670	144	560	83	2545	375	3105	458	190	31	880	143	1070	173	1140	65	3705	211	4845	275
	iii.Machine	3785	814	-	-	3785	814	3205	473	-	-	3205	473	4170	676	-	-	4170	676	11160	634	-	-	11160	634
	iv.Total	4445	956	2910	626	7355	1582	4185	617	7465	1101	11650	1718	4360	707	5128	831	9488	1538	12990	738	15503	881	28493	1619

(Concluded)

Table-17

PHYSICAL INPUT COST IN SAMPLE WATER COURSE NO. 15306

Crop: Barley. Area: 2.57 ha. Head : 0.57 ha. Middle : 0.39 ha Tail: 1.21 ha.

Sr. No.	Physical Input	Head: Purchased Total	Head: Purchased Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (2+4) Total	Head: Total (2+4) Per Hect.	Middle: Purchased Total	Middle: Purchased Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (8+10) Total	Middle: Total (8+10) Per Hect.	Tail: Purchased Total	Tail: Purchased Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (14+16) Total	Tail: Total (14+16) Per Hect.	All Places: Purchased (2+8+14) Total	All Places: Purchased (2+8+14) Per Hect.	All Places: Self Supplied (4+10+16) Total	All Places: Self Supplied (4+10+16) Per Hect.	All Places: Total Total	All Places: Total Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Seed	110	220	-	-	110	220	110	188	100	116	210	244	305	252	-	-	305	252	525	204	100	39	625	243
2.	Farm Yard Manure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.	Chemical Fertilizer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4.	Insecticide/ Pesticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Water Charges	30	60	-	-	30	60	50	58	-	-	50	58	72	60	-	-	72	60	152	59	-	-	152	59
6.	Dues of Artisans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Total	140	280	-	-	140	280	160	186	100	116	260	302	377	312	-	-	377	312	677	263	100	39	777	302

Table-19

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.115806

Crop: Barley | Area: 2.57 | i) Head : 0.58 ha | ii) Middle: 0.36 ha. | iii) Tail: 1.21 ha

Sr. No.	Operations	Labour inputs	Head: Paid Total	Head: Paid Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (3+5) Total	Head: Total (3+5) Per Hect.	Middle: Paid Total	Middle: Paid Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect.	Tail: Paid Total	Tail: Paid Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect.	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect.	All Places: Self Supp. (5+11+17) Total	All Places: Self Supp. (5+11+17) Per Hect.	All Places: Total (7+13+23) Total	All Places: Total (7+13+23) Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Ploughing	i.Manual	-	-	19	38	19	38	-	-	103	125	103	125	-	-	30	25	30	25	-	-	156	61	156	61
	ii.Animal	-	-	-	-	-	-	-	-	180	209	180	209	-	-	-	-	-	-	-	-	180	70	180	70
	iii.Machine	225	450	-	-	225	450	100	116	-	-	100	116	400	331	-	-	400	331	725	282	-	-	725	282
	iv.Total	225	450	19	38	244	488	100	116	283	334	383	451	400	331	30	25	430	355	725	282	336	131	1061	413
2. Leveling	i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50	41	50	41	-	-	50	20	50	20
	iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50	41	50	41	-	-	50	20	50	20
3. Planking	i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	21	25	21	-	-	25	10	25	10
	iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	21	25	21	-	-	25	10	25	10
4. Sowing	i.Manual	-	-	25	50	25	50	-	-	95	110	95	110	-	-	95	79	95	79	-	-	215	94	254	84
	ii.Animal	-	-	-	-	-	-	-	-	140	163	140	163	-	-	80	66	80	66	-	-	220	36	220	36
	iii.Machine	150	300	-	-	150	300	75	87	-	-	75	87	150	124	-	-	150	124	375	144	-	-	375	146
	iv.Total	150	300	25	50	175	350	75	87	235	273	310	360	150	124	175	145	325	269	375	144	435	169	810	315
5. Watering	i.Manual	-	-	2	4	2	4	-	-	15	17	15	17	-	-	8	6	8	6	-	-	24	9	24	9
6. F.Y.Manure	i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(Contd...)

Table-18

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.1158½

Crop: Barley Area: 2.57 ha. i) Head : 0.50 ha ii) Middle : 0.86 ha iii) Tail: 1.21 ha.

Sr. No.	Operations	Labour inputs	Head: Paid Total	Head: Paid Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (3+5) Total	Head: Total (3+5) Per Hect.	Middle: Paid Total	Middle: Paid Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect.	Tail: Paid Total	Tail: Paid Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect.	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect.	All Places: Self Supp. (5+11+17) Total	All Places: Self Supp. (5+11+17) Per Hect.	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
7. Chemical	i.Manual		-	-	2	4	2	4	-	-	16	19	16	19	-	-	15	12	15	12	-	-	33	13	33	13
8. Hoeing/Weeds	i.Manual		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9. Harvesting	i.Manual		-	-	210	420	210	420	-	-	180	209	180	209	-	-	270	223	270	223	-	-	660	257	660	257
10.Carriage to Threshing yard	i.Manual		-	-	105	210	105	210	-	-	90	105	90	105	-	-	60	50	60	50	-	-	255	99	255	99
	ii.Animal		25	50	120	240	145	290	65	76	75	87	140	163	-	-	130	107	130	107	90	35	385	126	415	161
	iii.Machine		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total		25	50	225	450	250	500	65	76	165	192	230	267	-	-	190	157	190	157	90	35	580	226	670	261
11.Threshing/ Winnowing	i.Manual		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ii.Animal		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iii.Machine		75	105	-	-	75	105	-	-	-	-	-	-	60	50	-	-	60	50	135	53	-	-	135	53
	iv.Total		75	105	-	-	75	105	-	-	-	-	-	-	60	50	-	-	60	50	135	53	-	-	135	53
12. Total	i.Manual		-	-	362	724	362	724	-	-	504	586	504	586	-	-	478	394	478	394	-	-	1343	523	1343	523
	ii.Animal		25	50	120	240	145	290	65	76	395	459	460	535	-	-	285	235	285	235	90	35	800	311	890	346
	iii.Machine		450	900	-	-	450	900	175	203	-	-	175	203	610	504	-	-	610	504	1235	481	-	-	1235	481
	iv.Total		475	950	482	964	957	1914	240	279	899	1045	1139	1324	610	504	763	630	1373	1134	1325	516	2143	834	3468	1350

(Concluded)

Table-19

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD.115896

Crop: Berseem Area: 0.96 ha. (i) Head : 0.46 ha. (ii) Middle : 0.30 ha. (iii) Tail : 0.20 ha.

Sr. No.	Physical Input	Head: Purchased Total	Head: Purchased Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (2+4) Total	Head: Total (2+4) Per Hect.	Middle: Purchased Total	Middle: Purchased Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (8+10) Total	Middle: Total (8+10) Per Hect.	Tail: Purchased Total	Tail: Purchased Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (14+16) Total	Tail: Total (14+16) Per Hect.	All Places: Purchased (2+8+14) Total	All Places: Purchased (2+8+14) Per Hect.	All Places: Self Supplied (4+10+16) Total	All Places: Self Supplied (4+10+16) Per Hect.	All Places: Total Total	All Places: Total Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Seed	140	304	42	91	182	396	480	1600	-	-	480	1600	60	300	-	-	60	300	680	708	42	44	722	752
2.	Farm Yard Manure	-	-	180	391	180	391	-	-	120	400	120	400	-	-	140	700	140	700	-	-	440	458	440	458
3.	Chemical Fertilizer	275	598	-	-	275	598	140	467	-	-	140	467	140	700	-	-	140	700	555	578	-	-	555	578
4.	Insecticide/ Pesticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Water Charges	20	43	-	-	20	43	48	160	-	-	48	160	9	45	-	-	9	45	77	80	-	-	77	80
6.	Dues of Artisans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Total	435	946	222	483	657	1428	668	2227	120	400	788	2627	209	1045	140	700	349	1745	1312	1367	482	502	1794	1869

Table-20

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.115806

Crop: Berseem Area: 0.96 i) Head : 0.46 ha ii) Middle: 0.30 ha. iii) Tail: 0.20 ha

Sr. No.	Operations	Labour inputs	Head: Paid Total	Head: Paid Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (3+5) Total	Head: Total (3+5) Per Hect.	Middle: Paid Total	Middle: Paid Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect.	Tail: Paid Total	Tail: Paid Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect.	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect.	All Places: Self Supp. (5+11+17) Total	All Places: Self Supp. (5+11+17) Per Hect.	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Ploughing		i.Manual	-	-	41	89	41	89	-	-	60	200	60	200	-	-	30	150	30	150	-	-	131	36	131	136
		ii.Animal	50	109	-	-	50	109	-	-	100	333	100	333	-	-	50	250	50	250	50	52	150	156	200	208
		iii.Machine	150	326	-	-	150	326	-	-	-	-	-	-	-	-	-	-	-	-	150	156	-	-	150	156
		iv.Total	200	435	41	89	241	524	-	-	160	533	160	533	-	-	80	400	80	400	200	208	281	293	481	501
2. Leveling		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3. Planking		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4. Sowing		i.Manual	-	-	45	98	45	98	-	-	45	150	45	150	-	-	8	40	8	40	-	-	98	102	98	102
		ii.Animal	25	54	-	-	25	54	-	-	75	250	75	250	-	-	-	-	-	-	25	26	75	78	100	104
		iii.Machine	75	163	-	-	75	163	-	-	-	-	-	-	50	250	-	-	50	250	125	130	-	-	125	130
		iv.Total	100	217	45	98	145	315	-	-	120	400	120	400	50	250	8	40	58	290	150	156	173	180	323	336
5. Watering		i.Manual	-	-	6	13	6	13	-	-	8	27	8	27	-	-	-	-	-	-	-	-	14	15	14	15
6. F.Y.Manure		i.Manual	-	-	45	98	45	98	-	-	30	100	30	100	-	-	30	150	30	150	-	-	105	109	105	109

(Contd...)

Table-20

LABOUR INPUT COST IN SAMPLE WATER COURSE RT.115806

Crop: Forsee Area: 0.96 i. Head : 0.46 ha ii. Middle: 0.30 ha. iii. Tail: 0.20 ha

Sr. No.	Operations	Labour inputs	Head Paid Total	Head Paid Per Hect.	Head Self Supplied Total	Head Self Supplied Per Hect.	Head Total (3+5) Total	Head Total (3+5) Per Hect.	Middle Paid Total	Middle Paid Per Hect.	Middle Self Supplied Total	Middle Self Supplied Per Hect.	Middle Total (9+11) Total	Middle Total (9+11) Per Hect.	Tail Paid Total	Tail Paid Per Hect.	Tail Self Supplied Total	Tail Self Supplied Per Hect.	Tail Total (15+17) Total	Tail Total (15+17) Per Hect.	All Places Paid (3+9+15) Total	All Places Paid (3+9+15) Per Hect.	All Places Self Supp. (5+11+17) Total	All Places Self Supp. (5+11+17) Per Hect.	All Places Total (21+23) Total	All Places Total (21+23) Per Hect.
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
7. Sheeing	i.Manual	-	-	6	13	6	13	-	-	4	13	-	13	-	-	2	10	2	10	-	-	12	13	12	13
8. Hoeing/Weed	i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9. Harvesting	i.Manual	-	-	90	196	90	196	-	-	45	150	45	150	-	-	60	300	60	300	-	-	195	203	195	203
10.Carriage to Threshing yard	i.Manual	-	-	60	130	60	130	-	-	30	100	30	100	-	-	60	300	60	300	-	-	150	156	150	156
	ii.Animal	80	174	-	-	80	174	-	-	40	133	40	133	70	350	-	-	70	350	150	156	40	42	190	198
	iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total	80	174	60	130	140	304	-	-	70	233	70	233	70	350	60	300	130	650	150	156	190	198	340	354
11.Threshing/ Winnowing	i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12. Total	i.Manual	-	-	293	637	293	637	-	-	222	740	222	740	-	-	190	950	190	950	-	-	705	734	705	734
	ii.Animal	155	337	-	-	155	337	-	-	215	717	215	717	70	350	50	250	120	600	225	234	265	276	490	510
	iii.Machine	225	489	-	-	225	489	-	-	-	-	-	-	50	250	-	-	50	250	275	286	-	-	275	286
	iv.Total	380	826	293	637	673	1463	-	-	437	1457	437	1457	120	600	240	1200	360	1800	500	521	970	1010	1470	1531

(Concluded)

Table-21

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD.115806
(P E A)

(NOT APPLICABLE.)

Table-22

LABOUR INPUT COST IN SAMPLE WATER COURSE RD. 115806
(P E A)

(NOT APPLICABLE)

Table-23

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD.115806
(SPINACH)

(NOT APPLICABLE)

Table-24

LABOUR INPUT COST IN SAMPLE WATER COURSE RD. 1158060
(SPINACH)

(NOT APPLICABLE)

Table-23

PRODUCTION COST AND PROFIT IN SAMPLE WATER COURSE NO.RD.115806

Sr. No.	Crops	Location	Area (Hectare)	Total Output: Main Product (Mds)	Total Output: By-product Unit	Total Output: By-product Total Output	Market Price per unit (ex-farm) MP (Rs)	Market Price per unit (ex-farm) BP (Rs)	Total value of output MP	Total value of output BP	Total value of output Total	Value per hectare MP	Value per hectare BP	Value per hectare Total	Total Farming cost: Physical inputs	Total Farming cost: Labour cost	Total Farming cost: Total	Cost per hectare	Profit/loss (+) (-): Total	Profit/loss (+) (-): Per hectare	Total Imputed costs: Physical input	Total Imputed costs: Labour	Total Imputed costs: Total	Carry home Income col.19+23: Total	Carry home Income col.19+23: Per hectare
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1. Wheat		Head	4.65	79.00	Mds	160.5	100	34	7900	5457	13357	1699	1173	2872	4281	7355	11636	2502	1721	370	-	2910	2910	4631	996
		Middle	6.78	149.50	Mds	294.5	100	34	14950	10013	24963	2205	1477	3682	5256	11550	16806	2494	3057	1188	-	7465	7465	15522	2289
		Tail	6.17	103.50	Mds	210.0	100	34	10350	7140	17490	1677	1157	2835	4759	9488	14247	2309	3243	526	-	5128	5128	8371	1357
		A.Places	17.06	332.00	Mds	665.0	100	34	33200	22610	55810	1336	1385	3171	14296	28493	42789	2431	13021	740	-	15503	15503	28524	1621
2. Barley		Head	0.50	9.50	Mds	18.5	95	25	903	463	1365	1805	925	2730	140	957	1097	2194	268	536	-	482	482	750	1500
		Middle	0.86	Hect:	Rs.	-	2093	-	1800	-	1800	2093	-	2039	260	1139	1399	1627	401	466	-	899	899	1300	1512
		Tail	1.21	Hect:	Rs.	-	1653	-	2000	-	2000	1653	-	1653	377	1373	1750	1446	250	207	-	763	763	1013	837
		A.Places	2.57	9.50		18.5	95	25	4703	463	5166	1830	180	2010	777	3469	4246	1652	919	358	-	2144	2144	3063	1192
3. Berseem		Head	0.46	Hect:	Rs.	-	2065	-	950	-	950	2065	-	2065	657	673	1330	2891	-380	-826	-	293	293	-87	-189
		Middle	0.30	Hect:	Rs.	-	2250	-	675	-	675	2250	-	2250	788	437	1225	4083	-550	-1833	-	437	437	-133	-377
		Tail	0.20	Hect:	Rs.	-	1000	-	200	-	200	1000	-	1000	349	360	709	3545	-509	-2545	-	240	240	-269	-1345
		A.Places	0.96	Hect:	Rs.	-	1901	-	1825	-	1825	1901	-	1901	1794	1470	3264	3400	-1439	-1499	-	970	970	-469	-489
4. Pea		Head	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		A.Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5. Spinach		Head	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		A.Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-26

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF WHEAT IN SAMPLE WATER COURSE RD. 115906

Sr. No.	Operations	Head (Area sown: 4.65)						Middle (Area sown: 6.78)						Tail (Area sown: 6.17)						All Places (Area sown: 17.60)					
		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours	
		Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Ploughing	11.25	2.37	5.00	1.08	42.50	9.14	43.63	6.44	41.00	6.05	20.00	2.95	17.75	2.88	12.00	1.94	41.00	6.65	72.38	4.11	53.00	3.30	103.50	5.38
2.	Levelling	-	-	-	-	-	-	-	-	1.00	0.15	-	-	1.00	0.16	-	-	-	-	1.00	0.06	1.00	0.06	-	-
3.	Planking	1.00	0.22	0.50	0.11	-	-	5.50	0.81	6.00	0.88	-	-	1.81	0.29	1.50	0.24	0.50	0.08	8.31	0.47	8.00	0.45	0.50	0.03
4.	Sowing	8.75	1.88	2.50	0.54	21.00	4.52	23.38	3.45	20.50	3.20	12.50	1.84	12.00	1.94	6.00	0.97	19.50	3.16	44.13	2.51	29.00	1.65	53.00	3.01
5.	Watering	1.38	0.30	-	-	-	-	1.38	0.20	-	-	-	-	0.25	0.04	-	-	-	-	3.01	0.17	-	-	-	-
6.	F.Y.Manure	3.50	0.75	-	-	-	-	3.75	0.55	-	-	-	-	5.75	0.93	-	-	-	-	13.00	0.74	-	-	-	-
7.	Che:Fertiliser	13.49	2.90	-	-	-	-	2.69	0.40	-	-	-	-	1.76	0.29	-	-	-	-	17.94	1.02	-	-	-	-
8.	Hoeing/Weeding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Harvesting	40.00	8.60	-	-	-	-	76.50	11.28	-	-	-	-	69.00	11.18	-	-	-	-	185.50	10.54	-	-	-	-
10.	Carriage to Threshing/ yard	9.00	1.94	9.00	1.94	-	-	9.00	1.33	9.00	1.33	-	-	8.00	1.30	8.00	1.30	-	-	26.00	1.48	26.00	1.48	-	-
11.	Threshing/ Winnowing	19.50	4.19	-	-	6.00	1.29	15.00	2.21	-	-	15.00	2.21	19.00	3.08	-	-	10.00	1.62	53.50	3.04	-	-	31.00	1.76
12.	Total	107.62	23.14	17.00	3.66	69.50	14.95	180.50	26.67	77.50	11.43	47.50	7.01	136.32	22.09	27.50	4.46	71.00	11.51	424.77	24.13	122.00	6.93	188.00	10.68

Table-27

MANUAL/ANIMAL MACHINE TIME CONSUMED IN CULTIVATION
OF BARLEY IN SAMPLE WATER COURSE RD. 1[illegible]806

Sr. No.	Operations	Head (Area sown: 2.02)						Middle (Area sown: 0.20)						Tail (Area sown: 4.36)						All Places (Area sown: 7.08)					
		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	3	7	9	9	10	11	12	13	14	15	16	17	3	19	20	21	22	23	24	25
1.	Ploughing	0.62	1.24	-	-	4.50	9.00	4.25	5.00	4.00	4.71	2.00	2.35	1.[illegible]	0.83	-	-	8.00	6.61	5.87	2.28	4.00	1.56	14.50	5.64
2.	Levelling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.[illegible]	0.33	-	-	-	-	1.00	0.3[illegible]	-	-
3.	Planking	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.50	0.41	-	-	-	-	0.50	0.19	-	-
4.	Sowing	0.81	1.62	-	-	3.00	6.00	3.50	4.12	3.00	3.53	1.50	1.76	3.25	2.69	2.00	1.65	3.00	2.48	7.56	2.94	5.00	1.95	7.50	2.92
5.	Watering	0.06	0.12	-	-	-	-	0.49	0.58	-	-	-	-	0.25	0.21	-	-	-	-	0.80	0.31	-	-	-	-
6.	F.Y.Manure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Che:Fertilizer	0.06	0.12	-	-	-	-	0.62	0.73	-	-	-	-	0.50	0.41	-	-	-	-	1.18	0.46	-	-	-	-
8.	Hoeing/Weeding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Harvesting	7.00	14.00	-	-	-	-	6.00	7.06	-	-	-	-	9.00	7.44	-	-	-	-	22.00	8.56	-	-	-	-
10.	Carriage to threshing	3.50	7.00	3.50	7.00	-	-	3.00	3.53	3.00	3.53	-	-	2.00	1.65	4.00	3.31	-	-	8.50	3.31	10.50	4.09	-	-
11.	Threshing/ Winnowing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.00	0.83	-	-	-	-	2.00	0.78
12.	Total	12.50	24.10	3.50	7.00	8.50	17.00	17.86	21.01	10.00	11.76	3.50	4.12	16.00	13.22	7.50	6.20	12.00	9.92	45.91	17.86	21.00	8.17	24.00	9.34

Table-28

MANUAL/ANIMAL/MACHINE TIME DISSAGGREGATED CULTIVATION
OF BERSEEM IN [illegible] WATER DEPTH [illegible]

Sr. No.	Operations	Head (Area sown: 0.46)						Middle (Area sown: 0.30)						Tail (Area sown: 0.20)						All Places (Area sown: 0.96)					
		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours	
		Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Ploughing	1.37	2.99	1.00	2.17	3.00	6.52	2.00	6.67	2.00	6.67	-	-	-	-	-	-	-	-	3.37	3.51	3.00	3.13	3.00	3.13
2.	Levelling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.	Planking	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4.	Sowing	1.50	3.26	0.50	1.09	50	3.26	1.50	5.00	1.50	5.00	-	-	0.25	1.25	-	-	1.00	5.00	3.25	3.39	2.00	2.08	2.50	2.60
5.	Watering	0.18	0.39	-	-	-	-	0.25	0.83	-	-	-	-	-	-	-	-	-	-	0.43	0.45	-	-	-	-
6.	F.Y.Manure	1.50	3.26	-	-	-	-	1.00	0.33	-	-	-	-	1.00	3.33	-	-	-	-	3.50	3.65	-	-	-	-
7.	Che:Fertilizer	0.18	0.39	-	-	-	-	0.12	0.40	-	-	-	-	0.13	0.65	-	-	-	-	0.43	0.45	-	-	-	-
8.	Hoeing/Weeding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Harvesting	3.00	6.52	-	-	-	-	1.50	5.00	-	-	-	-	2.00	10.00	-	-	-	-	6.50	6.77	-	-	-	-
10.	Carriage to threshing	2.00	4.35	2.00	4.35	-	-	1.00	3.33	1.00	3.33	-	-	2.00	10.00	2.00	10.00	-	-	5.00	5.21	5.00	5.21	-	-
11.	Threshing/ Winnowing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12.	Total	9.73	21.15	3.50	7.61	4.50	9.78	7.37	24.57	4.50	15.00	-	-	5.38	26.93	2.00	10.00	1.00	5.00	22.48	23.42	10.00	10.42	5.50	5.73

Table-29

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULT.VATION
OF PEA IN SAMPLE WATER COURSE RD. 115806

(NOT APPLICABLE)

Table-30

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF SPINACH IN SAMPLE WATER COURSE RD. 115806

(NOT APPLICABLE)

STATISTICAL TABLES OF SAMPLE WATER COURSE RD. 132000

818a

APPENDICES OF SCHEDULE-I

NO.	T I T L E	PAGE NO
1.	TENURE STATUS OF SAMPLE FARMERS IN SAMPLE WATER COURSE RD.132000	826
2.	LITERACY STATUS OF SAMPLE FARMERS IN SAMPLE WATER COURSE RD.132000	826
3.	LEVEL OF EDUCATION OF THE SAMPLE FARMERS IN RD. 132000	827
4.	HOUSEHOLD SIZE IN SAMPLE WATER COURSE RD.132000	827
5.	HOUSEHOLD SIZE AND COMPOSITION IN SAMPLE WATER COURSE RD.132000	827
6.	LITERACY AND ACTIVITY STATUS OF THE SAMPLE POPULATION IN SAMPLE WATER COURSE RD. 132000	828
7.	DISTRIBUTION OF WORKING MEMBERS BY OCCUPATION IN SAMPLE WATER COURSE RD.132000	829
8.	PLACE OF WORK IN SAMPLE WATER COURSE RD.132000	829
9.	MONTHLY INCOME (OTHER THAN FARMING) IN SAMPLE WATER COURSE RD.132000	830
10.	LAND HOLDINGS OF SAMPLE HOUSEHOLDS OF SAMPLE WATER COURSE RD. 132000	831
11.	AREA RENTED IN/OUT ON CASH/BATAI IN SAMPLE WATER COURSE RD.132000	832
12.	LAND USE IN SAMPLE WATER COURSE RD.132000	832
13.	IRRIGATED AREA BY MEANS OF IRRIGATION IN SAMPLE WATER COURSE RD.132000	833
14.	NUMBER OF TUBEWELLS IN SAMPLE WATER COURSE RD.132000	
15.	SOURCES OF FINANCE FOR TUBEWELLS IN SAMPLE WATER COURSE RD [illegible]	

NO.	T I T L E	PAGE NO
16.	NUMBER OF WATER TURNS (WARABANDI) PER FIELD IN SAMPLE WATER COURSE RD.132000	834
17.	TIME PER TURN OF WATER SUPPLY (WARABANDI) IN SAMPLE WATER COURSE RD.132000	834
18.	NUMBER OF [illegible] LOST DURING KHARIF 1987 IN SAMPLE WATER COURSE RD.132000	835
19.	REASON FOR LOSS OF WATER TURN IN SAMPLE WATER COURSE RD.132000	835
20.	INCIDENCE OF EXCHANGE OF WATER WITH OTHER FARMERS IN SAMPLE WATER COURSE RD. 132000	835
21.	NUMBER OF TIMES WATER WAS EXCHANGED DURING KHARIF 1987 IN SAMPLE WATER COURSE RD.132000	836
22.	FREE WATER FOR IRRIGATION OTHER THAN ON EXCHANGE IN SAMPLE WATER COURSE RD.132000	836
23.	TAMPERING OF WATER IN SAMPLE WATER COURSE RD.132000	836
24.	DE-SILTING OF WATER COURSE IN A YEAR IN SAMPLE WATER COURSE RD.132000?	836
25.	WHEN WAS THE WATER COURSE DE-SILTED LAST IN SAMPLE WATER COURSE RD.132000?	837
26.	CANAL WATER PROBLEMS IN SAMPLE WATER COURSE RD.132000	838
27.	MANAGEMENT OF DE-SILTATION OF WATER COURSE: ARE THE FARMERS SATISFIED WITH THE EXISTING ARRANGEMENTS IN SAMPLE WATER COURSE RD.132000?	839
28.	INCIDENCE OF INDEBTEDNESS IN SAMPLE WATER COURSE RD.132000	839
29.	AMOUNT BORROWED BY SOURCE DURING THE TWELVE MONTH IN SAMPLE WATER COURSE RD.132000	839
30.	UTILIZATION OF LOAN IN SAMPLE WATER COURSE RD.132000	840
31.	ANY IMPROVEMENT ON FARM CONTEMPLATED BY THE SAMPLE FARMERS IF THEY COULD GET ADEQUATE LOAN IN SAMPLE WATER COURSE RD.132000	840

NO.	T I T L E	PAGE NO
32.	USE OF SELECTED FARM INPUTS AND SOURCE OF SUPPLY IN SAMPLE WATER COURSE RD.132000	841
33.	USE OF IMPROVED SEED IN SAMPLE WATER COURSE RD.132000	842
34.	INPUTS IN THE SUPPLY OF WHICH PROBLEMS HAVE BEEN REPORTED BY FARMERS IN SAMPLE WATER COURSE RD.132000	845
35.	SOURCE OF AGRICULTURAL INFORMATION OF SAMPLE FARMERS IN RD.132000	846
36.	MEMBERSHIP OF SOCIETIES/ASSOCIATION ETC. IN SAMPLE WATER COURSE RD.132000	847
37.	USE OF TRACTORS BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD. 132000	848
38.	USE OF THRASHER BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD. 132000	848

APPENDICES OF SCHEDULE-II (KHARIF)

1.	AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS IN SAMPLE WATER COURSE RD.132000	849
2.	AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS OUTSIDE IN SAMPLE WATER COURSE RD.132000	850
3.	DISPOSAL OF MAIN PRODUCTS OTHER THAN SUGARCANE IN SAMPLE COURSE RD.132000	851
4.	DISPOSAL OF BY-PRODUCTS IN SAMPLE WATER COURSE RD. 132000	852
5.	MODE OF SALE OF MAIZE IN SAMPLE WATER COURSE RD. 132000	853
6.	MODE OF SALE OF SORGHUM IN SAMPLE WATER COURSE RD. 132000	853

NO.	T I T L E	PAGE NO
7.	MODE OF SALE OF PIGEON PEA IN SAMPLE WATER COURSE RD. 132000	853
8.	UTILIZATION OF SUGARCANE IN SAMPLE WATER COURSE RD.132000	853
9.	UTILIZATION OF SUGAR PRODUCED BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD. 132000	853
10.	NUMBER OF FARMERS REPORTING CONSUMPTION OF CHEMICAL FERTILIZERS IN SAMPLE WATER COURSE RD. 132000	854
11.	QUANTITY OF CHEMICAL FERTILIZERS USED BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD. 132000	855
12.	CONSUMPTION OF FARM YARD MANURE IN SAMPLE WATER COURSE RD. 132000	856
13.	NUMBER OF SAMPLE FARMERS WHO USED INSECTICIDES/PESTICIDES/WEEDICIDES IN SAMPLE WATER COURSE RD.132000	856
14.	QUANTITY OF SEED USED BY SAMPLE FARMERS IN SAMPLE WATERCOURSE RD.132000	857
15.	PHYSICAL INPUT COST OF MAIZE IN SAMPLE WATER COURSE RD.132000	858
16.	LABOUR INPUT COST OF MAIZE IN SAMPLE WATER COURSE RD.132000	859
17.	PHYSICAL INPUT COST OF SORGHUM IN SAMPLE WATER RD.132000	861
18.	LABOUR INPUT COST OF SORGHUM IN SAMPLE WATER COURSE RD.132000	862
19.	PHYSICAL INPUT COST OF SUGARCANE IN SAMPLE WATER COURSE RD.132000	864
20.	LABOUR INPUT COST OF SUGARCANE IN SAMPLE WATER COURSE RD.132000	864
21.	PHYSICAL INPUT COST OF PIGEON PEA IN SAMPLE WATER COURSE RD.132000	864

NO.	T I T L E	PAGE NO
22.	LABOUR INPUT COST OF PIGEON PEA IN SAMPLE WATER COURSE RD.132000	864
23.	PRODUCTION COST AND PROFIT IN SAMPLE WATER COURSE RD.132000	865
24.	CROPPING [illegible] IN SAMPLE WATER COURSE RD.132000	866
25.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF MAIZE IN SAMPLE WATER COURSE RD.132000	867
26.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF SORGHUM IN SAMPLE WATER COURSE RD.132000	868
27.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF SUGARCANE IN SAMPLE WATER COURSE RD.132000	869
28.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN IN CULTIVATION OF PIGEON PEA IN SAMPLE WATER COURSE RD.132000	869
29.	NUMBER OF FRUIT PLANTS, TREES AND FRUIT PRODUCTION IN SAMPLE WATER COURSE RD.132000	870
30.	LIVESTOCK HOLDINGS OF SAMPLE HOUSEHOLDS IN SAMPLE WATER COURSE RD.132000	874
31.	MILK PRODUCTION AND UTILIZATION IN SAMPLE WATER COURSE RD. 132000	878
32.	INCOME FROM SALE OF DAIRY PRODUCTS (OTHER THAN MILK) DURING SIX MONTHS PROCEEDING INTERVIEW OF SAMPLE HOUSEHOLDS IN KHARIF 1987 IN SAMPLE WATER COURSE RD.132000	880
33.	INCOME FROM HIRING OUT OF LIVESTOCK IN SAMPLE WATER COURSE RD. 132000	881
34.	INCOME FROM SELECTED SOURCES DURING SIX MONTHS BEFORE INTERVIEW IN KHARIF 1987 IN SAMPLE WATER COURSE RD. 132000	881
35.	PERMANENT LABOUR ON FARM IN SAMPLE WATER COURSE RD.132000	881

APPENDICES OF SCHEDULE-II (RABI)

NO.	T I T L E	PAGE NO
1.	AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS IN SAMPLE WATERCOURSE RD.132000	882
2.	AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS OUTSIDE SAMPLE WATERCOURSE RD.132000	883
3.	DISPOSAL OF MAIN PRODUCTS IN SAMPLE WATER COURSE RD.132000	884
4.	DISPOSAL OF BY-PRODUCTS IN SAMPLE WATER COURSE RD.132000	886
5.	MODE OF SALE OF WHEAT IN SAMPLE WATER COURSE RD.132000	888
6.	MODE OF SALE OF BARLEY IN SAMPLE WATER COURSE RD.132000	888
7.	MODE OF SALE OF BERSEEM IN SAMPLE WATER COURSE RD.132000	889
8.	MODE OF SALE OF PEA IN SAMPLE WATER COURSE RD.132000	889
9.	MODE OF SALE OF SPINACH IN SAMPLE WATER COURSE RD.132000	889
10.	NUMBER OF FARMERS REPORTING CONSUMPTION OF CHEMICAL FERTILIZERS IN SAMPLE WATER COURSE RD.132000	890
11.	QUANTITY OF CHEMICAL FERTILIZERS USED BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD.132000	891
12.	CONSUMPTION OF FARM YARD MANURE IN SAMPLE WATER COURSE RD.132000	892
13.	NUMBER OF SAMPLE FARMERS WHO USED INSECTICIDES/PESTICIDES/WEEDICIDES IN SAMPLE WATER COURSE RD.132000	893
14.	QUANTITY OF SEED USED BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD.132000	894

NO.	T I T L E	PAGE NO
15.	PHYSICAL INPUT COST OF WHEAT IN SAMPLE WATER COURSE RD.132000	895
16.	LABOUR INPUT COST OF WHEAT IN SAMPLE WATER COURSE RD.132000	896
17.	PHYSICAL INPUT COST OF BARLEY IN SAMPLE WATER COURSE RD.132000	898
18.	LABOUR INPUT COST OF BARLEY IN SAMPLE WATER COURSE RD.132000	899
19.	PHYSICAL INPUT COST OF BERSEEM IN SAMPLE WATER COURSE RD.132000	901
20.	LABOUR INPUT COST OF BERSEEM IN SAMPLE WATER COURSE RD.132000	901
21.	PHYSICAL INPUT COST OF PEA IN SAMPLE WATER COURSE RD.132000	901
22.	LABOUR INPUT COST OF PEA IN SAMPLE WATER COURSE RD. 132000	901
23.	PHYSICAL INPUT COST OF SPINACH IN SAMPLE WATER COURSE RD.132000	902
24.	LABOUR INPUT COST OF SPINACH IN SAMPLE WATER COURSE RD. 132000	903
25.	PRODUCTION COST AND PROFIT IN SAMPLE WATER COURSE RD.132000	905
26.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF WHEAT IN SAMPLE WATER COURSE RD. 132000	906
27.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF BARLEY IN SAMPLE WATER COURSE RD. 132000	907
28.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF BERSEEM IN SAMPLE WATER COURSE RD. 132000	908
29.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF PEA IN SAMPLE WATER COURSE RD. 132000	908
30.	MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION OF SPINACH IN SAMPLE WATER COURSE RD. 132000	909

Table-1

TENURE STATUS OF SAMPLE FARMERS IN
SAMPLE WATER COURSE RD. 132000

Sr. No.	Location	Tenure Status: Owner No.	Owner %	Owner cum tenant No	Owner cum tenant %	Tenant No.	Tenant %	Total Farmers No=100
0	1	2	3	4	5	6	7	8
1.	Head of W.C.	6	100	-	-	-	-	6
2.	Middle of W.C.	5	100	-	-	-	-	5
3.	Tail of W.C.	9	100	-	-	-	-	9
4.	Total	20	100	-	-	-	-	20

W.C.= Water Course

Table-2

LITERACY STATUS OF SAMPLE FARMERS
IN SAMPLE WATER COURSE RD.132000

Sr. No.	Location	Literate No.	Literate %	Illiterate No.	Illiterate %	Total No (=100)
0	1	2	3	4	5	6
1.	Head of Water Course	-	-	6	100	6
2.	Middle of Water Course	-	-	5	100	5
3.	Tail of Water Course	-	-	9	100	9
4.	T o t a l :-	-	-	20	100	20

Table-3

LEVEL OF EDUCATION OF THE SAMPLE FARMERS
IN SAMPLE WATER COURSE RD. 132000

(NOT APPLICABLE; NONE IS LITERATE)

Table-4

HOUSEHOLD SIZE IN SAMPLE WATER COURSE RD.132000

(Numbers)

Sr. No.	Location	Sample Households	Total Population	Average size of household
0	1	2	3	4
1.	Head of Watercourse	6	60	10.00
2.	Middle of Watercourse	5	35	7.00
3.	Tail of Watercourse	9	109	12.11
4.	Total	20	204	10.20

Table-5

HOUSEHOLD SIZE AND COMPOSITION IN SAMPLE
WATER COURSE RD.132000

Sr. No.	Age Group (Years)	Sex	Total Members: Head No.	Head %	Middle No.	Middle %	Tail No.	Tail %	All Places No.	All Places %
0	1	2	3	4	5	6	7	8	9	10
1.	Below 5	Male	12	36.36	8	36.36	16	20.83	36	34.29
		Female	11	40.74	5	33.46	26	30.61	42	42.42
		Both	23	38.33	13	37.14	42	25.77	78	38.24
2.	5 and above	Male	21	63.44	14	63.64	34	79.17	69	65.71
		Female	16	59.26	8	61.54	33	69.39	57	57.58
		Both	37	61.67	22	62.86	67	74.23	126	61.76
3.	All Ages	Male	33	100.00	22	100.00	50	100.00	105	100.00
		Female	27	100.00	13	100.00	59	100.00	99	100.00
		Both	60	100.00	35	100.00	109	100.00	204	100.00

Table-6

LITERACY AND ACTIVITY STATUS OF THE SAMPLE POPULATION IN SAMPLE WATER COURSE RD.132000

Sr. No.	Location	Total Respondents	Sex	Total Members	Literate (excluding students)		At School		Total literates at school	
					No	%	No.	%	No	%
0	1	2	3	4	5	6	7	8	9	10
1.	Head of watercourse	5	Male	21	6	28.57	9	42.86	15	71.43
			Female	16	-	-	-	-	-	-
			Both	37	6	16.22	9	24.32	15	40.54
2.	Middle of watercourse	5	Male	14	3	21.43	7	50.00	10	71.43
			Female	8	-	-	-	-	-	-
			Both	22	3	13.64	7	31.22	10	45.45
3.	Tail of watercourse	9	Male	34	7	20.59	17	50.00	24	70.59
			Female	33	-	-	-	-	-	-
			Both	67	7	10.45	17	25.37	24	35.82
4.	All places	20	Male	69	16	23.19	33	47.83	49	71.01
			Female	57		-				
			Both	126	16	12.70	33	26.19	49	38.89

Table-7

DISTRIBUTION OF WORKING MEMBERS BY OCCUPATIONS
IN SAMPLE WATER COURSE RD.132000

Sr. No.	Occupation	Location: Head	Middle	Tail	Total
0	1	2	3	4	5
1.	Paid employment	1	-	1	2
	a. On Farm	-	-	-	-
	b. Off Farm	1	-	1	2
2.	Self employed	6	5	9	20
	a. Farming	6	5	9	20
	b. Trade/Industry Transport	-	-	-	-
	c. Artisans	-	-	-	-
	d. Other	-	-	-	-
3.	Grand Total	7	5	10	22

Table-8

PLACE OF WORK IN SAMPLE WATER COURSE RD.132000

Sr. No.	Place of Work	Head	Middle	Tail	Total
0	1	2	3	4	5
1.	Sample W.C and other places in Peshawar Distt.	-	-	-	-
2.	Elsewhere in NWFP	-	-	-	
3.	Other Provinces	1	-	1	2
4.	Other Countries	-	-	-	-
5.	All Places	1	-	-	2

Table-9

MONTHLY INCOME (OTHER THAN FARMING)
IN SAMPLE WATER COURSE RD.132000

Sr. No.	Income Group (Rs. per month)	Location	Number	Total Income(Rs)	Average Income(Rs)
0	1	2	3	4	5
1.	Upto Rs. 500	Head	-	-	-
		Middle	-	-	-
		Tail	-	-	-
2.	501 to 1000	Head	1	800	800
		Middle	-	-	-
		Tail	1	900	900
3.	1001 to 1500	Head	-	-	-
		Middle	-	-	-
		Tail	-	-	-
4.	1501 to 2000	Head	-	-	-
		Middle	-	-	-
		Tail	-	-	-
5.	2001 to 2500	Head	-	-	-
		Middle	-	-	-
		Tail	-	-	-
6.	2501 to 3000	Head	-	-	-
		Middle	-	-	-
		Tail	-	-	-
7.	3001 to 4000	Head	-	-	-
		Middle	-	-	-
		Tail	-	-	-
8.	4001 to 5000	Head	-	-	-
		Middle	-	-	-
		Tail	-	-	
9.	Above 5000	Head	-	-	
		Middle	-	-	-
		Tail	-	-	-

Table-10

LAND HOLDINGS OF SAMPLE HOUSEHOLDS OF SAMPLE WATER COURSE RD.133/90

Sr. No.	Locality	Total respondent	Location of Land	Area Owned Total	Area Owned Average	Area Rented in Total	Area Rented in Average	Area Rented Out Total	Area Rented Out Average	Operated Holding Total	Operated Holding Average
0	1	2	3	4	5	6	7	8	9	10	11
1.	Head of W.C	6	a.This water-course	26.31	4.39	-	-	-	-	26.31	4.39
			b.Other places	7.99	1.33	-	-	-	-	7.99	1.33
			c. Total	34.30	5.72	-	-	-	-	34.30	5.72
2.	Middle of W.C.	5	a.This water-course	17.60	3.52	-	-	2.43	0.49	15.17	3.03
			b.Other places	9.21	1.84	-	-	1.21	1.21	8.00	1.60
			c. Total	26.81	5.36	-	-	3.64	3.64	23.17	4.63
3.	Tail of W.C.	9	a.This water-course	35.21	3.91	-	-	9.51	9.51	25.70	2.86
			b.Other places	11.74	1.30	-	-	-	-	11.74	1.30
			c. Total	46.95	5.22	-	-	9.51	9.51	37.44	4.16
4.	All Places	20	a.This water-course	79.12	3.96	-	-	11.94	0.60	67.18	3.36
			b.Other places	28.94	1.45	-	-	1.21	0.06	27.73	1.39
			c. Total	108.06	5.40	-	-	13.15	0.66	94.91	4.75

Table-11

AREA RENTED IN/OUT ON CASH/BATAI IN
SAMPLE WATER COURSE RD.132000

Sr. No.	Location	Area Rented In			Area Rented Out		
		Batai	Cash Rent	Total	Batai	Cash Rent	Total
0	1	2	3	4	5	6	7
1.	Head of W.C.	-	-	-	-	-	-
2.	Middle of W.C.	-	-	-	2.43	-	2.43
3.	Tail of W.C.	-	-	-	9.51	-	9.51
4.	All Places	-	-	-	11.94	-	11.94

Table-12

LAND USE IN SAMPLE WATER COURSE RD.132000

Sr. No.	Land Use	Head		Middle		Tail		All Places	
		Hec-tare	%	Hec-tare	%	Hec-tare	%	Hec-tare	%
0	1	2	3	4	5	6	7	8	9
1.	Crops	18.01	68.48	14.37	77.18	29.14	90.58	61.52	79.80
2.	Orchard	3.84	14.60	-	-	0.20	0.62	4.04	5.24
3.	Not available for cultivation	4.45	16.92	4.25	22.82	2.83	8.80	11.53	14.96
4.	Total Area	26.30	100.0	18.62	100.0	32.17	100.0	77.09	100.0

Table-13

IRRIGATED AREA BY MEANS OF IRRIGATION
IN SAMPLE WATER COURSE RD.132000

Sr. No.	Means of Irrigation	Head of W.C. Jareeb	%	Middle of W.C Jareeb	%	Tail of W.C Jareeb	%	Total Jareeb	%
0	1	2	3	4	5	6	7	8	9
1.	Canal Only	130.50	100	87	100	140	87.50	357.50	94.70
2.	Open well only	-	-	-	-	-	-	-	-
3.	Tube-well only	-	-	-	-	-	-	-	-
4.	Mixed	-	-	-	-	20	12.50	20.00	5.30
5.	Total (All types)	130.50	100	87	100	160	100.0	377.50	100.0

Table-14

NUMBER OF TUBEWELLS IN SAMPLE WATER COURSE RD.132000

(NO TUBEWELL HERE)

Table-15

SOURCES OF FINANCE OF TUBEWELL IN
SAMPLE WATER COURSE RD.132000

(NOT APPLICABLE; NO TUBEWELL HERE)

Table-16

NUMBER OF WATER TURNS (WARABANDI) PER FIELD
IN SAMPLE WATER COURSE RD.132000

Sr. No.	Particulars	Location: Head No.	Head %	Middle No.	Middle %	Tail No.	Tail %	All places No.	All places %
0	1	2	3	4	5	6	7	8	9
1.	Total Farmers	6	100	5	100	9	100	20	100
2.	One turn per week	6	100	5	100	9	100	20	100
3.	One turn per two weeks.	-	-	-	-	-	-	-	-
4.	Water not yet allotted but drawing once per week.	-	-	-	-	-	-	-	-

Table-17

TIME PER TURN OF WATER SUPPLY (WARABANDI)
IN SAMPLE WATER COURSE RD.132000

Sr. No.	Location	Water drawn once every	Distribution of water users by number of hours of water supply: Upto one No.	%	1 - 2 No.	%	3 No.	%	4 - 6 No.	%	5 - 8 No.	%	More than 8 No.	%	All cases No(=100)
1	Head Section	7th day	1	16.67	1	16.67	2	33.33	-	-	2	33.33	-	-	6
2	Middle Section	7th day	-	-	-	-	1	20.00	-	-	3	60.00	1	20.00	5
3	Tail Section	7th day	1	11.11	-	-	3	33.33	-	-	2	22.22	3	33.33	9
4	All Places	7th day	2	10.00	1	5.00	6	30.00	-	-	7	35.00	4	20.00	20

Table-18

NUMBER OF WATER TURNS LOST DURING THE PERIOD
APRIL DECEMBER 1988 IN SAMPLE WATER COURSE RD.132000

No.	Number of turns lost	Head		Middle		Tail		All Places
		No.	%	No.	%	No.	%	No (=100)
0	1	2	3	4	5	6	7	8
1.	None							
2.	One							
3.	Two							
4.	Three	(WATER WAS NOT AVAILABLE THROUGH-OUT THE YEAR)						
5.	Four							
6.	Five							
7	More than 5							
8.	All							

Table-19

REASON FOR LOSS OF WATER TURN IN
SAMPLE WATER COURSE RD.132000

(NOT APPLICABLE; NO TURN LOST ANY WHERE)

Table-20

INCIDENCE OF EXCHANGE OF WATER WITH OTHER
FARMERS IN SAMPLE WATER COURSE RD.132000

(NO CASE REPORTED FROM ANYWHERE)

Table-21

NUMBER OF TIMES WATER WAS EXCHANGED DURING KHARIF 1987
IN SAMPLE WATER COURSE RD.132000

(NO CASE REPORTED ANYWHERE)

Table-22

FREE WATER FOR IRRIGATION OTHER THAN ON
EXCHANGE IN SAMPLE WATER COURSE RD.132000

(NO CASE REPORTED)

Table-23

TAMPERING OF WATER IN SAMPLE WATER COURSE RD.132000

(NO TAMPERING REPORTED)

Table-24

DE-SILTING OF WATER COURSE IN A
YEAR IN SAMPLE WATER COURSE RD.132000 ?

Sr.	Number of De-silting in a year	Head of W.C.		Middle of WC		Tail of W.C		All Places	
		No.	%	No.	%	No.	%	No.	%
0	1	2	3	4	5	6	7	14	15
1.	One	4	67	-	-	6	67	10	50
2.	Two	2	33	5	100	3	33	10	50
3.	Three	-	-	-	-	-	-	-	-
4.	Four	-	-	-	-	-	-	-	-
5.	Five or More	-	-	-	-	-	-	-	-
6.	Not reported	-	-	-	-	-	-	-	-
7.	When need	-	-	-	-	-	-	-	-
8.	All cases	6	100	5	100	9	100	20	100

Table-25

WHEN WAS THE WATER COURSE DE-SILTED LAST
IN SAMPLE WATER COURSE RD.132000 ?

Sr. No.	Number of De-silting in a year	Head		Middle		Tail		All Places	
		No.	%	No.	%	No.	%	No.	%
0	1	2	3	4	5	6	7	4	5
1.	Rabi 1986-87 (Oct-86 to April-87)	4	67	-	-	3	33	7	35
2	Kharif 1987 (May-Nov.87)	2	33	5	100	5	56	12	60
3.	Rabi 1987-88 (December 87)	-	-	-	-	-	-	-	-
4.	Not cleared during last 12 month	-	-	-	-	1	11	1	5
5.	No Response	-	-	-	-	-	-	-	
6.	When the canal was dry	-	-	-	-	-	-	-	-
7.	All cases	6	100	5	100	9	100	20	100

Table-26

CANAL WATER PROBLEMS IN SAMPLE WATER COURSE RD.132000

Sr. No.	Problems	Location water course	Is this problems faced Yes No.	Yes %	No No.	No %	Total Farmers No(=100)
0	1	2	3	4	5	6	7
1.	A general shortage of water	Head	6	100	-	-	6
		Middle	5	100	-	-	5
		Tail	9	100	-	-	9
		All points	20	100	-	-	20
2.	Defective slope of the channel	Head	-	-	6	100	6
		Middle	-	-	5	100	5
		Tail	-	-	9	100	9
		All points	-	-	20	100	20
3.	Siltation of the channel	Head	2	33	4	67	6
		Middle	2	40	3	60	5
		Tail	3	33	6	67	9
		All points	7	35	13	65	20
4.	Warabandi defects (in convenient timing)	Head	-	-	6	100	6
		Middle	-	-	5	100	5
		Tail	-	-	9	100	9
		All points	-	-	20	100	20
5.	Theft of water	Head	-	-	6	100	6
		Middle	-	-	5	100	5
		Tail	-	-	9	100	9
		All points	-	-	20	100	20

Table-27

MANAGEMENT OF DE-SILTATION OF WATER COURSE: ARE THE FARMERS SATISFIED WITH THE EXISTING ARRANGEMENTS IN SAMPLE WATER COURSE RD.132000 ?

Sr. No.	Location	Are the farmers satisfied with existing arrangements ? Yes No.	Yes %	No No.	No %	Total Farmers No(=100)
0	1	2	3	4	5	6
1.	Head of W.C.	6	100	-	-	6
2.	Middle of W.C.	5	100	-	-	5
3.	Tail of W.C.	8	89	1	11	9
4.	All points	20	95	1	5	20

Table-28

INCIDENCE OF INDEBTEDNESS IN SAMPLE WATER COURSE RD.132000

(NO INDEBTEDNESS REPORTED)

Table-29

AMOUNT BORROWED BY SOURCE IN SAMPLE WATER COURSE RD.132000

(NO BORROWING REPORTED)

Table - 30

UTILIZATION OF LOAN IN SAMPLE WATER COURSE RD.132000

(NOT APPLICABLE; NO LOAN TAKEN)

Table-31

ANY IMPROVEMENT ON FARM CONTEMPLATED BY THE SAMPLE FARMERS IF THEY COULD GET ADEQUATE LOAN IN SAMPLE WATER COURSE RD.132000

Sr. No.	Location	Any improvement contemplated? Yes No.	Yes %	No No.	No %	Total Farmers No(=100)
0	1	2	3	4	5	6
1.	Head of W.C.	-	-	6	100	6
2.	Middle of W.C.	-	-	5	100	5
3.	Tail_of W.C.	-	-	9	100	9
4.	All places	-	-	20	100	20

Table-32

USE OF SELECTED FARM INPUTS AND SOURCE OF SUPPLY IN SAMPLE WATER COURSE RD.132000

Sr. No.	Name of Inputs	Location points of farm as W.C	Farms who use is No.	%	Sources of Supply: Villages No.	%	Outside No.	%	Both No.	%	Total Farmers No=(10
0	1	2	3	4	5	6	7	8	9	10	11
1.	Urea	Head	5	83.33	-	-	5	100	-	-	6
		Middle	5	100.0	-	-	5	100	-	-	5
		Tail	9	100.0	-	-	9	100	-	-	9
		All Places	19	95.00	-	-	19	100	-	-	20
2.	DAP	Head	5	83.33	-	-	5	100	-	-	6
		Middle	3	60.00	-	-	3	100	-	-	5
		Tail	6	66.67	-	-	6	100	-	-	9
		All Places	14	70.00	-	-	14	100	-	-	20
3.	NPK	Head	2	33.33	-	-	2	100	-	-	6
		Middle	-	-	-	-	-	-	-	-	5
		Tail	-	-	-	-	-	-	-	-	9
		All Places	2	10.00	-	-	2	100	-	-	20
4.	NP	Head	2	33.33	-	-	2	100	-	-	6
		Middle	1	20.00	-	-	1	100	-	-	5
		Tail	-	-	-	-	-	100	-	-	9
		All Places	3	15.00	-	-	3	100	-	-	20
5.	Ammonium Sulphate	Head	-	-	-	-	-	-	-	-	6
		Middle	1	20.00	-	-	1	100	-	-	5
		Tail	-	-	-	-	-	-	-	-	9
		All Places	1	5.00	-	-	1	100	-	-	20
6.	Ammonium Nitrate	Head	-	-	-	-	-	-	-	-	6
		Middle	-	-	-	-	-	-	-	-	5
		Tail	1	11.11	-	-	1	100	-	-	9
		All Places	1	5.00	-	-	1	100	-	-	20
7.	Insecticides/ Pesticides	Head	1	16.67	-	-	1	100	-	-	6
		Middle	-	-	-	-	-	-	-	-	5
		Tail	-	-	-	-	-	-	-	-	9
		All Places	1	5.00	-	-	1	100	-	-	20
8.	Weedicides	Head	1	16.67	-	-	1	-	-	-	6
		Middle	-	-	-	-	-	-	-	-	5
		Tail	-	-	-	-	-	-	-	-	9
		All Places	1	5.00	-	-	1	-	-	-	20

Table-33

USE OF IMPROVED SEED IN SAMPLE WATER COURSE RD.132000

Seed	Location	Farmers who: Know about this		Use this		If used; where purchased: In the village		Own		Other places		Total Farmers
		No.	% of (Col.13)	No.	% of (Col.13)	No.	% of (Col.5)	No.	% of (Col.5)	No.	% of (Col.5)	No(=100)
1	2	3	4	5	6	7	8	9	10	11	12	13
WHEAT												
	Head	4	66.67	4	66.67	-	-	1	25	3	75	6
i- Pak-81	Middle	2	40.00	2	40.00	2	100	-	-	-	-	5
	Tail	5	55.56	4	44.44	1	25	-	-	3	75	9
	All Places	11	55.00	10	50.00	3	30	1	10	6	60	20
ii- L-79	Head	-	-	-	-	-	-	-	-	-	-	6
	Middle	-	-	-	-	-	-	-	-	-	-	5
	Tail	-	-	-	-	-	-	-	-	-	-	9
	All Places		-	-	-	-	-	-	-	-	-	20
iii- Sarhad-82	Head	-	-	-	-	-	-	-	-	-	-	6
	Middle	-	-	-	-	-	-	-	-	-	-	5
	Tail	-	-	-	-	-	-	-	-	-	-	9
	All Places	-	-	-	-	-	-	-	-	-	-	20
iv- Khyber-79	Head	-	-	-	-	-	-	-	-	-	-	6
	Middle	-	-	-	-	-	-	-	-	-	-	5
	Tail	-	-	-	-	-	-	-	-	-	-	9
	All Places	-	-	-	-	-	-	-	-	-	-	20
v- Pirsabad-85	Head	-	-	-	-	-	-	-	-	-	-	6
	Middle	-	-	-	-	-	-	-	-	-	-	5
	Tail	-	-	-	-	-	-	-	-	-	-	9
	All Places	-	-	-	-	-	-	-	-	-	-	20
vi- Mexipak	Head	2	33.33	2	33.33	-	-	2	100	-	-	6
	Middle	3	60.00	3	60.00	3	100	-	-	-	-	5
	Tail	3	33.33	3	33.33	3	100	-	-	-	-	9
	All Places	8	40.00	8	40.00	6	75	2	25	-	-	20

(Contd....)

Table-33

USE OF IMPROVED SEED IN SAMPLE WATER COURSE RD.132000

Sr. No.	Seed	Location	Farmers who: Know about this		Use this		If used; where purchased: In the village		Own		Other places		Total Farmers (No.=100)
			No.	% of (Col.13)	No.	% of (Col.13)	No.	% of (Col.5)	No.	% of (Col.5)	No.	% of (Col.5)	
0	1	2	3	4	5	6	7	8	9	10	11	12	13
	vii- Khushal	Head	-	-	-	-	-	-	-	-	-	-	6
		Middle	-	-	-	-	-	-	-	-	-	-	5
		Tail	-	-	-	-	-	-	-	-	-	-	9
		All Places	-	-	-	-	-	-	-	-	-	-	20
	viii- Chanab	Head	-	-	-	-	-	-	-	-	-	-	6
		Middle	-	-	-	-	-	-	-	-	-	-	5
		Tail	-	-	-	-	-	-	-	-	-	-	9
		All Places	-	-	-	-	-	-	-	-	-	-	20
2.	SUGARCANE												
		Head	-	-	-	-	-	-	-	-	-	-	6
	i- M-1ol	Middle	-	-	-	-	-	-	-	-	-	-	5
		Tail	-	-	-	-	-	-	-	-	-	-	9
		All Places	-	-	-	-	-	-	-	-	-	-	20
	ii- CP-40	Head	-	-	-	-	-	-	-	-	-	-	6
		Middle	-	-	-	-	-	-	-	-	-	-	5
		Tail	-	-	-	-	-	-	-	-	-	-	9
		All Places	-	-	-	-	-	-	-	-	-	-	20
	iii- CO-310	Head	-	-	-	-	-	-	-	-	-	-	6
		Middle	1	20.00	1	20.00	-	-	-	-	1	100	5
		Tail	5	55.56	3	33.33	-	-	-	-	3	100	9
		All Places	6	30.00	4	20.00	-	-	-	-	4	100	20

(Contd.....)

Table-33

USE OF IMPROVED SEED IN SAMPLE WATER COURSE RD.132000

Sr. No.	Seed	Location	Farmers who: Know about this		Use this		If used: where purchased: In the village		Own		Other places		Total Farmers (No=100)
			No.	% of Col.13	No.	% of Col.13	No.	% of Col.5	No.	% of Col.5	No.	% of Col.5	
1	1	2	3	4	5	6	7	8	9	10	11	12	13
2.	MAIZE	Head	-	-	-	-	-	-	-	-	-	-	6
		Middle	2	40.00	2	40.00	2	100.0	-	-	-	-	5
	i- Sarhad White	Tail	5	55.56	4	44.44	1	25.00	3	75.00	-	-	9
		All Places	7	35.00	6	30.00	3	50.00	3	50.00	-	-	20
	ii- Changaz	Head	-	-	-	-	-	-	-	-	-	-	6
		Middle	-	-	-	-	-	-	-	-	-	-	5
		Tail	-	-	-	-	-	-	-	-	-	-	9
		All Places	-	-	-	-	-	-	-	-	-	-	20
	iii - Zia	Head	-	-	-	-	-	-	-	-	-	-	6
		Middle	-	-	-	-	-	-	-	-	-	-	5
		Tail	-	-	-	-	-	-	-	-	-	-	9
		All Places	-	-	-	-	-	-	-	-	-	-	20
	iv- Shaheen	Head	1	16.67	1	16.67	1	100.0	-	-	-	-	6
		Middle	3	60.00	3	60.00	3	100.0	-	-	-	-	5
		Tail	-	-	-	-	-	-	-	-	-	-	9
		All Places	4	20.00	4	20.00	4	100.0	-	-	-	-	20
	v- Haqqnan	Head	-	-	-	-	-	-	-	-	-	-	6
		Middle	-	-	-	-	-	-	-	-	-	-	5
		Tail	1	11.11	1	11.11	1	100.0	-	-	-	-	9
		All Places	1	5.00	1	5.00	1	100.0	-	-	-	-	20
3.	RICE	Head	-	-	-	-	-	-	-	-	-	-	6
		Middle	-	-	-	-	-	-	-	-	-	-	5
	i- Irri-6	Tail	-	-	-	-	-	-	-	-	-	-	9
		All Places	-	-	-	-	-	-	-	-	-	-	20
	ii- Basmati	Head	-	-	-	-	-	-	-	-	-	-	6
		Middle	-	-	-	-	-	-	-	-	-	-	5
		Tail	-	-	-	-	-	-	-	-	-	-	9
		All Places	-	-	-	-	-	-	-	-	-	-	20

(Concluded)

Table-34

INPUTS IN THE SUPPLY OF WHICH PROBLEMS HAVE BEEN REPORTED BY FARMERS IN SAMPLE WATERCOURSE RD.132000

Sr. No.	Location	Total Farmers No(=100)	Farmers reporting problems in supply of: Fertilizer		Improved seed		Farm Insecticides		Machinery	
			No	%	No	%	No	%	No	%
0	1	2	3	4	5	6	7	8	9	10
1.	Head	6	-	-	-	-	-	-	-	-
2.	Middle	5	2	40	2	40	-	-	1	20
3.	Tail	9	2	22	2	40	-	-	1	20
4.	All Places	20	4	20	4	40	-	-	2	10

Table-35

SOURCE OF AGRICULTURAL INFORMATION OF SAMPLE FARMERS IN R.[illegible]

Sr No.	Source	Number and percentage* of farmers who took Agri. information from this source								Number and percentage** of sample farmers who used that							
		Head of W.C.		Middle of W.C.		Tail of W.C.		All Places		Head of W.C.		Middle of W.C.		Tail of W.C.		All Places	
		No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
0	1	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1.	Agriculture Department	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.	Demonstration plots laid by insecticides/ pesticides firms	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-
3.	Radio	2	33	4	80	4	44	10	50	1	50	2	50	2	50	5	50
4.	Television	1	17	1	20	5	56	7	35	1	100	1	100	2	40	4	57
5.	Newspaper	-	-	-	-	1	11	1	5	-	-	-	-	1	100	1	100
6.	Landlord	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Other Farmers	1	17	5	100	6	67	12	60	1	100	5	100	4	67	10	83
8.	Input suppliers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Other sources specify)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Total Farmers = 20
Head = 6
Middle = 5
Tail = 9

* of total sample farmers in the section concerned

** of those who took information from a source given in col.1

Table-36

MEMBERSHIP OF SOCIETIES/ASSOCIATIONS ETC.
IN SAMPLE WATER COURSE RD.132000

Sr. No.	Institution	Locality	Are the sample farmers members of of the societies/associations as in col.2						Total Farmers No =(100)
			Yes		No		Not applicable		
			No	%	No	%	No	%	
0	1	2	3	4	5	6	7	8	9
1.	Water Users Association	Head	-	-	5	83	1	17	6
		Middle	-	-	4	80	1	20	5
		Tail	-	-	6	67	3	33	9
		All Places	-	-	15	75	5	25	20
2.	Cooperative Society	Head	-	-	5	83	1	17	6
		Middle	-	-	4	80	1	20	5
		Tail	3	33	6	67	-	-	9
		All Places	3	15	15	75	2	10	20
3.	Union Council	Head	-	-	6	100	-	-	6
		Middle	-	-	5	100	-	-	5
		Tail	-	-	9	100	-	-	9
		All Places	-	-	20	100	-	-	20
4.	Other Societies/ Association	Head	-	-	6	100	-	-	6
		Middle	-	-	5	100	-	-	5
		Tail	1	11	8	89	-	-	9
		All Places	1	5	19	95	-	-	20

Table-37

USE OF TRACTORS BY SAMPLE FARMERS IN
SAMPLE WATER COURSE RD. 132000

Sr. No.	Section	Is tractor used ?					Ownership Status of tractor used				Source of supply of rented in tractor				Farmer reporting probleas in tractor supply	
		Yes		No		Total	Own		Rented in		Own Village		Other Places			
		No.	% of col.2	No.	% of col.4	No. (=100)	No.	% of col.2	No.	% of col.2	No.	% of col.9	No.	% of col.9	No.	% of col.6
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.	Head	6	100	-	-	6	-	-	6	100.00	6	100.00	-	-	-	-
2.	Middle	5	100	-	-	5	-	-	5	100.00	5	100.00	-	-	-	-
3.	Tail	9	100	-	-	9	1	11.11	8	88.89	9	112.50	-	-	-	-
4.	All Sections	20	100	-	-	20	1	5.00	19	95.00	19	100.00	-	-	-	-

Table-38

USE OF THRASHER BY SAMPLE FARMERS IN
SAMPLE WATER COURSE RD. 132000

Sr. No.	Section	Is Thrasher used ?					Ownership Status of Thrasher used				Source of supply of rented in Thrasher				Farmer reporting probleas in Thrasher supply	
		Yes		No		Total	Own		Rented in		Own Village		Other Places			
		No.	% of col.2	No.	% of col.2	No. (=100)	No.	% of col.2	No.	% of col.2	No.	% of col.9	No.	% of col.9	No.	% of col.6
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.	Head	6	100	-	-	6	-	-	6	100.00	6	100	-	-	-	-
2.	Middle	5	100	-	-	5	-	-	5	100.00	5	100	-	-	-	-
3.	Tail	9	100	-	-	9	1	11.11	8	88.89	8	100	-	-	-	-
4.	All Sections	20	100	-	-	20	1	5.00	19	95.00	19	100	-	-	-	-

Table-1

AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS OUTSIDE IN SAMPLE WATER COURSE RD. 132000

Sr. No.	Crops	Location	Area	Main Product			By Product		
				Unit	Total	Per Hectare	Unit	Total	Per Hectare
0	1	2	3	4	5	6	7	8	9
1.	Maize Grain	Head	1.21	Mds	3.00	2.48	Bundle	50	41.32
		Middle	1.42	Mds	1.00	0.70	Bundle	30	21.13
		Tail	0.40	Mds	-	-	Bundle	-	-
		Total	3.03	Mds	4.00	1.32	Bundle	80	26.40
2.	Maize Fodder	Head	0.81	Mds	140.00	173.00	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	0.81	Mds	140.00	173.00	-	-	-
3.	Sorghum (fodder)	Head	0.51	Rs.	75.00	147.06	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	0.51	Rs.	75.00	147.06	-	-	-
4.	Sugarcane Converted into Gur	Head	-	Mds of Gur	-	-	C.T. Mds Bagg: Mds	- -	- -
		Middle	-	Mds of Gur	-	-	C.T. Mds Bagg: Mds	- -	- -
		Tail	-	Mds of Gur	-	-	C.T. Mds Bagg: Mds	- -	- -
		Total	-	Mds of Gur	-	-	C.T. Mds Bagg: Mds	- -	- -
5.	Sugarcane Sold in field	Head	-	Rs.	-	-	-	-	-
		Middle	-	Rs.	-	-	-	-	-
		Tail	-	Rs.	-	-	-	-	-
		Total	-	Rs.	-	-	-	-	-
6.	Pigeon Pea	Head	-	Rs.	-	-	-	-	-
		Middle	-	Rs.	-	-	-	-	-
		Tail	-	Rs.	-	-	-	-	-
		Total	-	Rs.	-	-	-	-	-

C.T.= Cane Tops Bagg:= Bagasse

Table-2

AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS OUTSIDE SAMPLE WATER COURSE RD. 132000

Sr. No.	Crops	Location	Area	Main Product			By Product		
				Unit	Total	Per Hectare	Unit	Total	Per Hectare
0	1	2	3	4	5	6	7	8	9
1.	Maize Grain	Head	0.25	Mds	13.00	52.63	Bundle	80	320.00
		Middle	2.86	Mds	20.00	6.99	Bundle	420	146.85
		Tail	-	-	-	-	-	-	-
		Total	3.11	Mds	33.00	10.61	Bundle	500	160.77
2.	Maize Fodder	Head	0.20	Bundle	40.00	200.00	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	0.20	Bundle	40.00	200.00	-	-	-
3.	Sorghum (fodder)	Head	0.20	Rs.	400.00	2000	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	0.20	Rs.	400.00	2000.00	-	-	-
4.	Sugarcane Converted into Gur	Head	-	Mds of Gur	-	-	C.T. Mds	-	-
							Bagg: Mds	-	-
		Middle	-	Mds of Gur	-	-	C.T. Mds	-	-
							Bagg: Mds	-	-
		Tail	-	Mds of Gur	-	-	C.T. Mds	-	-
							Bagg: Mds	-	-
		Total	-	Mds of Gur	-	-	C.T. Mds	-	-
							Bagg: Mds	-	-
5.	Sugarcane Sold in field	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	-	-	-	-	-	-	-
6.	Pigeon Pea	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	-	-	-	-	-	-	-

C.T.= Cane Tops Bagg:= Bagasse

Table-3

DISPOSAL OF MIAN PRODUCTS OTHER SUGARCANE IN SAMPLE WATER COURSE RD 132000

Sr. No.	Crop Mode of Disposal	Maize (Maunds)								Sorghum (Rs)								Sugarcane (Mds)								Pigeon Pea (Bundles)							
		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places	
		Qty.	%	Qty.	%	Qty	%	Qty.	%	Rs.	%	Rs.	%	Rs.	%	Rs.	%	Qty.	%	Qty.	%	Qty.	%	Qty.	%	Qty	%	Qty	%	Qty	%	Qty	%
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
I	Total Output	16	100	21	100	-	-	37	100	475	100	-	-	-	-	475	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II.	Disposal																																
	1.Retained for H.use	16	100	21	100	-	-	37	100	475	100	-	-	-	-	475	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.Sold	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3.Landlord's Share	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4.Artisan's dues	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5.Given to Labourers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6.Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7.Usher/Charity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8.Other Specify	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
III.	Total =All Uses	16	100	21	100	-	-	37	100	475	100	-	-	-	-	475	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-4

DISPOSAL OF BY-PRODUCTS IN SAMPLE WATER COURSE RD 132000

Sr. No.	Crop Mode of Disposal	Maize (Bundles)								Sorghum (Rupees)							
		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places	
		Qty.	%	Qty.	%	Qty	%	Qty.	%	Rs.	%	Rs.	%	Rs.	%	Rs.	%
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
I	Total Output -	310	100	450	100	-	-	760	100	-	-	-	-	-	-	-	-
II.	Disposal																
	1.Retained fo H.use	190	61.00	450	100	-	-	640	84.21	-	-	-	-	-	-	-	-
	2.Sold	120	38.71	-	-	-	-	120	15.79	-	-	-	-	-	-	-	-
	3.Landlord's Share	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4.Artisan's dues	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5.Given to Labourers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6.Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7.Usher/Charity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8.Other Specify	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
III.	Total =All Uses	310	100	450	100	-	-	760	100	-	-	-	-	-	-	-	-

(Contd...)

Sugarcane (C.T. and Bagg: in Maunds)															
Head				Middle				Tail				All Places			
C.T.	Bagg:	Total	%	C.T.	Bagg:	Total	%	C.T.	Bagg:	Total	%	C.T.	Bagg:	Total	%
18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(Concluded..)

Table-5

MODE OF SALE OF MAIZE IN SAMPLE WATER COURSE RD 132000

(NOT APPLICABLE)

Table-6

MODE OF SALE OF SORGHUM IN SAMPLE WATER COURSE RD 132000

(NOT APPLICABLE)

Table-7

MODE OF SALE OF SUGARCANE IN SAMPLE WATER COURSE RD 132000

(NOT APPLICABLE)

Table-8

UTILIZATION OF PIGEON PEA IN SAMPLE WATER COURSE RD 132000

(NOT APPLICABLE)

Table-9

UTILIZATION OF GUR PRODUCED BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD 132000

(NOT APPLICABLE)

Table-10

NUMBER OF FARMERS REPORTING CONSUMPTION OF CHEMICAL FERTILIZERS IN SAMPLE WATER COURSE RD 132000

Sr. No.	Location of farm	Total farmers growing this crop No.(=100)	Quantity of Fertilizer Used: Urea		D A P		N P K		N P		Ammonium Sulphate		Ammonium Nitrate		P.Sulphate	
			No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
I.	MAIZE															
	a.Head of W.C.	5	4	80.00	1	20	-	-	1	20.00	-	-	-	-	-	-
	b.Middle of W.C.	3	2	66.67	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	9	6	66.67	1	11.11	-	-	1	11.11	-	-	-	-	-	-
II.	SORGHUM															
	a.Head of W.C.	3	3	100.00	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-
III.	SUGARCANE															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IV.	PIGEON PEA															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-11

QUANTITY OF CHEMICAL FERTILIZERS USED BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD. 132000

Sr. No.	Location of farm	Area sown (Hectare)	Quantity of Fertilizer Used: (KG)													
			Urea		D A P		N P I		N P		Ammonium Sulphate		Ammonium Nitrate		P.Sulphate	
			Total	Per Hect-are	Total	Per Hect-are	Total	Per Hect-are	Total	Per Hect-are	Total	Per Hect-are	Total	Per Hect-are	Total	Per Hect-are
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
I.	MAIZE															
	a.Head of W.C.	2.02	275	136	50	25	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	1.42	100	70	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	0.40	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	3.84	375	98	50	25	-	-	-	-	-	-	-	-	-	-
II.	SORGHUM															
	a.Head of W.C.	0.51	75	147	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	0.51	75	147	-	-	-	-	-	-	-	-	-	-	-	-
III.	SUGARCANE															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IV.	PIGEON PEA															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-12

CONSUMPTION OF FARM YARD MANURE IN
SAMPLE WATER COURSE RD.13200

Sr. No.	Location of farm	Total farmers growing this crop	Farmers using Farm Yard Manure		Area Sown	Quantity used (KG)	
			No.	%		Total	Per Hectare
0	1	2	3	4	5	6	7
I.	MAIZE						
	a.Head of W.C.	6	2	33.33	2.02	5225	2587
	b.Middle of W.C.	5	0	-	1.42	-	-
	c.Tail of W.C.	9	1	11.11	0.40	3732	9330
	d.All Places	20	3	15.00	3.84	8957	2333
II.	SORGHUM						
	a.Head of W.C.	6	-	-	0.51	-	-
	b.Middle of W.C.	5	-	-	-	-	-
	c.Tail of W.C.	9	-	-	-	-	-
	d.All Places	20	-	-	0.51	-	-
III.	SUGARCANE						
	a.Head of W.C.	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-
IV.	PIGEON PEA						
	a.Head of W.C.	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-

Table-13

NUMBER OF SAMPLE FARMERS WHO USED
INSECTICIDES/PESTICIDES/WEEDICIDES (RD 132000)

(NOT APPLICABLE)

Table-14

QUANTITY OF SEED USED BY SAMPLE FARMERS
IN SAMPLE WATER COURSE RD 132000

(Kg)

Sr. No.	Crop	Total Area (Hectare)	Head Quantity used			Middle Quantity used			Tail Quantity used			All Places Quantity used		
			Impr-oved	Local	Total	Impr-oved	Local	Total	Impr-oved	Local	Total	Impr-oved	Local	Total
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Maize	3.84	116	-	116	82	-	82	24	-	24	222	-	222
2.	Sorghum	0.51	54	-	54	-	-	-	-	-	-	54	-	54
3.	Sugarcane	-	-	-	-	-	-	-	-	-	-	-	-	-
4.	Pigeon Pea	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-15

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD 132000

Crop: Maize Area: 3.84 ha. i) Head : 2.02 ha ii) Middle: 1.42 ha iii) Tail: 0.40 ha

Sr. No.	Physical Input	Head						Middle						Tail						All Places					
		Purchased		Self Supplied		Total (2+4)		Purchased		Self Supplied		Total(8+10)		Purchased		Self Supplied		Total (14+16)		Purchased (2+8+14)		Self Supplied (3+9+16)		Total	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hec
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Seed	120	59	258	128	378	187	108	76	133	94	241	170	108	270	-	-	108	270	336	88	[illegible]	102	727	189
2.	Farm Yard Manure	-	-	510	252	510	252	-	-	-	-	-	-	-	-	400	1000	400	1000	-	-	[illegible]	237	910	237
3.	Chemical Fertilizer	890	441	-	-	890	441	240	169	-	-	240	169	-	-	-	-	-	-	1130	294	-	-	1130	294
4.	Insecticide/ Pesticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
5.	Water Charges	120	59	-	-	120	59	84	59	-	-	84	59	24	60	-	-	24	60	228	59	-	-	228	59
6.	Dues of Artisans	422	209	-	-	422	209	-	-	-	-	-	-	-	-	-	-	-	-	422	110	-	-	422	116
7.	Total	1552	768	768	380	2320	1149	432	304	133	94	565	398	132	330	400	1000	532	1330	2116	551	1301	339	3417	890

Table-16

LABOUR INPUT COST IN SAMPLE WATER COURSE RD 132000

Crop: Maize Area: 3.84 ha. i) Head : 2.02 ha ii) Middle: 1.42 ha iii) Tail: 0.40 ha

Sr. No.	Operations	Labour inputs	Head: Paid Total	Head: Paid Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (3+5) Total	Head: Total (3+5) Per Hect.	Middle: Paid Total	Middle: Paid Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect.	Tail: Paid Total	Tail: Paid Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect.	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect.	All Places: Self Supp. (5+11+17) Total	All Places: Self Supp. (5+11+17) Per Hect.	All Places: Total (19+21) Total	All Places: Total (19+21) Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Ploughing	i.Manual	-	-	716	354	716	354	-	-	390	275	390	275	-	-	23	58	23	58	-	-	1129	294	1139	294
	ii.Animal	-	-	850	421	850	421	-	-	600	423	600	423	-	-	-	-	-	-	-	-	1450	378	1450	378
	iii.Machine	600	297	-	-	600	297	400	282	-	-	400	282	300	750	-	-	300	750	1300	339	-	-	1300	339
	iv.Total	600	297	1566	775	2166	1072	400	282	990	697	1390	979	300	750	23	58	323	808	1300	339	2579	672	2879	750
2. Levelling	i.Manual	-	-	68	34	68	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	68	18	68	18
	ii.Animal	-	-	150	74	150	74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150	39	150	39
	iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total	-	-	218	108	218	108	-	-	-	-	-	-	-	-	-	-	-	-	-	-	218	57	218	57
3. Planking	i.Manual	-	-	135	67	135	67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	135	35	135	35
	ii.Animal	-	-	225	111	225	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	225	59	225	59
	iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	iv.Total	-	-	360	178	360	178	-	-	-	-	-	-	-	-	-	-	-	-	-	-	360	94	360	94
4. Sowing	i.Manual	-	-	209	103	209	103	-	-	53	37	53	37	-	-	8	20	8	20	-	-	270	70	270	70
	ii.Animal	-	-	400	198	400	198	-	-	150	106	150	106	-	-	-	-	-	-	-	-	550	143	550	143
	iii.Machine	210	104	-	-	210	104	120	85	-	-	120	85	60	150	-	-	60	150	390	102	-	-	390	102
	iv.Total	210	104	609	301	819	405	120	85	203	143	323	227	60	150	8	20	68	170	390	102	820	214	1210	315
5. Watering	i.Manual	-	-	62	31	62	31	-	-	42	30	42	30	-	-	-	-	-	-	-	-	104	27	104	27
6. F.Y.Manure	i.Manual	-	-	158	79	158	78	-	-	-	-	-	-	-	-	-	-	-	-	-	-	158	41	158	41

Contd....)

Table-16

LABOUR INPUT COST IN SAMPLE WATER COURSE RD 122000

Crop: Maize | Area: 3.84 ha. | i) Head : 2.02 ha | ii) Middle: 1.42 ha | iii) Tail: 0.40 ha

Sr. No.	Operations	Labour Inputs	Head: Paid Total	Head: Paid Per Hect:	Head: Self Supplied Total	Head: Self Supplied Per Hect:	Head: Total (3+5) Total	Head: Total (3+5) Per Hect:	Middle: Paid Total	Middle: Paid Per Hect:	Middle: Self Supplied Total	Middle: Self Supplied Per Hect:	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect:	Tail: Paid Total	Tail: Paid Per Hect:	Tail: Self Supplied Total	Tail: Self Supplied Per Hect:	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect:	All Pieces: Paid (3+9+15) Total	All Pieces: Paid (3+9+15) Per Hect:	All Pieces: Self Supp: (5+11+17) Total	All Pieces: Self Supp: (5+11+17) Per Hect:	All Pieces: Total (21+23) Total	All Pieces: Total (21+23) Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
7. Chemical		i.Manual	-	-	29	14	29	14	-	-	11	8	11	8	-	-	40	100	40	100	-	-	[illegible]	21	80	21
8. Hoeing/Weed:		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9. Harvesting		i.Manual	-	-	135	67	135	67	-	-	30	21	30	21	-	-	-	-	-	-	-	-	[illegible]	43	165	43
10.Carriage to Threshing Yard		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11.Threshing/ Winnowing		i.Manual	-	-	30	15	30	15	-	-	15	11	15	11	-	-	-	-	-	-	-	-	[illegible]	12	45	12
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	30	15	30	15	-	-	15	11	15	11	-	-	-	-	-	-	-	-	45	12	45	12
12.Total		i.Manual	-	-	1542	763	1542	763	-	-	541	381	541	381	-	-	71	178	71	178	-	-	2154	561	2154	561
		ii.Animal	-	-	1525	804	1525	804	-	-	750	528	750	528	-	-	-	-	-	-	-	-	2375	618	2375	618
		iii.Machine	910	401	-	-	810	401	520	366	-	-	520	366	360	900	-	-	360	900	1690	440	-	-	1690	440
		iv.Total	810	401	3157	1568	3977	1969	520	366	1291	909	1811	1275	360	900	71	178	431	1078	1690	440	4529	1179	6219	1620

(Concluded)

Table-17

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD 132000

Crop: Sorghum Area: 0.51 ha. i) Head : 0.51 ha ii) Middle: 0.00 ha iii) Tail: 0.00 ha

Sr. No.	Physical Input	Head						Middle						Tail						All Places					
		Purchased		Self Supplied		Total (2+4)		Purchased		Self Supplied		Total (8+10)		Purchased		Self Supplied		Total (14+16)		Purchased (3+9+15)		Self Supplied (4+10+16)		Total	
		Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Seed	150	294	126	247	276	541	-	-	-	-	-	-	-	-	-	-	-	-	150	294	126	247	276	541
2.	Farm Yard Manure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.	Chemical Fertilizer	125	245	-	-	125	245	-	-	-	-	-	-	-	-	-	-	-	-	125	245	-	-	125	245
4.	Insecticide/ Pesticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Water Charges	22	43	-	-	22	43	-	-	-	-	-	-	-	-	-	-	-	-	22	43	-	-	22	43
6.	Dues of Artisans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Total	297	582	126	247	423	829	-	-	-	-	-	-	-	-	-	-	-	-	297	582	126	247	423	829

Table-18

LABOUR INPUT COST IN SAMPLE WATER COURSE RD 132000

Crop: Sorghum Area: 0.51 i) Head : 0.51 ha ii) Middle: 0.00 ha iii) Tail: 0.0[illegible] ha

Sr. No.	Operations	Labour Inputs	Head: Paid Total	Head: Paid Per Hect:	Head: Self Supplied Total	Head: Self Supplied Per Hect:	Head: Total (3+5) Total	Head: Total (3+5) Per Hect:	Middle: Paid Total	Middle: Paid Per Hect:	Middle: Self Supplied Total	Middle: Self Supplied Per Hect:	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect:	Tail: Paid Total	Tail: Paid Per Hect:	Tail: Self Supplied Total	Tail: Self Supplied Per Hect:	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect:	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect:	All Places: Self Supp: (5+11+17) Total	All Places: Self Supp: (5+11+17) Per Hect:	All Places: Total (7+23) Total	All Places: Total (7+23) Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Ploughing		i.Manual	-	-	60	118	60	118	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60	118	[illegible]	118
		ii.Animal	-	-	75	147	75	147	-	-	-	-	-	-	-	-	-	-	-	-	-	-	75	147	[illegible]	147
		iii.Machine	100	196	-	-	100	196	-	-	-	-	-	-	-	-	-	-	-	-	100	196	-	-	[illegible]	196
		iv.Total	100	196	135	265	235	461	-	-	-	-	-	-	-	-	-	-	-	-	100	196	135	265	[illegible]	461
2. Leveling		i.Manual	-	-	15	29	15	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15	29	[illegible]	29
		ii.Animal	-	-	6	12	6	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	12	[illegible]	12
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	21	41	21	41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21	41	[illegible]	41
3. Planking		i.Manual	-	-	15	29	15	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15	29	15	29
		ii.Animal	-	-	25	49	25	49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	49	25	49
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	40	78	40	78	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40	78	40	78
4. Sowing		i.Manual	-	-	30	59	30	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	59	30	59
		ii.Animal	-	-	15	29	15	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	49	25	49
		iii.Machine	100	196	-	-	100	196	-	-	-	-	-	-	-	-	-	-	-	-	100	196	-	-	100	196
		iv.Total	100	196	45	88	145	284	-	-	-	-	-	-	-	-	-	-	-	-	100	196	45	88	145	284
5. Watering		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6. F.Y.Manure		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(Contd...

Table-18

LABOUR INPUT COST IN SAMPLE WATER COURSE RD 132000

Crop: Sorghum Area: 0.51 ha. i) Head : 0.51 ha ii) Middle:0.00 ha. iii) Tail:0.00 ha.

Sr. No.	Operations	Labour inputs	Head						Middle						Tail						All Places					
			Paid		Self Supplied		Total (3+5)		Paid		Self Supplied		Total(9+11)		Paid		Self Supplied		Total (15+17)		Paid (3+9+15)		Self Supp: (5+11+17)		Total (21+23)	
			Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
7. Chemical		i.Manual	-	-	8	16	8	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	16	8	16
8. Hoeing/Weeding		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
9. Harvesting		i.Manual	-	-	130	353	130	353	-	-	-	-	-	-	-	-	-	-	-	-	-	-	130	353		353
10.Carriage to Threshing yard		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
		iv.Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11.Threshing/ Winnowing		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12. Total		i.Manual	-	-	308	604	308	604	-	-	-	-	-	-	-	-	-	-	-	-	-	-	308	604	308	604
		ii.Animal	-	-	121	237	121	237	-	-	-	-	-	-	-	-	-	-	-	-	-	-	121	237	121	237
		iii.Machine	200	392	-	-	200	392	-	-	-	-	-	-	-	-	-	-	-	-	200	392	-	-	200	392
		iv.Total	200	392	429	841	629	1233	-	-	-	-	-	-	-	-	-	-	-	-	200	392	429	841	629	1233

(Concluded)

Table-19

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD 132000
(SUGARCANE)

(NOT APPLICABLE)

Table-20

LABOUR INPUT COST IN SAMPLE WATER COURSE RD 132000
(SUGARCANE)

(NOT APPLICABLE)

Table-21

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD 132000
(PIGEON PEA)

(NOT APPLICABLE)

Table-22

LABOUR INPUT COST IN SAMPLE WATER COURSE RD 132000
(PIGEON PEA)

(NOT APPLICABLE)

Table-23

PRODUCTION COST AND PROFIT IN SAMPLE WATER COURSE RD.132000

Sr. No.	Crops	Location	Area (Hectare)	Total Output: Main Product (Mds)	Total Output: By-product Unit	Total Output: By-product Total Output	Market Price per unit (ex-farm) MP (Rs)	Market Price per unit (ex-farm) BP (Rs)	Total value of output MP	Total value of output BP	Total value of output Total	Value per Hectare MP	Value per Hectare BP	Value per Hectare Total	Total Faraing cost: Physical inputs	Total Faraing cost: Labour cost	Total Faraing cost: Total	Cost per hectare	Profit/loss (+) (-): Total	Profit/loss (+) (-): Per Hectare	Total Imputed costs: Physical input	Total Imputed costs: Labour	Total Imputed costs: Total	Carry home Income Total	Carry home Income per hectare
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	[illegible]
1. Maize	Head		2.02	3.00	Bundles	190	115	2	345	380	725	171	188	359	2320	3977	6297	3117	-5572	-2758	-	3167	3167	-2405	[illegible]
	Middle		1.42	1.00	Bundles	30	115	2	115	60	175	81	42	123	565	1811	2376	1673	-2201	-1550	-	1291	1291	-910	[illegible]
	Tail		0.40	-	Bundles	-	-	-	-	-	-	-	-	-	532	431	963	2408	-963	-2408	-	71	71	-892	[illegible]
	A.Places		3.84	4.00	Bundles	220	115	2	460	440	900	120	115	234	3417	6219	9636	2509	-8736	-2275	-	4529	4529	-4207	[illegible]
2. Sorghum	Head		0.51	Hect: Rs.		-	147	-	75	-	75	147	-	147	423	629	1052	2963	-977	-1916	-	429	429	-548	[illegible]
	Middle		-	Hect: Rs.		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tail		-	Hect: Rs.		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	A.Places		0.51	Hect: Rs.		-	147	-	75	-	75	147	-	147	423	629	1052	2963	-977	-1916	-	429	429	-548	[illegible]
3. Sugar-cane (Eur)	Head		-	-	Mds.C.Tops	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					Mds.Bagasse	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Middle		-	-	Mds.C.Tops	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					Mds.Bagasse	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tail		-	-	Mds.C.Tops	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					Mds.Bagasse	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	A.Places		-	-	Mds.C.Tops	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					Mds.Bagasse	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4. Pigeon Pea	Head		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Middle		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tail		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	A.Places		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-24

CROPPING PATTERN ON SAMPLE FARMS IN SAMPLE WATER COURSE RD 132000

Sr. No.	Crop	Area											
		Head			Middle			Tail			All Places		
		Hect-are	% of season	% of year	Hect-are	% of season	% of year	Hect-are	% of season	% of year	Hect-are	% of season	% of year
0	1	2	3	4	5	6	7	8	9	10	11	12	13
I.	Kharif 1987												
	1. Maize	2.02	79.84	22.70	1.42	100.00	16.51	0.40	100.00	3.80	3.84	88.28	10.96
	2. Sorghum	0.51	20.16	5.73	-	-	-	-	-	-	0.51	11.72	1.46
	3. Sugarcane	-	-	-	-	-	-	-	-	-	-	-	-
	4. Pigeon Pea	-	-	-	-	-	-	-	-	-	-	-	-
	5. All Kharif Crops	2.53	100.00	28.43	1.42	100.00	16.51	0.40	100.00	3.80	4.35	100.00	12.42
II.	Rabi 1987-88												
	1. Wheat	1.92	30.14	21.57	6.37	88.72	74.07	3.64	35.97	34.60	18.93	61.72	54.05
	2. Barley	2.02	31.71	22.70	0.20	2.79	2.33	4.86	48.02	46.20	7.08	23.08	20.22
	3. Berseem	-	-	-	-	-	-	-	-	-	-	-	-
	4. Spinach	2.43	38.15	27.30	0.61	8.50	7.09	1.62	16.01	15.40	4.66	15.19	13.13
	5. Pea	-	-	-	-	-	-	-	-	-	-	-	-
	6. All Rabi Crops	6.37	100.00	71.57	7.18	100.00	83.49	10.12	100.00	96.20	23.67	100.00	87.57
III.	Kharif + Rabi	8.90	-	100.00	8.60	-	100.00	10.52	-	100.00	28.02	-	100.00

Table-25

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF MAIZE IN SAMPLE WATER COURSE RD 132000

Sr. No.	Operations	Head (Area sown: 2.33)						Middle (Area sown: 3.79)						Tail (Area sown: 2.43)						All Places (Area sown: [illegible].55)					
		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	3	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Ploughing	23.87	11.82	17.00	8.42	12.00	5.94	12.00	8.45	12.00	8.45	8.00	5.63	6.00	15.00	-	-	6.00	15.00	41.87	10.70	29.00	7.[illegible]	[illegible].00	6.77
2.	Levelling	2.25	1.11	3.00	1.49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.25	0.59	3.00	0.[illegible]	-	-
3.	Planking	4.50	2.23	4.50	2.23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.50	1.17	4.50	1.1[illegible]	-	-
4.	Sowing	6.97	3.45	8.00	3.96	3.50	1.73	1.75	1.23	3.00	2.11	2.00	1.41	0.25	0.63	-	-	1.00	2.50	8.97	2.34	11.00	2.8[illegible]	[illegible].50	1.69
5.	Watering	2.06	1.02	-	-	-	-	1.40	0.99	-	-	-	-	-	-	-	-	-	-	3.46	0.90	-	-	-	-
6.	F.Y.Manure	5.20	2.57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.20	1.35	-	-	-	-
7.	Che:Fertilizer	0.95	0.47	-	-	-	-	0.38	0.27	-	-	-	-	-	-	-	-	-	-	1.33	0.35	-	-	-	-
8.	Hoeing/Weeding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Harvesting	4.50	2.23	-	-	-	-	1.00	0.70	-	-	-	-	-	-	-	-	-	-	5.50	1.43	-	-	-	-
10.	Carriage to Threshing/yard	-	-	-	-	-	-	0.50	0.35	-	-	-	-	-	-	-	-	-	-	0.50	0.35	-	-	-	-
11.	Threshing/ Winnowing	1.00	0.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.00	0.26	-	-	-	-
12.	Total	51.30	25.40	22.50	16.09	15.50	7.67	17.03	11.99	15.00	10.56	10.00	7.04	6.25	15.63	-	-	7.00	17.50	74.58	19.42	47.50	12.37	32.50	8.46

Table-26

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF SORGHUM IN SAMPLE WATER COURSE RD 132000

Sr. No.	Operations	Head (Area sown: 1.01)						Middle (Area sown: 2.93)						Tail (Area sown: 1.62)						All Places (Area sown: [illegible])					
		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	[illegible]	25
1.	Ploughing	2.00	3.92	1.50	2.94	2.00	3.92	-	-	-	-	-	-	-	-	-	-	-	-	2.00	3.92	1.50	2.94	[illegible]	3.92
2.	Levelling	0.50	0.98	0.13	0.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.50	0.98	0.13	0.25	-	-
3.	Planking	0.50	0.98	0.50	0.98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.50	0.98	0.50	0.98	-	-
4.	Sowing	1.00	1.96	0.50	0.98	2.00	3.92	-	-	-	-	-	-	-	-	-	-	-	-	1.00	1.96	0.50	0.98	[illegible]	3.92
5.	Watering	0.63	1.24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.63	1.24	-	-	-	-
6.	F.Y.Manure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Che:Fertilizer	0.25	0.49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.25	0.49	-	-	-	-
8.	Hoeing/Weeding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Harvesting	6.00	11.76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.00	11.76	-	-	-	-
10.	Carriage to threshing	2.00	3.92	1.00	1.96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.00	3.92	1.00	1.96	-	-
11.	Threshing/ Winnowing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12.	Total	12.88	25.25	3.63	7.12	4.00	7.84	-	-	-	-	-	-	-	-	-	-	-	-	12.88	25.25	3.63	7.12	4.00	7.84

Table-27

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF SUGARCANE IN SAMPLE WATER COURSE RD 132000

(NOT APPLICABLE)

Table-28

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF PIGEON PEA IN SAMPLE WATER COURSE RD 132000

(NOT APPLICABLE)

Table-29

NUMBER OF FRUIT PLANTS, TREES AND FRUIT
PRODUCTION IN SAMPLE WATER COURSE RD.132000

Sr. No.	Particulars	Unit	Head (Total sample farmers = 6)											
			Apricot			Plum			Guava			Peach		
			In this Water-course	In Other Places	Total	In this Water-course	In Other Places	Total	In this Water-course	In Other Places	Total	In this Water-course	In Other Places	Total
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Sample household	Number	2.00	3.00	5.00	-	-	-	-	-	-	-	-	-
2.	Total Trees:													
	a. Bearing & non-bearing	Number	70.00	391.00	461.00	-	-	-	-	-	-	-	-	-
	b. Fruit bearing	Number	70.00	91.00	161.00	-	-	-	-	-	-	-	-	-
3.	Avg. Number of Tree:													
	a. No.per fruit growing household													
	i-Bearing & non-bearing (2a÷1)	Number	35.00	130.00	230.00	-	-	-	-	-	-	-	-	-
	ii-Fruit bearing (2b÷1)	Number	35.00	30.00	80.50	-	-	-	-	-	-	-	-	-
	b. No.per h.hold general:													
	i-Bearing & non-bearing		11.67	65.17	76.83	-	-	-	-	-	-	-	-	-
	ii-Fruit bearing		11.67	15.17	26.83	-	-	-	-	-	-	-	-	-
4.	Total fruit product	Kg	-	-	-	-	-	-	-	-	-	-	-	-
5.	Fruit Production per H.hold.													
	a.Fruit growing h.hold		-	-	-	-	-	-	-	-	-	-	-	-
	b.Sample H.hold in general		-	-	-	-	-	-	-	-	-	-	-	-
6.	Gross receipt from of fruit	Rs.	3000	15000	18000	-	-	-	-	-	-	-	-	-
7.	Average sale process:													
	a. per fruit growing h.hold		1500	5000	3600	-	-	-	-	-	-	-	-	-
	b. per sample house in general		500	2500	3000	-	-	-	-	-	-	-	-	-

(Contd....)

Table-29

NUMBER OF FRUIT PLANTS, TREES AND FRUIT
PRODUCTION IN SAMPLE WATER COURSE RD.132000

Sr. No.	Particulars	Unit	Middle (Total sample farmers = 5)											
			Apricot			Plum			Guava			Peach		
			In this Water-course	In Other Places	Total	In this Water-course	In Other Places	Total	In this Water-course	In Other Places	Total	In this Water-course	In Other Places	Total
0	1	2	15	16	17	18	19	20	21	22	23	24	25	26
1.	Sample household	Number	-	-	-	-	-	-	-	-	-	-	-	-
2.	Total Trees:													
	a. Bearing & non-bearing	Number	-	-	-	-	-	-	-	-	-	-	-	-
	b. Fruit bearing	Number	-	-	-	-	-	-	-	-	-	-	-	-
3.	Avg. Number of Tree:													
	a. No.per fruit growing household													
	i-Bearing & non-bearing non-bearing(2a÷1)	Number	-	-	-	-	-	-	-	-	-	-	-	
	ii-Fruit bearing (2b÷1)	Number	-	-	-	-	-	-	-	-	-	-	-	
	b. No.per h.hold general:													
	i-Bearing & non-bearing		-	-	-	-	-	-	-	-	-	-	-	
	ii-Fruit bearing		-	-	-	-	-	-	-	-	-	-	-	
4.	Total fruit product	Mds	-	-	-	-	-	-	-	-	-	-	-	
5.	Fruit Production per household:													
	a.Fruit growing h.hold		-	-	-	-	-	-	-	-	-	-	-	
6.	Gross receipt from of fruit		-	-	-	-	-	-	-	-	-	-	-	
7.	Average sale process:													
	a. per fruit growing h.hold		-	-	-	-	-	-	-	-	-	-	-	
	b. per sample house in general		-	-	-	-	-	-	-	-	-	-	-	

(Contd....)

Table-29

NUMBER OF FRUIT PLANTS, TREES AND FRUIT
PRODUCTION IN SAMPLE WATER COURSE RD.132000

Sr. No.	Particulars	Unit	Tail (Total sample farmers = 9)											
			Apricot			Plum			Guava			Peach		
			In this Water-course	In Other Places	Total	In this Water-course	In Other Places	Total	In this Water-course	In Other Places	Total	In this Water-course	In Other Places	Total
0	1	2	27	28	29	30	31	32	33	34	35	36	37	38
1.	Sample household	Number	-	-	-	-	-	-	-	-	-	-	-	-
2.	Total Trees:													
	a. Bearing & non-bearing	Number	-	-	-	-	-	-	-	-	-	-	-	-
	b. Fruit bearing	Number	-	-	-	-	-	-	-	-	-	-	-	-
3.	Avg. Number of Trees:													
	a. No.per fruit growing household		-	-	-	-	-	-	-	-	-	-	-	-
	i-Bearing & non-bearing non-bearing(2a÷1)	Number	-	-	-	-	-	-	-	-	-	-	-	-
	ii-Fruit bearing (2b÷1)	Number	-	-	-	-	-	-	-	-	-	-	-	-
	b. No.per h.hold general:													
	i-Bearing & non-bearing		-	-	-	-	-	-	-	-	-	-	-	-
	ii-Fruit bearing		-	-	-	-	-	-	-	-	-	-	-	-
4.	Total fruit product	Mds	-	-	-	-	-	-	-	-	-	-	-	-
5.	Fruit Production per household:		-	-	-	-	-	-	-	-	-	-	-	-
	a.Fruit growing h.hold		-	-	-	-	-	-	-	-	-	-	-	-
6.	Gross receipt from of fruit		-	-	-	-	-	-	-	-	-	-	-	-
7.	Average sale process:													
	a. per fruit growing h.hold		-	-	-	-	-	-	-	-	-	-	-	-
	b. per sample house in general		-	-	-	-	-	-	-	-	-	-	-	-

(Contd....)

Table-29

NUMBER OF FRUIT PLANTS, TREES AND FRUIT
PRODUCTION IN SAMPLE WATER COURSE RD.132000

Sr. No.	Particulars	Unit	All Places(Total sample farmers = 20)											
			Apricot			Plum			Guava			Peach		
			In this Water-course	In Other Places	Total	In this Water-course	In Other Places	Total	In this Water-course	In Other Places	Total	In this Water-course	In Other Places	Total
0	1	2	39	40	41	42	43	44	45	46	47	48	49	50
1.	Sample household	Number	2.00	3.00	5.00	-	-	-	-	-	-	-	-	-
2.	Total Trees:													
	a. Bearing & non-bearing	Number	70.00	391.00	461.00	-	-	-	-	-	-	-	-	-
	b. Fruit bearing	Number	70.00	91.00	161.00	-	-	-	-	-	-	-	-	-
3.	Avg. Number of Tree:													
	a. No.per fruit growing household													
	i-Bearing & non-bearing non-bearing(2a÷1)	Number	35.00	130.00	230.50	-	-	-	-	-	-	-	-	-
	ii-Fruit bearing (2b÷1)	Number	35.00	30.00	80.50	-	-	-	-	-	-	-	-	-
	b. No.per h.hold general:													
	i-Bearing & non-bearing		4.00	20.00	23.05	-	-	-	-	-	-	-	-	-
	ii-Fruit bearing		4.00	5.00	8.05	-	-	-	-	-	-	-	-	-
4.	Total fruit product	Kg	-	-	-	-	-	-	-	-	-	-	-	-
5.	Fruit Production per household:													
	a.Fruit growing h.hold		-	-	-	-	-	-	-	-	-	-	-	-
6.	Gross receipt from of fruit		3000	15000	18000	-	-	-	-	-	-	-	-	-
7.	Average sale process:													
	a. per fruit growing h.hold		1500	5000	3600	-	-	-	-	-	-	-	-	-
	b. per sample house in general		150	750	900	-	-	-	-	-	-	-	-	-

(Concluded...)

Table-30

LIVESTOCK HOLDING OF SAMPLE HOUSEHOLDS IN
SAMPLE WATER COURSE RD.132000

Sr. No.	Kind of Livestock	No. of H.hold who possess theses:	Number of Livestock Possessed											
			Head											
			Minor			Adult			Total			In-milk		
			a	b	c	a	b	c	a	b	c	a	b	c
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Buffalo	4.00	5	1.25	0.83	8.00	2.00	1.33	13.0	3.25	2.17	5	1.25	0.83
2.	Cow	4.00	1	0.25	0.17	7.00	1.75	1.17	8.00	2.00	1.33	3	0.75	0.50
3.	Goat	2.00	1	0.50	0.17	4.00	2.00	0.67	5.00	2.50	0.83	2	1.00	0.33
4.	Sheep	1.00		-	-	11.0	11.0	1.83	11.0	11.0	1.83	1	1.00	0.17
5.	Bullock	2.00	4	2.00	0.67	2.00	1.00	0.33	6.00	3.00	1.00		-	-
6.	He Buffalo	1.00				1.00	1.00	0.17	1.00	1.00	0.17		-	-
7.	Horse/Mule	-	-	-	-	-	-	-	-	-	-		-	-
8.	Donkey	4.00	3	0.75	0.50	5.00	1.25	0.83	8.00	2.00	1.33		-	-
9.	Camel	-	-	-	-	-	-	-	-	-	-	-	-	-
10.	Total	18	14	0.78	2.33	38	2.11	6.33	52	2.89	8.67	11	0.61	1.83
11.	Poultry	6.00	5	0.83	0.83	99.0	16.50	16.50	104	17.33	17.33		-	-

(Contd....)

Total Household: 20
Head: 6
Middle: 5
Tail: 9

a. Total animal
b. Number per owner
c. Number per sample household in general

Table-30

LIVESTOCK HOLDING OF SAMPLE HOUSEHOLDS IN
SAMPLE WATER COURSE RD.132000

Sr. No.	Kind of Livestock	No. of H.hold who possess these:	Number of Livestock Possessed											
			Middle											
			Minor			Adult			Total			In-milk		
			a	b	c	a	b	c	a	b	c	a	b	c
0	0	15	16	17	18	19	20	21	22	23	24	25	26	27
1.	Buffalo	3.00	4	1.33	0.80	5	1.67	1.00	9	3.00	1.80	3	1.00	0.60
2.	Cow	4.00	3	0.75	0.60	6	1.50	1.20	9	2.25	1.80	3	0.75	0.60
3.	Goat	2.00		-	-	17	8.50	3.40	17	8.50	3.40	2	1.00	0.40
4.	Sheep	1.00	3	3.00	0.60	20	20.00	4.00	23	23.00	4.60	3	3.00	0.60
5.	Bullock	1.00		-	-	2	2.00	0.40	2	2.00	0.40		-	-
6.	He Buffalo	1.00		-	-	2	2.00	0.40	2	2.00	0.40		-	-
7.	Horse/Mule	-	-	-	-	-	-	-	-	-	-		-	-
8.	Donkey	3.00	1	0.33	0.20	3	1.00	0.60	4	1.33	0.80		-	-
9.	Camel	-	-	-	-	-	-	-	-	-	-	-	-	-
10.	Total	15	11	0.73	2.20	55	3.67	11.00	66	4.40	13.20	11	0.73	2.20
11.	Poultry	5		-	-	66	13.20	13.20	66	13.20	13.20		-	-

(Contd..)

Total Household:20
Head: 6
Middle: 5
Tail: 9

a. Total animal
b. Number per owner
c. Number per sample household in general

Table-30

LIVESTOCK HOLDING OF SAMPLE HOUSEHOLDS IN
SAMPLE WATER COURSE RD.132000

Sr. No.	Kind of Livestock	No. of H.hold who possess these:	Number of Livestock Possessed											
			Tail											
			Minor			Adult			Total			In-milk		
			a	b	c	a	b	c	a	b	c	a	b	c
0	0	28	29	30	31	32	33	34	35	36	37	38	39	40
1.	Buffalo	4.00	4	1.00	0.44	6	1.50	0.67	10	2.50	1.11	3	0.75	0.33
2.	Cow			-	-		-	-		-	-		-	-
3.	Goat	1.00	2	2.00	0.22	1	1.00	0.11	3	3.00	0.33	1	1.00	0.11
4.	Sheep	2.00	1	0.50	0.11	4	2.00	0.44	5	2.50	0.56	2	1.00	0.22
5.	Bullock	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	He Buffalo	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Horse/Mule	-	-	-	-	-	-	-	-	-	-	-	-	-
8.	Donkey	4.00		-	-	4	1.00	0.44	4	1.00	0.44	-	-	-
9.	Camel	-		-	-	-	-	-	-	-	-	-	-	-
10.	Total	11.00	7	0.64	0.78	15	1.36	1.67	22	-	-	6	0.55	0.67
11.	Poultry	3.00		-	-	22	7.33	2.44	22	7.33	2.44		-	-

(Contd..)

Total Household:20

Head: 6
Middle: 5
Tail: 9

a. Total animal

b. Number per owner
c. number per sample household in general

Table-30

LIVESTOCK HOLDING OF SAMPLE HOUSEHOLDS IN
SAMPLE WATER COURSE RD.132000

Sr. No.	Kind of Livestock	No. of household who possess these:				Number of Livestock Possessed											
						All Places											
						Minor			Adult			Total			In-milk		
		Head	Middle	Tail	All Places	a	b	c	a	b	c	a	b	c	a	b	c
0	0	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
1.	Buffalo	4.00	3.00	4.00	11.00	13	1.18	0.65	19	1.73	0.95	32	2.91	1.60	11.00	1.00	0.55
2.	Cow	4.00	4.00		8.00	4	0.50	0.20	13	1.63	0.65	17	2.13	0.85	6.00	0.75	0.30
3.	Goat	2.00	2.00	1.00	5.00	3	0.60	0.15	22	4.40	1.10	25	5.00	1.25	5.00	1.00	0.25
4.	Sheep	1.00	1.00		4.00	4	1.00	0.20	35	8.75	1.75	39	9.75	1.95	6.00	1.50	0.30
5.	Bullock	2.00	1.00		3.00	4	1.33	0.20	4	1.33	0.20	8	2.67	0.40		-	-
6.	He Buffalo	1.00	1.00		2.00		-	-	3	1.50	0.15	3	1.50	0.15		-	-
7.	Horse/Mule	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-
8.	Donkey	4.00	3.00	4.00	11.00	4	0.36	0.20	12	1.09	0.60	16	1.45	0.80		-	-
9.	Camel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.	Total	18.00	15.0	11.00	44.00	32	0.73	1.60	108	2.45	5.40	140	3.18	7.00	28	0.64	1.40
11.	Poultry	6.00	5.00	3.00	14.00	5	0.36	0.25	187	13.36	9.35	192	13.71	9.60		-	-

(Concluded)

Total Household:20
Head: 6
Middle: 5
Tail: 9

a. Total animal
b. Number per owner
c. Number per sample household in general

Table-31

MILK PRODUCTION AND UTILIZATION IN SAMPLE
WATER COURSE RD 132000

Sr. No.	Particulars	Unit	Head (Total sample farmers = 6)					Middle (Total sample farmers= 10)				
			Buffalo	Cow	Goat	Sheep	Total	Buffalo	Cow	Goat	Sheep	Total
0	1	2	3	4	5	6	7	8	10	11	12	13
1.	In Milk animal	Number	5.00	3.00	2.00	1.00	11.00	3.00	3.00	2.00	3.00	11.00
2.	Number of Owners	Number	3.00	3.00	2.00	1.00	9.00	3.00	3.00	1.00	1.00	8.00
3.	Avg.Daily milk production	Litre	4.50	2.67	1.25	0.50		5.67	2.00	1.00	1.50	
4.	Avg.Monthly milk Production (1 x 3 x 30)	Litre	675.00	240.30	75.00	15.00		510.30	180.0	60.00	135.00	
5.	Avg.Monthly sale (in normal in-milk state)	Litre	1[illegible]	60.00	30.00	15.00		100.00	-	-	-	
6.	5 as %age of 4 (5÷4x100)	%age	26.67	24.97	40.00	100.0		19.60	-	-	-	
7.	Lactation period	Day	305.00	200.00	90.00	90.00		306.00	200.0	90.00	90.00	
8.	Total Production per lactation period (1x3x7)	Litre	6862.50	1602.00	225.00	45.00	8734.50	5205.0	1200	180.0	405.00	
9.	Estimated sale per lactation period(6x8)÷100		1830.00	400.00	90.00	45.00	2365.23	1020.0	-	-	-	
10.	Price per litre	Rs.	6.00	6.00	6.00	6.00		6.00	-	-	-	
11.	Estimated receipt from sales per lactation period (9x10)	Rs.	10980.00	2400.00	540.00	270.00		6120.00	-	-	-	
12.	Avg. annual sale proceed:											
	a. Per owner household (11÷2)	Rs.	3660.00	800.00	270.00	270.00		2040.00	-	-	-	
	b. Per sample household in general	Rs.	1030.00	2400.00	540.00	45.00		1220.00	-	-	-	

(Contd....)

Table-31

MILK PRODUCTION AND UTILIZATION IN SAMPLE
WATER COURSE RD 132000

Sr. No.	Particulars	Unit	Tail (Total sample farmers = 9)					A.Places(Total Sample Farmers= 30)				
			Buffalo	Cow	Goat	Sheep	Total	Buffalo	Cow	Goat	Sheep	Total
0			14	15	16	17	18	19	20	21	22	23
1.	In Milk Animal	Number	3.00		1.00	2.00	6.00	11.0	6.00	5.00	6.00	28.00
2.	Number of Owner	Number	2.00		1.00	1.00	4.00	8.0	6.00	4.00	3.00	21.00
3.	Avg.Daily Milk Production	Litre	5.00		1.50	0.50		5.0	2.33	1.13	0.83	-
4.	Avg. Monthly Milk Production (1 x 3 x30)	Litre	450.00	-	45.00	30.00		1650.0	419.40	169.50	149.40	
5.	Avg. Monthly sale (in normal in-milk state)	Litre	-	-	-	-	-	60.0	10.00	7.50	5.00	
6.	5 as %age if 4(5÷4x100)	%age	-	-	-	-	-	3.64	2.38	4.42	3.35	
7.	Lactation Period	Day	305.00		90.00	90.00	-	305.00	200.00	90.00	90.00	
8.	Total Production per lactation period (1x3x7)	Litre	4575.00		135.00	135.00		16775.00	2796.0	508.50	448.20	
9.	Estimated sale per lactation period(6x8)÷100		-	-	-	-	-	610.00	66.67	22.50	15.00	
10.	Price per litre	Rs.	-	-	-	-	-	6.00	6.00	6.00	6.00	
11.	Estimated receipt from sales per lactation period (9x10)	Rs.	-	-	-	-	-	3660.00	400.00	135.00	90.00	
12.	Avg. Annual sale Proceed:											
	a. Per owner household (11 ÷ 2)	Rs.	-	-	-	-	-	457.50	66.67	33.75	30.00	
	b. Per sample household in general	Rs.	-	-	-	-	-	183.19	19.96	7.34	4.50	

(Concluded).

Table-32

INCOME FROM SALE OF DAIRY PRODUCTS (OTHER THAN MILK)
DURING SIX MONTHS PROCEEDING INTERVIEW OF
SAMPLE HOUSEHOLD IN KHARIF 1987 IN
SAMPLE WATER COURSE RD 13200

Sr. No.	I t e m	Household Reporting sales				Gross Income (Rs)	Average Income:	
		Head	Middle	Tail	All Places		Per selling H.hold (Rs)	Per sample Household in general (Rs)
0	1	2	3	4	5	6	7	8
1.	Butter	-	-	-	-	-	-	-
2.	Ghee	-	-	-	-	-	-	-
3.	Eggs	1	1	-	2	1200	600	200.00
4.	Poultry	1	-	-	1	300	300	50.00
5.	Animals	-	-	-	-	-	-	-
6.	Hides	-	-	-	-	-	-	-
7.	Skins	-	-	-	-	-	-	-
8.	Wool	-	-	-	-	-	-	-
9.	Hair	-	-	-	-	-	-	-
10	Manure	-	-	-	-	-	-	-
11.	Total	2	1	-	3	1500	500	75.00

Household
1. Head : 6
2. Middle : 5
3. Tail : 9
4. A.Places: 20

Table-33

INCOME FROM HIRING OUT OF LIVESTOCK IN
SAMPLE WATER COURSE RD.132000

(NOT APPLICABLE)

Table-34

INCOME FROM SELECTED SOURCES DURING SIX
MONTHS BEFORE INTERVIEW IN KHARIF 1987
IN SAMPLE WATER COURSE RD 132000

(NOT APPLICABLE)

Table-35

PERMANENT LABOUR ON FARM IN SAMPLE
WATER COURSE RD 132000

(NOT APPLICABLE)

Table-1

AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS IN SAMPLE WATERCOURSE RD.132000

Sr. No.	Crops	Location	Area	Main Product			By Product		
				Unit	Total	Per Hectare	Unit	Total	Per Hectare
0	1	2	3	4	5	6	7	8	9
1.	Wheat	Head	1.92	Mds	20.00	10.42	Mds	40	20.83
		Middle	6.37	Mds	30.00	4.71	Mds	100	15.70
		Tail	3.64	Mds	31.50	8.65	Mds	67	18.41
		Total	18.93	Mds	81.50	6.83	Mds	207	17.35
2.	Barley Grain	Head	2.02	Mds	33.00	16.84	Mds	66	32.67
		Middle	0.20	Mds	-	-	Mds	-	-
		Tail	4.86	Mds	46.00	9.47	Mds	74	15.23
		Total	7.08	Mds	79.00	11.16	Mds	140	19.77
3.	Barley Fodder	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	-	-	-	-	-	-	-
4.	Berseem	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	-	-	-	-	-	-	-
5.	Pea	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	-	-	-	-	-	-	-
6.	Spinach	Head	2.43	Mds	14.00	5.76	-	-	-
		Middle	0.61	Mds	6.00	9.84	-	-	-
		Tail	1.62	Mds	25.00	15.43	-	-	-
		Total	4.66	Mds	45.00	9.66	-	-	-

Table-2

AREA AND PRODUCTION OF CROPS CULTIVATED BY SAMPLE HOUSEHOLDS OUTSIDE SAMPLE WATERCOURSE RD 132000

Sr. No.	Crops	Location	Area	Main Product			By Product		
				Unit	Total	Per Hectare	Unit	Total	Per Hectare
0	1	2	3	4	5	6	7	8	9
1.	Wheat	Head	4.55	Mds	85.50	18.79	Mds	171	37.58
		Middle	2.12	Mds	46.00	21.70	Mds	92	43.40
		Tail	0.71	Mds	8.00	11.27	Mds	16	22.54
		Total	7.38	Mds	139.50	18.90	Mds	279	37.80
2.	Barley Grain	Head	0.40	Mds	10.00	25.00	Mds	20	50.00
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	0.40	Mds	10.00	25.00	Mds	20	50.00
3.	Barley Fodder	Head	0.61	-	-	-	Rs.	1600	2622.95
		Middle	0.40	-	-	-	Rs.	1600	4000.00
		Tail	-	-	-	-	-	-	-
		Total	1.01	-	-	-	Rs.	3200	3168.32
4.	Berseem	Head	0.51	Rs.	1400	2745.00	-	-	-
		Middle	0.61	Rs.	2400	3934.43	-	-	-
		Tail	1.21	Rs.	1800	1487.60	-	-	-
		Total	2.33	Rs.	5600	2403.43	-	-	-
5.	Pea	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	-	-	-	-	-	-	-
6.	Spinach	Head	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-
		Total	-	-	-	-	-	-	-

Table-3

DISPOSAL OF MAIN-PRODUCTS IN SAMPLE WATER COURSE RD. 132000

Sr. No.	Crop Mode of Disposal	Wheat (Mds)								Barley (Mds)							
		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places	
		Qty.	%	Qty.	%	Qty	%	Qty.	%	Qty.	%	Qty	%	Qty.	%	Qty.	%
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
I Total Output		105.5	100.00	76.00	100.00	471.00	100.00	221.00	100.00	43.00	100.00	-	-	46.00	100.00	[illegible]	100.00
II. Disposal																	
1.Retained for H.use		1.5	0.47	1.00	1.32	24.70	62.53	26.20	11.86	32.00	74.42	-	-	34.50	75.00	66.50	74.72
2.Sold		85.5	81.04	[illegible]	60.52	8.00	20.25	139.50	63.12	10.00	23.26	-	-	-	-	10.00	11.24
3.Landlord's Share		-	-	14.50	19.08	3.50	8.86	18.00	8.14	-	-	-	-	3.00	6.52	3.00	3.37
4.Artisan's dues		8.5	8.06	6.50	8.55	3.50	8.33	17.50	7.92	-	-	-	-	4.00	8.70	4.00	4.49
5.Given to Labourers		-	-	2.00	2.63	0.50	2.03	2.33	1.27	-	-	-	-	0.50	1.09	0.50	0.56
6.Seed		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.Usher/Charity		11.0	10.43	6.00	7.89	-	-	17.00	7.69	1.00	2.33	-	-	3.00	6.52	4.00	4.49
8.Other Specify		-	-	-	-	-	-	-	-	-	-	-	-	1.00	2.17	1.00	1.12
III.Total =All Uses		105.5	100.00	76.00	100.00	39.50	100.00	[illegible]	100.00	43.00	100.00	-	-	46.00	100.00	89.00	100.00

Contd...p-2

Table-3

DISPOSAL OF MAIN PRODUCTS IN SAMPLE WATERCOURSE RD. 122000

Sr. No.	Crop Mode of Disposal	Berseem (Rs)								Pea								Spinach (Mds)							
		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places		Head		Midlle		Tail		All Places	
		Rs.	%	Rs.	%	Rs.	%	Rs.	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%
0	1	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
I	Total Output	1400	100	2400	100	1800	100	5600	100	-	-	-	-	-	-	-	-	14	100	37	100	25	100	45	100
II.	Disposal																								
	1.Retained for H.use	1400	100	2400	100	1800	100	5600	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.Sold	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14	100	37	100	25	100	-	-
	3.Landlord's Share	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4.Artisan's dues	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5.Given to Labourers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6.Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7.Usher/Charity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8.Other Specify	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
III.	Total =All Uses	1400	100	2400	100	1800	100	5600	100	-	-	-	-	-	-	-	-	14	100	37	100	25	100	-	-

(Concluded)

Table-4

DISPOSAL OF BY-PROCUTS IN SAMPLE WATER COURSE RD. 132000

Sr. No.	Crop Mode of Disposal	Wheat (Mds)								Barley (Mds)							
		Head		Middle		Tail		All Places		Head		Middle		Tail		All Places	
		Qty.	%	Qty.	%	Qty	%	Qty.	%	Qty.	%	Qty.	%	Qty.	%	Qty.	%
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
I	Total Output	211.0	100.00	192.0	100.00	83.00	100.00	486.00	100.00	66	100	-	-	74	100	140	100.00
II.	Disposal																
	1.Rented for H.use	40.0	18.86	60.0	31.25	60.00	72.29	160.00	32.92	66	100	-	-	74	100	140	100.00
	2.Sold	171.0	81.04	92.0	47.92	16.00	19.23	279.00	57.41	-	-	-	-	-	-	-	-
	3.Landlord's Share	-	-	34.0	17.71	-	-	34.00	7.00	-	-	-	-	-	-	-	-
	4.Artisan's dues	-	-	2.0	1.04	3.00	3.61	5.00	1.03	-	-	-	-	-	-	-	-
	5.Given to Labourers	-	-	2.0	1.04	-	-	2.00	0.41	-	-	-	-	-	-	-	-
	6.Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7.Usher/Charity	-	-	2.0	1.04	4.00	4.82	6.00	1.23	-	-	-	-	-	-	-	-
	8.Other Specify	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
III.	Total =All Uses	211.0	100.0	192.0	100.00	83.00	100.00	486.00	100.00	66	100	-	-	-	-	3200	100.00

(Contd....)

Table-4

DISPOSAL OF BY-PRODUCTS IN SAMPLE WATER COURSE RD. 172000

Sr. No.	Crop Mode of Disposal	Berseem (Rs)								Pea								Spinach (Mds)							
		Head		Middle		Tail		All Places		head		Middle		Tail		All Places		Head		Middle		Tail		All Places	
		Rs.	%	Rs.	%	Rs.	%	Rs.	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%
0	1	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
I	Total Output	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II.	Disposal																								
	1.Rented for H.use	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.Sold	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3.Landlord's Share	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4.Artisan's dues	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5.Given to Labourers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6.Seed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7.Usher/Charity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8.Other Specify	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
III.	Total =All Uses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(Cocluded..)

Table-5

MODE OF SALE OF WHEAT IN SAMPLE WATER COURSE RD.132000

(NOT APPLICABLE)

Table-6

MODE OF SALE OF BARLEY IN SAMPLE WATER COURSE RD.132000

Sr. No.	Mode of Sale	Head		Middle		Tail		All Places	
		Qty.	%	Qty	%	Qty	%	Qty	%
0	1	2	3	4	5	6	7	8	9
I.	In Village	-	-	-	-	57.5	100	57.5	100.00
	1. To Beoparis	-	-	-	-	-	-	-	-
	2. To Shop Keepers	-	-	-	-	57.5	30.34	57.5	23.28
	3. To others	-	-	-	-	-	-	-	-
II.	In other Villages	-	-	-	-	-	-	-	-
	1. To Beoparis	-	-	-	-	-	-	-	-
	2. To Shop Keepers	-	-	-	-	-	-	-	-
	3. To others	-	-	-	-	-	-	-	-
III.	In Peshawar	-	-		-	-	-	-	-
	1. Through Commission Agents	-	-		-	-	-	-	-
	2. To whole sellers	-	-		-	-	-	-	-
	3. To others	-	-		-	-	-	-	-
IV.	In other urban centres	-	-		-	-	-	-	-
V.	Total Sales	-	-		-	57.5	100.00	57.5	100.00

Table-7

MODE OF SALE OF BERSEEM IN SAMPLE WATER COURSE RD.132000

(NOT APPLICABLE)

Table-8

MODE OF SALE OF PEA IN SAMPLE WATER COURSE RD.132000

(NOT APPLICABLE)

Table-9

MODE OF SALE OF SPINACH IN SAMPLE WATER COURSE RD.132000

(NOT APPLICABLE)

Table-10

NUMBER OF FARMERS REPORTING CONSUMPTION OF CHEMICAL FERTILIZERS IN SAMPLE WATER COURSE RD.132000

Sr. No.	Location of farm	Total farmers growing this crop No(=100)	Farmers using fertilizers: Urea		D A P		N P K		N P		Ammonium Sulphate		Ammonium Nitrate		P.Sulphate	
			No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
I.	WHEAT															
	a.Head of W.C.	2	1	200.00	-	-	-	-	1	100.00	-	-	-	-	-	-
	b.Middle of W.C.	4	3	133.33	-	-	-	-	1	33.33	-	-	-	-	-	-
	c.Tail of W.C.	4	2	200.00	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	16	6	166.67	-	-	-	-	2	33.33	-	-	-	-	-	-
II.	BARLEY															
	a.Head of W.C.	3	1	300.00	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	4	1	400.00	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	9	2	450.00	-	-	-	-	-	-	-	-	-	-	-	-
III.	BERSEEM															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IV.	P E A															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V.	SPINACH															
	a.Head of W.C.	3	2	150.00	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	3	2	150.00	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table-11

QUANTITY OF CHEMICAL FERTILIZERS USED BY SMAPLE FARMERS IN SAMPLE WATER COURSE RD.132000

Sr. No.	Location of farm	Area sown (Hectare)	Quantity of fertilizer used: (KG)													
			Urea		D A P		N P K		N P		Ammonium Sulphate		Ammonium Nitrate		P.Sulphate	
			Total	Per Hect-are	Total	Per Hect-are	Total	Per Hect-are	Total	Per Hect-are	Total	Per Hect-are	Total	Per Hect-are	Total	Per Hect-are
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
I.	WHEAT															
	a.Head of W.C.	1.92	50	26.04	-	-	-	-	300	156.25	-	-	-	-	-	-
	b.Middle of W.C.	6.37	300	47.10	-	-	-	-	400	62.79	-	-	-	-	-	-
	c.Tail of W.C.	3.64	125	34.34	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	11.93	475	39.82	-	-	-	-	700	58.63	-	-	-	-	-	-
II.	BARLEY															
	a.Head of W.C.	2.02	50	24.75	-	-	-	-	200	99.01	-	-	-	-	-	-
	b.Middle of W.C.	0.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	4.86	25	5.14	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	7.06	75	10.59	-	-	-	-	200	28.25	-	-	-	-	-	-
III.	BERSEEM															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IV.	P E A															
	a.Head of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V.	BERSEEM															
	a.Head of W.C.	2.43	150	61.73	-	-	-	-	-	-	-	-	-	-	-	-
	b.Middle of W.C.	0.61	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c.Tail of W.C.	1.62	75	46.30	-	-	-	-	-	-	-	-	-	-	-	-
	d.All Places	4.66	225	48.28	-	-	-	-	-	-	-	-	-	-	-	-

Table-12

CONSUMPTION OF FARM YARD MANURE IN
SAMPLE WATER COURSE RD.132000

Sr. No.	Location of farm	Total farmers growing this crop	Farmers using Farm Yard Manure		Area Sown (Hec-tare)	Quantity used (KG)	
			No.	%		Total	Per Hectare
0	1	2	3	4	5	6	7
I.	WHEAT						
	a.Head of W.C.	2	-	-	1.92	-	-
	b.Middle of W.C.	4	2	50.00	6.37	15674.40	2461
	c.Tail of W.C.	4	-	-	3.64	-	-
	d.All Places	10	2	20.00	11.93	15674.40	1314
II.	BARLEY						
	a.Head of W.C.	3	-	-	-	-	-
	b.Middle of W.C.	2	-	-	-	-	-
	c.Tail of W.C.	4	-	-	-	-	-
	d.All Places	9	-	-	-	-	-
III.	BERSEEM						
	a.Head of W.C.	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-
IV.	PEA						
	a.Head of W.C.	-	-	-	-	-	-
	b.Middle of W.C.	-	-	-	-	-	-
	c.Tail of W.C.	-	-	-	-	-	-
	d.All Places	-	-	-	-	-	-
V.	SPINACH						
	a.Head of W.C.	3	-	-	2.43	-	-
	b.Middle of W.C.	2	1	-	0.61	1866.00	-
	c.Tail of W.C.	3	1	-	1.62	3732.00	-
	d.All Places	8	2	-	4.66	5598.00	-

Table-13

NUMBER OF SAMPLE FARMERS WHO USED INSECTICIDES/ PESTICIDES/WEEDICIDES IN SAMPLE WATER COURSE RD.132000

Sr. No.	Location of farm	Total Farmer Growing this crops No(=100)	Farmers who used:Insect:/ Pesticides		Farmers who used: Weedicides	
			No.	%	No.	%
0	1	2	3	4	5	6
I.	WHEAT					
	a. Head of W.C.	2	-	-	-	-
	b. Middle of W.C.	4	-	-	-	-
	c. Tail of W.C.	4	-	-	-	-
	d. All places	10	-	-	-	-
II.	BARLEY					
	a. Head of W.C.	3	-	-	-	-
	b. Middle of W.C.	2	-	-	-	-
	c. Tail of W.C.	4	-	-	-	-
	d. All places	9	-	-	-	-
III.	BERSEEM					
	a. Head of W.C.	-	-	-	-	-
	b. Middle of W.C.	-	-	-	-	-
	c. Tail of W.C.	-	-	-	-	-
	d. All places	-	-	-	-	-
IV.	PEA					
	a. Head of W.C.	-	-	-	-	-
	b. Middle of W.C.	-	-	-	-	-
	c. Tail of W.C.	-	-	-	-	-
	d. All places	-	-	-	-	-
V.	SPINACH					
	a.Head of W.C.	3	-	-	-	-
	b.Middle of W.C.	2	-	-	-	-
	c.Tail of W.C.	3	-	-	-	-
	d.All Places	8	-	-	-	-

Table-14

QUANTITY OF SEED USED BY SAMPLE FARMERS IN SAMPLE WATER COURSE RD.132000

Sr. No.	Crop	Total Area (Hectare)	Head Quantity used			Middle Quantity used			Tail Quantity used			All Places Quantity used		
			Improved	Local	Total	Improved	Local	Total	Improved	Local	Total	Improved	Local	Total
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Wheat	11.93	-	190	190	-	489	489	-	356	356	-	1035	1035
2.	Barley	7.08	-	192	192	-	74	74	-	500	500	-	766	766
3.	Berseem	-	-	-	-	-	-	-	-	-	-	-	-	-
4.	Pea	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Spinach	4.66	-	40	40	-	6	6	-	25	25	-	71	71

Table-15

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD.132000

Crop: Wheat Area: 11.93 ha. i) Head : 1.92 ha ii) Middle: 6.37 ha. iii) Tail: 3.64 ha.

Sr. No.	Physical Input	Head						Middle						Tail						All Places					
		Purchased		Self Supplied		Total (2+4)		Purchased		Self Supplied		Total (8+10)		Purchased		Self Supplied		Total (14+16)		Purchased (2+8+14)		Self Supplied (14+16)		Total	
		Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Seed	505	263	75	39	580	302	1522	239	-	-	1522	239	468	129	400	110	868	238	2495	209	475	40	2970	249
2.	Farm Yard Manure	-	-	-	-	-	-	-	-	840	132	840	132	-	-	-	-	-	-	-	-	840	70	840	70
3.	Chemical Fertilizer	515	268	-	-	515	268	1328	208	-	-	1328	208	329	93	-	-	329	93	2182	183	-	-	2182	183
4.	Insecticide/ Pesticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Water Charges	114	59	-	-	114	59	378	59	-	-	378	59	216	59	-	-	216	59	707	59	-	-	707	59
6.	Dues of Artisans	305	159	-	-	305	159	506	79	-	-	506	79	250	69	-	-	250	69	1061	89	-	-	1061	89
7.	Total	1439	749	75	39	1514	789	3734	586	840	132	4574	719	1263	350	400	110	1663	460	6445	540	1315	110	7760	651

Table-16

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.132000

Crop: Wheat | Area:11.93 ha. | i) Head : 1.92 ha. | ii) Middle: 6.37 ha. | iii) Tail: 3.64 ha.

Sr. No.	Operations	Labour inputs	Head: Paid Total	Head: Paid Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (3+5) Total	Head: Total (3+5) Per Hect.	Middle: Paid Total	Middle: Paid Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect.	Tail: Paid Total	Tail: Paid Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect.	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect.	All Places: Self Supp. (5+11+17) Total	All Places: Self Supp. (5+11+17) Per Hect.	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Ploughing		i.Manual	-	-	33	17	33	17	-	-	660	104	660	104	-	-	90	25	90	25	-	-	783	66	783	66
		ii.Animal	-	-	-	-	-	-	-	-	1525	239	-	-	-	-	-	-	-	-	-	-	1525	128	1525	128
		iii.Machine	500	260	-	-	500	260	300	47	-	-	300	47	1200	330	-	-	1200	330	2000	168	-	-	2000	168
		iv.Total	500	260	33	17	533	277	300	47	2185	3430	2445	393	1200	330	90	25	1290	354	2000	168	2308	193	4308	361
2. Levelling		i.Manual	-	-	-	-	-	-	-	-	65	10	65	10	-	-	-	-	-	-	-	-	65	5	65	5
		ii.Animal	-	-	-	-	-	-	-	-	130	20	130	20	-	-	-	-	-	-	-	-	130	11	130	11
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	-	-	-	-	-	-	195	31	195	31	-	-	-	-	-	-	-	-	195	16	195	16
3. Planking		i.Manual	-	-	-	-	-	-	-	-	34	5	34	5	-	-	-	-	-	-	-	-	34	3	34	3
		ii.Animal	-	-	-	-	-	-	-	-	65	10	65	10	-	-	-	-	-	-	-	-	65	5	65	5
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	-	-	-	-	-	-	99	15	99	15	-	-	-	-	-	-	-	-	99	8	99	8
4. Sowing		i.Manual	-	-	16	9	16	9	-	-	574	90	574	90	-	-	54	15	54	15	-	-	644	54	644	54
		ii.Animal	-	-	-	-	-	-	-	-	1275	200	1275	200	-	-	-	-	-	-	-	-	1275	107	1275	107
		iii.Machine	250	130	-	-	250	130	150	24	-	-	150	24	375	103	-	-	375	103	775	65	-	-	775	65
		iv.Total	250	130	16	9	266	139	150	24	1849	290	1999	314	375	103	54	15	429	118	775	65	1919	161	2694	226
5. Watering		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6. F.Y.Manure		i.Manual	-	-	-	-	-	-	-	-	183	29	183	29	-	-	-	-	-	-	-	-	183	15	183	15

(Contd....)

Table-16

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.132000

Crop: Wheat Area:11.93 ha. i) Head : 1.92 ha. ii) Middle: 6.37 ha. iii) Tail: 3.68 ha.

Sr. No.	Operations	Labour inputs	Head						Middle						Tail						All Places					
			Paid		Self Supplied		Total (3+5)		Paid		Self Supplied		Total (9+11)		Paid		Self Supplied		Total (15+17)		Paid (3+9+15)		Self Supplied (5+11+17)		Total (21+23)	
			Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
7. Chemical		i.Manual	-	-	14	7	14	7	-	-	113	18	113	18	-	-	14	4	14	4	-	-	140	12	140	12
8. Hoeing/Weed		i.Manual	-	-	-	-	-	-	-	-	263	41	263	41	-	-	-	-	-	-	-	-	263	22	263	22
9. Harvesting		i.Manual	-	-	980	510	980	510	-	-	1350	212	1352	212	-	-	1710	470	1710	470	-	-	4040	339	4040	339
10.Carriage to Threshing Yard		i.Manual	-	-	290	151	290	151	-	-	1020	160	1020	160	-	-	105	29	105	29	-	-	1415	119	1415	119
		ii.Animal	-	-	210	109	210	109	-	-	225	35	225	35	120	33	130	36	250	69	120	10	565	47	635	57
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	400	[illegible]	-	-	400	110	400	34	-	-	400	34
		iv.Total	-	-	500	260	500	260	-	-	1245	195	1245	195	520	143	235	65	755	207	520	44	1980	166	2500	210
11.Threshing/ Winnowing		i.Manual	-	-	130	68	130	68	-	-	375	59	375	59	-	-	135	37	135	37	-	-	640	54	640	54
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii.Machine	375	195	-	-	375	195	1235	194	-	-	1235	194	550	151	-	-	550	151	2160	181	-	-	2160	181
		iv.Total	375	195	130	68	505	263	1235	194	375	59	1610	253	550	151	135	37	685	188	2160	181	640	54	2800	235
12.Total		i.Manual	-	-	1463	762	1463	762	-	-	4635	728	4635	728	-	-	2108	759	2108	759	-	-	8205	688	8205	688
		ii.Animal	-	-	210	109	210	109	-	-	3220	505	3220	505	120	33	130	36	250	69	120	10	3560	298	3680	308
		iii.Machine	1125	586	-	-	1125	586	1685	265	-	-	1685	265	2525	694	-	-	2525	694	5335	447	-	-	5335	447
		iv.Total	1125	586	1673	871	2798	1457	1685	265	7855	1233	9540	1498	2645	727	2238	615	4883	1341	5455	457	11765	986	17220	1443

(Concluded)

Table-17

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD.132000

Crop: Barley Area: 7.08 ha i) Head : 2.02 ha ii) Middle : 0.20 ha iii) Tail: 4.86 ha

Sr. No.	Physical Input	Head: Purchased Total	Head: Purchased Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (2+4) Total	Head: Total (2+4) Per Hect.	Middle: Purchased Total	Middle: Purchased Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (8+10) Total	Middle: Total (8+10) Per Hect.	Tail: Purchased Total	Tail: Purchased Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (14+16) Total	Tail: Total (14+16) Per Hect.	All Places: Purchased (2+8+14) Total	All Places: Purchased (2+8+14) Per Hect.	All Places: Self Supplied (4+10+16) Total	All Places: Self Supplied (4+10+16) Per Hect.	All Places: Total Total	All Places: Total Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Seed	409	202	-	-	409	202	166	830	60	300	226	1130	760	156	470	97	1230	253	1335	199	530	75	1865	263
2.	Farm Yard Manure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.	Chemical Fertilizer	390	193	-	-	390	193	-	-	-	-	-	-	69	14	-	-	69	14	459	65	-	-	459	65
4.	Insecticide/ Pesticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Water Charges	120	59	-	-	120	59	12	59	-	-	12	59	288	59	-	-	288	59	420	59	-	-	420	59
6.	Dues of Artisans	253	125	-	-	253	125	143	715	-	-	143	715	260	54	-	-	260	54	656	93	-	-	656	93
7.	Total	1172	580	-	-	1172	580	321	1604	60	300	381	1904	1377	283	470	97	1847	380	2870	405	530	75	3400	480

Table-18

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.132000

Crop: Barley Area: 7.08 i) Head : 2.02 ha ii) Middle: 0.20 ha iii) Tail: [illegible] ha

Sr. No.	Operations	Labour inputs	Head						Middle						Tail						All Places					
			Paid		Self Supplied		Total (3+5)		Paid		Self Supplied		Total(9+11)		Paid		Self Supplied		Total (15+17)		Paid (3+9+15)		Self Supp (5+11+17)		Total (21+23)	
			Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	[illegible]	25	26
1. Ploughing		i.Manual	-	-	188	93	188	93	-	-	6	31	6	31	-	-	243	50	243	50	-	-	437	[illegible]	437	62
		ii.Animal	-	-	300	149	300	149	-	-	-	-	-	-	-	-	160	33	160	33	-	-	460	[illegible]	460	65
		iii.Machine	275	136	-	-	275	136	50	250	-	-	50	250	1100	226	-	-	1100	226	1425	301	-		1425	201
		iv.Total	275	136	488	241	763	377	50	250	6	31	56	281	1100	226	403	83	1503	309	1425	301	897	[illegible]	2222	328
2. Leveling		i.Manual	-	-	38	19	38	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	[illegible]	38	5
		ii.Animal	-	-	75	38	75	38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	75	11	75	11
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	113	56	113	56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	113	[illegible]	113	16
3. Planking		i.Manual	-	-	25	12	25	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	4	25	4
		ii.Animal	-	-	50	25	50	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50	7	50	7
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	75	37	75	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	75	11	75	11
4. Sowing		i.Manual	-	-	175	87	175	87	-	-	6	31	6	31	-	-	133	27	133	27	-	-	314	44	314	44
		ii.Animal	-	-	300	149	300	149	-	-	-	-	-	-	-	-	160	33	160	33	-	-	460	65	460	65
		iii.Machine	125	62	-	-	125	62	25	125	-	-	25	125	500	103	-	-	500	103	650	92	-	-	650	92
		iv.Total	125	62	475	235	600	297	25	125	6	31	31	156	500	103	293	60	793	163	650	92	774	109	1424	201
5. Watering		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	1	4	1	-	-	4	1	4	1
6. F.Y.Manure		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Conted...)

Table-18

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.132000

Crop: Barley Area: 7.08 ha. i) Head : 2.02 ha ii) Middle : 0.20 ha iii) Tail: 4.86 ha

Sr. No.	Operations	Labour inputs	Head: Paid Total	Head: Paid Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (3+5) Total	Head: Total (3+5) Per Hect.	Middle: Paid Total	Middle: Paid Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect.	Tail: Paid Total	Tail: Paid Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect.	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect.	All Places: Self Supplied (5+11+17) Total	All Places: Self Supplied (5+11+17) Per Hect.	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
7. Chemical		i.Manual	-	-	8	4	8	4	-	-	6	31	6	31	-	-	3	2	3	2	-	-	21	3	21	3
8. Weeding/Weeding		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9. Harvesting		i.Manual	-	-	930	411	930	411	-	-	100	500	100	500	-	2350	464	-	2350	464	-	-	328	3	3280	464
10.Carriage to Threshing yard		i.Manual	-	-	260	129	260	129	-	-	-	-	-	-	-	-	625	129	625	129	-	-	885	5	885	125
		ii.Animal	-	-	290	144	290	144	-	-	-	-	-	-	-	-	670	138	670	138	-	-	960	6	960	136
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	550	272	550	272	-	-	-	-	-	-	-	-	1295	266	1295	266	-	-	1845	261	1845	261
11.Threshing/ Winrowing		i.Manual	75	37	115	57	190	94	-	-		-	-	-	-	-	190	39	190	39	75	11	305	43	380	54
		ii.Animal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iii.Machine	330	163	-	-	330	163	-	-	-	-	-	-	550	113	-	-	550	113	880	124	-	-	880	124
		iv.Total	405	201	115	57	520	257	-	-	-	-	-	-	550	113	190	39	740	152	955	135	305	43	1260	178
12. Total		i.Manual	75	37	1633	811	1713	848	-	-	19	594	119	594	-	-	3553	731	3553	731	75	11	5309	750	5384	760
		ii.Animal	-	-	1015	502	1015	502	-	-	-	-	-	-	-	-	990	204	990	204	-	-	2005	283	2005	283
		iii.Machine	730	361	-	-	730	361	75	375	-	-	75	375	2150	442	-	-	2150	442	2955	417	-	-	2955	417
		iv.Total	805	399	2653	1313	3458	1712	75	375	119	594	194	969	2150	442	4543	935	6693	1377	3030	428	7314	1033	10343	1461

(Concluded)

Table-19

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD.132000
(BERSEEM)

(NOT APPLICABLE)

Table-20

LABOUR INPUT COST IN SAMPLE WATER COURSE RD. 132000
(BERSEEM)

(NOT APPLICABLE)

Table-21

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD.132000
(P E A)

(NOT APPLICABLE)

Table-22

LABOUR INPUT COST IN SAMPLE WATER COURSE RD. 132000
(P E A)

(NOT APPLICABLE)

Table-23

PHYSICAL INPUT COST IN SAMPLE WATER COURSE RD.132000

Crop: Spinach Area: 4.66 ha. i) Head : 2.43 ha. ii) Middle : 0.61 ha. iii) Tail: 1.62 ha

Sr. No.	Physical Input	Head: Purchased Total	Head: Purchased Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (2+4) Total	Head: Total (2+4) Per Hect.	Middle: Purchased Total	Middle: Purchased Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (8+10) Total	Middle: Total (8+10) Per Hect.	Tail: Purchased Total	Tail: Purchased Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (14+16) Total	Tail: Total (14+16) Per Hect.	All Places: Purchased (2+8+14) Total	All Places: Purchased (2+8+14) Per Hect.	All Places: Self Supplied (4+10+16) Total	All Places: Self Supplied (4+10+16) Per Hect.	Total Total	Total Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Seed	630	260	150	62	830	342	100	64	-	-	100	164	575	943	-	-	575	943	1305	271	150	32	[illegible]	323
2.	Farm Yard Manure	-	-	-	-	-	-	-	-	350	574	350	574	-	-	400	656	400	656	-	-	750	161		161
3.	Chemical Fertilizer	420	173	-	-	420	173	138	226	-	-	138	226	207	339	-	-	207	339	765	164	-	-	[illegible]	164
4.	Insecticide/ Pesticide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Water Charges	322	133	-	-	322	133	81	133	-	-	81	133	215	352	-	-	215	352	618	133	-	-	6.	133
6.	Dues of Artisans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Total	1422	585	150	62	1572	647	319	523	350	574	669	1097	997	1634	400	656	1397	2290	2738	588	900	193	3638	791

Table-24

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.132000

Crop: Spinach Area: 4.66 ha. i) Head : 2.43 ha. ii) Middle: 0.61 ha. iii) Tail: 1.62 ha.

Sr. No.	Operations	Labour inputs	Head						Middle						Tail						All Places					
			Paid		Self Supplied		Total (3+5)		Paid		Self Supplied		Total (9+11)		Paid		Self Supplied		Total (15+17)		Paid (3+9+15)		Self Supp: (5+11+17)		Total (21+23)	
			Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Ploughing		i.Manual	-	-	218	90	218	90	-	-	108	176	108	176	-	-	42	26	42	26	-	-	367	79	367	79
		ii.Animal	-	-	350	144	350	144	-	-	200	328	200	328	-	-	-	-	-	-	-	-	550	118	550	118
		iii.Machine	250	103	-	-	250	103	50	82	-	-	50	82	350	216	-	-	350	216	650	140	-	-	650	140
		iv.Total	250	103	568	234	818	336	50	82	308	504	358	586	350	216	42	26	392	242	650	140	917	197	1567	336
2. Levelling		i.Manual	-	-	89	36	88	36	-	-	2	3	2	3	-	-	-	-	-	-	-	-	89	19	89	19
		ii.Animal	-	-	175	72	175	72	-	-	-	-	-	-	-	-	-	-	-	-	-	-	175	38	175	38
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	263	108	263	108	-	-	2	3	2	3	-	-	-	-	-	-	-	-	264	57	264	57
3. Planking		i.Manual	-	-	44	18	44	18	-	-	1	1	1	1	-	-	-	-	-	-	-	-	45	10	45	10
		ii.Animal	-	-	88	36	88	36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	88	19	88	19
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	132	54	132	54	-	-	1	1	1	1	-	-	-	-	-	-	-	-	132	29	132	29
4. Sowing		i.Manual	-	-	210	86	210	86	-	-	56	92	56	92	-	-	26	16	26	16	-	-	292	63	292	63
		ii.Animal	-	-	350	144	350	144	-	-	100	164	100	164	-	-	-	-	-	-	-	-	450	97	450	97
		iii.Machine	250	103	-	-	250	103	50	82	-	-	50	82	250	154	-	-	250	154	550	118	-	-	550	118
		iv.Total	250	103	560	231	810	333	50	82	156	256	206	338	250	154	26	16	276	170	550	118	742	159	1292	277
5. Watering		i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6. F.Y.Manure		i.Manual	-	-	-	-	-	-	-	-	50	82	50	82	-	-	60	37	60	37	-	-	110	24	110	24

(Contd..)

Table-24

LABOUR INPUT COST IN SAMPLE WATER COURSE RD.132000

Crop: Spinach Area: 4.66 ha. i) Head : 2.43 ha. ii) Middle: 0.61 ha. iii) Tail: [illegible] ha.

Sr. No.	Operations	Labour inputs	Head: Paid Total	Head: Paid Per Hect.	Head: Self Supplied Total	Head: Self Supplied Per Hect.	Head: Total (3+5) Total	Head: Total (3+5) Per Hect.	Middle: Paid Total	Middle: Paid Per Hect.	Middle: Self Supplied Total	Middle: Self Supplied Per Hect.	Middle: Total (9+11) Total	Middle: Total (9+11) Per Hect.	Tail: Paid Total	Tail: Paid Per Hect.	Tail: Self Supplied Total	Tail: Self Supplied Per Hect.	Tail: Total (15+17) Total	Tail: Total (15+17) Per Hect.	All Places: Paid (3+9+15) Total	All Places: Paid (3+9+15) Per Hect.	All Places: Self Supplied (5+11+17) Total	All Places: Self Supplied (5+11+17) Per Hect.	All Places: Total (21+23) Total	All Places: Total (21+23) Per Hect.
2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
7. Chemical		i.Manual	-	-	22	9	22	9	-	-	[illegible]	21	13	21	-	-	3	2	3	2	-	-	37	[illegible]	[illegible]	8
8. [illegible]	[illegible]/Weed:	i.Manual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-
9. [illegible]	[illegible]ashing	i.Manual	240	99	525	216	765	315	-	-	[illegible]	738	450	738	-	-	930	574	930	574	240	99	1905		5	460
10. Carriage to Threshing yard		i.Manual	-	-	255	105	255	105	-	-	75	123	75	123	-	-	270	167	270	167	-	-	600	[illegible]	600	129
		ii.Animal	-	-	110	45	110	45	-	-	[illegible]	66	40	66	-	-	360	222	360	222	-	-	510	[illegible]	510	510
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-
		iv.Total	-	-	365	150	365	150	-	-	35	189	115	189	-	-	630	389	630	389	-	-	1110	[illegible]	1110	238
11. Threshing/ Winnowing		i.Manual	-	-	555	229	555	229	-	-	-	-	-	-	-	-	270	167	270	167	-	-	825	177	825	177
		ii.Animal	-	-	50	21	50	21	-	-	-	-	-	-	-	-	280	173	280	173	-	-	330	71	330	71
		iii.Machine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		iv.Total	-	-	605	249	605	249	-	-	-	-	-	-	-	-	550	340	550	340	-	-	1155	248	1155	248
13. Total		i.Manual	240	99	1916	788	2156	887	-	-	54	1235	754	1235	-	-	1601	998	1601	998	240	52	4270	916	4510	968
		ii.Animal	-	-	1123	462	1123	462	-	-	340	557	340	557	-	-	640	395	640	395	-	-	2103	451	2103	451
		iii.Machine	500	206	-	-	500	206	100	164	-	-	100	164	600	370	-	-	600	370	1200	258	-	-	1200	258
		iv.Total	740	305	3038	1250	3778	1555	100	164	1094	1793	1194	1957	600	370	2241	1383	2841	1754	1440	309	6372	1368	7812	1677

Concluded

Table-25

PRODUCTION COST AND PROFIT IN SAMPLE WATER COURSE RD.132000

Sr. No.	Crops	Location	Area (Hectare)	Total Output: Main Product (Mds)	Total Output: By-product Unit	Total Output: By-product Total Output	Market Price per unit (ex-farm) MP (Rs)	Market Price per unit (ex-farm) BP (Rs)	Total value of output MP	Total value of output BP	Total value of output Total	Value per hectare MP	Value per hectare BP	Value per hectare Total	Total Farming cost: Physical inputs	Total Farming cost: Labour cost	Total Farming cost: Total	Cost per hectare	Profit/loss (+) (-): Total	Profit/loss (+) (-): Per hectare	Total Imputed costs: Physical input	Total Imputed costs: Labour	Total Imputed costs: Total	Carry home Income =col.14+23: Total	Carry home Income =col.14+23: Per hectare
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1. Wheat		Head	1.92	20.00	Mds	40	110	32	2200	1280	3480	1146	667	1813	1514	2798	4312	2246	-832	-433	-	1673	1673	841	438
		Middle	6.37	30.00	Mds	100	110	31	3300	3100	6400	518	487	1005	4574	9540	14114	2216	-7714	-1211	-	7855	7855	141	22
		Tail	3.64	31.50	Mds	102	102	31	3213	2077	5290	883	571	1453	1673	4883	6556	1801	-1266	-348	-	2238	2238	972	267
		A.Places	11.93	81.50	Mds	270			8713	6457	15170	730	541	1272	7761	17221	24982	2094	-9812	-822	-	11766	11766	1954	164
2. Barley		Head	2.02	33.00	Mds	66	107	30	3531	1980	5511	1748	980	2728	1172	3457	4629	2292	882	437	-	2652	2652	3534	1750
		Middle	0.20	-	-	-	-	-	-	-	-	-	-	-	381	194	575	2875	-575	-2875	-	119	119	-456	-2280
		Tail	4.86	46.00	Mds	74	105	30	4830	2220	7050	994	457	1451	1347	6693	8040	1757	-1490	-307	-	4543	4543	3053	628
		A.Places	7.08	79.00	Mds	140			8361	4200	12561	1181	593	1774	3400	10344	13744	1941	-1183	-167	-	7314	7314	6131	866
3. Berseem		Head	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		A.Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4. Pea		Head	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Tail	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		A.Places	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5. Spinach		Head	2.43	14.00	-	-	600	-	8400	-	8400	3457	-	3457	1572	3778	5850	2201	3051	1255	-	3038	3038	6089	2506
		Middle	0.61	6.00	-	-	600	-	3600	-	3600	5902	-	5902	669	1194	1863	3053	1739	2848	-	1094	1094	2832	4642
		Tail	1.62	25.00	-	-	600	-	15000	-	15000	9259	-	9259	1397	2841	4238	2616	10762	6643	-	2241	2241	13003	8027
		A.Places	4.66	45.00	-	-		-	27000	-	27000	5794	-	5794	3638	7812	11450	2457	15550	3337	-	6373	6373	21923	4705

Table-26

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF WHEAT IN SAMPLE WATER COURSE NO. 132000

Sr. No.	Operations	Head (Area sown: 1.92)						Middle (Area sown: 6.37)						Tail (Area sown: 3.64)						All Places (Area sown: 11.93)					
		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours	
		Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.	Total	Per Hect.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Ploughing	1.25	0.65	-	-	10.00	5.21	28.75	4.51	30.50	4.79	6.00	0.94	3.00	0.82	-	-	24.00	6.59	33.00	2.77	30.[illegible]	[illegible]	40.00	3.35
2.	Levelling	-	-	-	-	-	-	2.60	0.41	2.60	0.41	-	-	-	-	-	-	-	-	2.60	0.22	2	[illegible]	-	-
3.	Planking	-	-	-	-	-	-	1.30	0.20	1.30	0.20	-	-	-	-	-	-	-	-	1.30	0.11	1	[illegible]	-	-
4.	Sowing	0.53	0.28	-	-	5.00	2.60	15.25	2.39	25.50	4.00	3.00	0.47	1.94	0.53	-	-	7.50	2.06	17.72	1.49	25	[illegible]	15.50	1.30
5.	Watering	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
6.	F.Y.Manure	-	-	-	-	-	-	7.30	1.15	-	-	-	-	-	-	-	-	-	-	7.30	0.61	-	-	-	-
7.	Che:Fertilizer	1.19	0.62	-	-	-	-	4.30	0.68	-	-	-	-	0.45	0.12	-	-	-	-	5.94	0.50	-	-	-	-
8.	Hoeing/Weeding	-	-	-	-	-	-	10.50	1.65	-	-	-	-	-	-	-	-	-	-	10.50	0.88	-	-	-	-
9.	Harvesting	38.00	19.79	-	-	-	-	126.00	19.79	-	-	-	-	57.00	15.66	-	-	-	-	221.00	18.52	-	-	-	-
10.	Carriage to Threshing yard	11.00	5.73	7.00	3.65	-	-	39.00	6.12	7.50	1.18	-	-	6.50	1.79	7.00	1.92	5.00	1.37	56.50	4.74	21.50	1.80	5.00	0.42
11.	Threshing/ Winnowing	5.00	2.60	-	-	4.00	2.08	14.50	2.28	-	-	12.00	1.88	4.50	1.24	-	-	6.00	1.65	24.00	2.01	-	-	22.00	1.84
12.	Total	56.97	29.67	7.00	3.65	19.00	9.90	249.50	39.17	67.40	10.58	21.00	3.30	73.39	20.16	7.00	1.92	42.50	11.68	379.86	31.84	81.40	6.82	82.50	6.92

Table-27

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF BARLEY IN SAMPLE WATER COURSE RD. 132000

Sr. No.	Operations	Head (Area sown: 2.02)						Middle (Area sown: 0.20)						Tail (Area sown: 4.85)						All Places (Area sown: 7.08)					
		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	3	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Ploughing	7.50	3.71	6.00	2.97	5.50	2.72	0.25	1.25	-	-	1.00	5.00	9.75	2.01	4.00	0.82	22.00	4.53	17.50	2.47	10.[illegible]	1.41	28.50	4.03
2.	Levelling	1.50	0.74	1.50	0.74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.50	0.21	1.50	0.21	-	-
3.	Planking	1.00	0.50	1.00	0.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.00	0.14	1.00	0.14	-	-
4.	Sowing	7.00	3.47	6.00	2.97	2.50	1.24	0.25	1.25	-	-	0.50	2.50	5.87	1.21	4.00	0.82	10.00	2.06	13.12	1.85	10.[illegible]	1.41	13.00	1.84
5.	Watering	-	-	-	-	-	-	-	-	-	-	-	-	0.20	0.04	-	-	-	-	0.20	0.03	-	-	-	-
6.	F.Y.Manure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	Che:Fertilizer	0.25	0.12	-	-	-	-	0.25	1.25	-	-	-	-	0.25	0.05	-	-	-	-	0.75	0.11	-	-	-	-
8.	Hoeing/Weeding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Harvesting	32.00	15.84	-	-	-	-	4.00	20.00	-	-	-	-	81.00	16.67	-	-	-	-	117.00	16.53	-	-	-	-
10.	Carriage to threshing	10.00	4.95	6.00	2.97	-	-	-	-	-	-	-	-	21.50	4.42	19.00	3.91	-	-	31.50	4.45	25.00	3.53	-	-
11.	Threshing/ Winnowing	7.50	3.71	-	-	6.00	2.97	-	-	-	-	-	-	6.50	1.34	-	-	11.00	2.26	14.00	1.98	-	-	17.00	2.40
12.	Total	66.75	33.04	20.50	10.15	14.00	6.93	4.75	23.75	-	-	1.50	7.50	125.07	25.78	27.00	5.56	43.00	8.85	196.57	27.76	47.50	6.71	58.50	8.26

Table-28

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF BERSEEM IN SAMPLE WATER COURSE RD. 132000

(NOT APPLICABLE)

Table-29

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF PEA IN SAMPLE WATER COURSE RD. 132000

(NOT APPLICABLE)

Table-30

MANUAL/ANIMAL/MACHINE TIME CONSUMED IN CULTIVATION
OF SPINACH IN SAMPLE WATER COURSE RD. 132000

Sr. No.	Operations	Head (Area sown: 2.43)						Middle (Area sown: 0.61)						Tail (Area sown: 1.82)						All Places (Area s[illegible] : 4.66)					
		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours		Mandays		Animal Days		Machine Hours	
		Total	Per Hect:	Total	Per Hect:	Total	Per Hect	Total	Per Hect:	Total	Per Hect:	Total	Per Hect	Total	Per Hect	Total	Per Hect:	Total	Per Hect	Total	Per Hect:	Total	Per Hect:	Total	Per Hect:
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.	Ploughing	9.00	3.70	7.00	2.88	5.00	2.06	4.25	6.97	4.00	6.56	1.00	1.64	1.60	0.99	-	-	7.00	4.32	14.85	3.19	11.00	[illegible]	13.00	2.79
2.	Levelling	3.50	1.44	3.50	-	-	-	0.06	0.10	-	-	-	-	-	-	-	-	-	-	3.56	0.76	3.50	[illegible]	-	-
3.	Planking	1.75	0.72	1.75	0.72	-	-	0.03	0.05	-	-	-	-	-	-	-	-	-	-	1.78	0.38	1.75	[illegible]	-	-
4.	Sowing	7.30	3.21	7.00	2.38	5.00	2.06	2.25	3.69	2.00	3.28	1.00	1.64	0.97	0.[illegible]	-	-	7.00	4.32	11.02	2.36	9.00	[illegible]	13.00	2.79
5.	Watering	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	F.Y.Manure	-	-	-	-	-	-	2.00	3.28	-	-	-	-	2.00	1.23	-	-	-	-	4.00	0.86	-		-	-
7.	Che:Fertilizer	0.38	0.35	-	-	-	-	0.50	0.82	-	-	-	-	0.10	0.06	-	-	-	-	1.48	0.32	-	-	-	-
8.	Hoeing/Weeding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Harvesting	29.00	11.93	-	-	-	-	18.00	29.51	-	-	-	-	31.00	19.14	-	-	-	-	78.00	16.74	-	-	-	-
10.	Carriage to Threshing	10.00	4.12	2.00	0.82	-	-	3.00	4.92	1.00	1.64	-	-	9.00	5.56	9.00	5.56	-	-	22.00	4.72	12.00	2.58	-	-
11.	Threshing/ Winnowing	22.00	9.05	1.00	0.41	-	-	-	-	-	-	-	-	13.00	8.02	6.00	3.70	-	-	35.00	7.51	7.00	1.50	-	-
12.	Total	83.93	34.54	22.25	9.16	10.00	4.12	30.09	49.33	7.00	11.48	2.00	3.28	57.67	35.60	15.00	9.26	14.00	8.64	171.69	36.84	44.25	9.50	26.00	5.58

INSTITUTE OF DEVELOPMENT STUDIES
N.W.F.P. AGRICULTURAL UNIVERSITY
PESHAWAR

BASE LINE SURVEY FOR COMMAND WATER PROJECT
WARSAK LIFT CANAL UNIT, PESHAWAR

SCHEDULE-I

Q.1. Sample Water Course

1.1 R.D. Number

1.2 Village

1.3 Location

i- Head of Canal /_____/

ii- Middle of Canal /_____/

iii- Tail of Canal /_____/

Q.2. Sample Farm

2.1 Sample number

2.2 Serial number on sample list

2.3 Location on Water Course:

2.3.1 Head /_____/

2.3.2 Middle /_____/

2.3.3 Tail /_____/

2.4 Tenure status of farmer

2.4.1 Owner /_____/

2.4.2 Owner-cum-tenant /_____/

2.4.3 Tenant /_____/

Q.3. Sample Farmer

3.1 Name

3.2 Age

3.3 Literacy Status

3.3.a. Literate /_____/ Go to 3.3.c

3.3.b. Not literate /_____/

3.3.c. Highest examination passed /_____/

Q.4. Respondent (if other than sample farmer)

4.1 Name

4.2 Age

4.3 Education

4.4 Relation with sample farmer

Q.5. Household Size and Composition

Sr. No.	Particulars	Below 5 year			5 year & above			All Ages		
		M	F	T	M	F	T	M	F	T
0.	1	2	3	4	5	6	7	8	9	10
1.	Number of members									
2.	How many can read and write (excluding students)									
3.	How many are at School(s)									
4.	How many are working (earning) members ?									

M= Male F= Female T= Total

Q.6. Particulars of the household members who are employed; including those working outside but having dependents in this household.

Sr. No.	N a m e	Occupation	Place of work	Employer	Average monthly income
0.	1	2	3	4	5
1.					
2.					
3.					
4.					

Q.7. Land Holding

Sr. No.	Particulars	Total Area (Jareeb)			Cash rent/ Batai rate
		A	B	All Places (2 + 3)	
0	1	2	3	4	5
1.	Area owned				
2.	Area rented in:				
	a. on cash rent				
	b. batai (share produce)				
	c. Total				
3.	Area rented out:				
	a. on cash out:				
	b. batai (share produce)				
	c. Total				
4.	Area operated (1 +2c - 3c)				

(A) This water course (B) Other places

Q.8. Land use (of operated holding in this water course)

Sr. No.	Particulars	Area (Jareeb)		
		Irrigated	Un-Irrigated	Total
1.	Total operated holding (note from Q.No.7 Col.2 row 4)			
2.	Land use.			
	2.1 Crops			
	2.2 Orchard			
	2.3 Not available for cultivation			
	a- culturable waste			
	b- unfit for cultivation due to water logging/salinity.			
	c- other (specify)			

Q.9. Means of irrigation

Sr. No.	Particulars	Area (Jareeb)
1.	Total irrigated holding	
2.	Means of irrigation	
	a. Canal only	
	b. Open wells only	
	c. Tube-well only	
	d. Mixed	

Q.10.Do you have a tube-well/lift pump No/_____/ Yes/_____/go to 11

i- When sunk ?

ii- What is the discharge size:_____

iii- Operating cost of tube-well/lift pump.

Sr. No.	Item	Average monthly cost (Rs)	Months (Kharif) 1987	Total cost (Col.(2x3) (Rs)
0.	1	2	3	4
1.	Fuel/Power			
2.	Wages of operator			
3.	Maintenance			
4.	Other (specify)			
	T o t a l :-			

iv- Is water sold? Yes /_____/ No /_____/

(If 'yes ask the following)

S.No.	B a s i s	Rate/Share in produce
0.	1	2
i-	Per hour	
ii-	Per Jareeb	
iii-	Share basis	

v- How was this tubewell financed ?

a- Entirely self-financed /_____/

b- With borrowed money /_____/ How much:

i- Borrowed:
ii- Self-provided:

Q.11.Warabandi (Kharif 1987)

11.a. Number of turns (irrigations) sanctioned per week for your fields in this zone:

/_____/

11.b. Time allowed per turn:/_____/ hours/minutes

11.c. At what time of the day/night ?

11.d. Was any turn for irrigation lost in Kharif 1987?

No /_____/ Yes /_____/

11.e. If yes, to 11.d how many turns were lost?

/_____/

(details of turns lost)

Sr. No.	Month (in Kharif 1987)	Turns lost (No.)	Reasons for loss of turns
1.			
2.			
3.			
4.			
5.			
6.			

11.f. Do you exchange water with other farmers ?

No /_____/ Yes /_____/

11.g. Frequency and terms of exchange of water

11.g.i. In kharif 1987, how many times was water:

a. borrowed?
b. lent ?

11.g.ii. What are the terms of exchanges ?

11.h. Free Water for Irrigation (Other than exchange)

11.h.i Do you ever get free water for irrigation from other farmers ?

Yes /_____/ No /_____/

if 'yes'

a. When did you last get it ?

b. On what conditions ?

11.h.ii. Do you ever give free water for irrigation to other farmers ?

Yes /_____/ No /_____/

If 'yes'

a. When did you last give it ?

b. On what conditions ?

1.12. Is there any tampering of your share of water ?

12.1 No /_____/

12.2 Yes /_____/

12.3 Describe the nature and extent of tampering problem.

1.13. De-silting of water course.

13.1 How many times is the water course de-silted in a year?

13.2 When was it de-silted last ?

1.14. Number of breaches, if any, in the water course during your turns in Kharif 1987.

Q.15. Canal Water Problems.

Sr. No.	Particulars	Write yes or No as applicable.	Elaborate the problem and how does it affect you ?	Give Suggestions to overcome this problem.
0.	1	2	3	4
1.	Do you face the <u>following problems:</u>			
	a. A general shortage of water.			
	b. Defective slope of the channel.			
	c. Siltation of the channel			
	d. Warabandi defects (inconvenient timing/ in adequate time etc)			
	e. Theft of water			
2.	What other problems do you face in respect of canal water supply?			

Q.16. Management of de-silting of water course

16.1. What arrangements exist for this ?

16.2. Are you satisfied with the arrangements ?

Yes /_____/ No /_____/

If 'No' please give the reasons ?

16.3. If water users participation is obligatory in de-siltation work, then please tell us:

a. How is this arrangement enforced ?

b. What is the penalty for the water users who donot participate in de-siltation work?

c. What are the main problems , if any,in enforcement of de-siltation work rules ?

d. By reference to 16.3 (c), please give your suggestions to overcome this problem.

Q.17. C r e d i t.

17.1 Have you ever been in debt? Yes /_____/

No /_____/ go to 18

17.2 Amount outstanding on interview date: Rs./_____/

17.3 Amount borrowed during last twelve months and its utilization ?

Sr. No.	Source	Amount borrowed	Utilization a	b	c	d	e	f	g
0	1	2							
1.	Agricultural Development Bank								
2.	Commercial Bank								
3.	Cooperative								
4.	Traders								
5.	Private money								
6.	Relatives								
7.	Friends								
8.	Other (specify)								
9.	All Sources								

a. Purchase of farm inputs
b. Farm machinery
c. Purchase of land;
d. Repayment of loan;
e. For business;
f. Domestic consumption;
g. Other (specify)

17.4. Terms and conditions for loan from private money lenders.

17.5. In your opinion what are the three best sources of credit?

Source in order of preference	Reason for preference
i-	
ii-	
iii-	

17.6. What problems, if any, do you face in obtaining credit ?

Source of credit	Problem
1. A.D.B.P.	
2. C o o p	
3. Commercial Bank.	
4. Traders	

17.7. Do you have in mind some improvements you would like to make on the farm, if you could get adequate credit ?

No /_____/

Yes /_____/

Give details.

What improvement?	Probable cost	Benefits expected
i-		
ii-		
iii-		

Q.18. Use of selected farm inputs.

Sr. No.	Name of Inputs	Do you use this?	If yes, where do you buy this ?	Supply problems state, if any.
Q.	a	b	c	d
1.	Chemical Fertilizer			
	i-Urea			
	ii-D.A.P			
	iii-N.P.K.	-		
	iv-N.P.			
	v-Ammonium Sulphate			
	vi-Ammonium Nitrate			
2.	Insecticides/ Pesticide			
3.	Weedicides			

Q.16.(a) Use Of Other Selected Farm Inputs

Sr. No.	Name of Inputs	A	B	C	Supply problems state, if any.
0.	1	2	3	4	5
1.	Improved seed				
	a. Wheat				
	i-Pak-81				
	ii- L-73				
	iii- Sarhad-82				
	iv-Khyber-79				
	v-Pirsabaq-85				
	b. Sugarcane				
	i-M.I.61				
	ii-CP-48				
	iii-CO-310				
	iv-				
	c. Maize				
	i-Surhad White				
	ii-Changes				
	iii-Zia				
	iv-Shaheen				
	d. Rice				
	i-IRRI-6				
	ii-Basmati				

(A) Do you know about this?
(B) Do you use this?
(C) If used, where purchased.

Q.19. What problems other than those already stated above, if any, in agricultural input supply do you face ?

Sr. No.	Particulars	Problems*
I.	Specific inputs	
	i-	
	ii-	
	iii-	
	iv-	
	v-	
II	Inputs in general	

*Such as quality, prices, timing of supply.

Q.20. Source of agricultural information

Sr. No.	Source	State whether any information ever taken from this source ? Yes	No	If 'yes' what was that information	Was it used? Yes	No
0.	1	2	3	4	5	6
1.	Agriculture department					
2.	Demonstration plots laid by insecticide/ pesticide firms.					
3.	R a d i o.					
4.	Television.					
5.	Newspaper.					
6.	Landlord.					
7.	Other farmers.					
8.	Input suppliers.					
9.	Other sources (specify).					

Q.21. (Ask if applicable) why are you unable to use all the modern inputs/agricultural methods that you know ?

Q.22. Are you a member of:

i- Water users Association? Yes /_____/ No /_____/ NA /_____/

If yes since when /_____/

ii- Cooperative society? Yes /_____/ No /_____/ NA /_____

If yes since when ? /_____/

iii- Union Council Yes /_____/ No /_____/

If yes since when ? /_____/

iv- Any other society/association/ committee etc. (specify).

a. _____
b. _____
c. _____

Q.23. Is there any problem concerning water management and farming which has not been covered by this schedule but which you want to be included in this study ?

No /_____/ Yes /_____/

If 'yes'

b. Please point out the problem.

Problem area	Particulars/details

INSTITUTE OF DEVELOPMENT STUDIES
N.W.F.P. AGRICULTURAL UNIVERSITY
PESHAWAR

BASE LINE SURVEY FOR COMMAND WATER PROJECT-WARSAK LIFT CANAL
Schedule-II for Farm Accounts (Kharif 1987)

Village_____ Interviewer:_____

R.D. No_____ Date of Interview_____

Q.1.(a) Name of farmer.

b) Sample farm

i- Sample number

ii- Sr.number in sample list

iii- Location:Head /_____/ Middle /_____/ Tail/_____/

Q.2. Tenure status

i- Owner cultivator /_____/

ii- Owner-cum-tenant /_____/

iii- Tenant /_____/

Q.3. Land Holding

Sr. No.	Particulars	Total Area (Jareeb) A	B	All places (2+3)	Cash rent/ Batai rate
0	1	2	3	4	5
1.	Area owned				
2.	Area rented in:				
	a. on cash rent				
	b. batai (share				
	produce)				
	c. Total				
3.	Area rented out:				
	a. on cash rent				
	b. batai (share				
	produce)				
	c. Total				
4.	Area operated				
	(1 + 2c - 3c)				

A) This water course B) Other places

Q.4. Land use (of operated holding in this water course)

Sr. No.	Particulars	Area (Jareeb)		
		Irrigated	Un-Irrigated	Total
0	1	2	3	4
1.	Total operated holding (note from Q.No.3 Col.2 row 4).			
2.	Land use.			
	2.1. Crops			
	2.2. Orchard			
	2.3. Not available for cultivation.			
	a-culturable waste			
	b-unfit for cultivation due to water logging/salinity.			
	c-other (specify)			

Q.5. Crops: Area and Production Kharif 1987 in this part of sample water course

Sr. No.	Crop	Area (Jareeb)	Yield per Jareeb (Mds)	Total Output: Main product (md)	Total Output: By-product (md)	Crop in Rabi 86*: Name	Crop in Rabi 86*: Area	What part in orchard? (Jareeb)
0	1	2	3	4	5	6	7	8
1.								
2.								
3.								
4.								
5.								
6.								

*What was sown in Rabi 1987 on the piece of land occupied by the Kharif 1986 crop shown in Col.1

Q.6. Area and production of Kharif crops on land operated in other places.

Sr. No.	Crops	Area (Jareeb)	Yield per Jareeb (Mds)	Total output (Mds): Main product	Total output (Mds): By product
0	1	2	3	4	5
1.					
2.					
3.					
4.					
5.					
6.					
7.					

Q.7. Farmgate prices: Kharif 1987

Sr. No.	Crop	Price of main product		Price of by-product	
		Unit	price	Unit	Price
0	1	2	3	4	5
1.					
2.					
3.					
4.					

Q.8.Disposal of farm output (other than sugarcane fruit and dairy products) in and outside the water course.

(Mds)

Sr. No.	Particulars	Crop											
		MP	BP	MP	BP	MP	BP	MP	BP	MP	BP	MP	BP
0.	1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Total output (note from Q.6)												
2.	Disposal:												
	a. Retained for home use.												
	b. Sold												
	c. Landlord's share												
	d. Artisan's dues												
	e. Given to labourers												
	f. Seed												
	g. Usher/charity												
	h. Other (specify)												
3.	Break up of sales												
	a. In village												
	i- To Beopari												
	ii- To Shopkeepers												
	iii- To others												
	b. In other villages												
	i- To Beopari												
	ii- To Shopkeepers												
	iii- To others												
	c. In Peshawar												
	i- Through Commission agent.												
	ii- To wholesaler												
	iii- Others												
	d. In other urban centres												
	e. Total sales(=												

MP= Main product BP= By-product

Q.8(a) Disposal of sugarcane.

(Mds)

Sr. No.	Particulars	Quantity (Mds)	Gross sale proceeds (Rs)
0	1	2	3
1.	Total production		
2.	Disposal		
	a. Sold to sugarmills		
	b. Sold to others		
	c. Converted into Gur		
	d. Used as seed		
	e. Other uses (specify)		

Q.8(b) Disposal of Gur.

Sr. No.	Particulars	Unit	
0	1	2	3
1.	Gur produced	Mds	
2.	Disposal		
	a. Sold	Mds	
	b. Self-consumed	Mds	
	c. Other (specify)	Mds	
3.	Gross sale proceeds from Gur.	Rs.	

Q.9. Chemical fertilizers used

Sr. No.	Name of fertilizer	Unit	Price per unit	Crop-wise units used and total cost									
				a	b	a	b	a	b	a	b	a	b
0	1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Urea												
2.	DAP												
3.	NPK												
4.	NP												
5.	Ammonium sulphate												
6.	Ammonium Nitrate												
7.	Potash												
Area to which fertilizers applied													

a) Total units used b) Total cost

Q.10. Farm Yard Manure:

Sr. No.	Crop	Unit	Total units used			Price per unit (Rs)	Cost of FYM			Carriage cost per unit	Carriage cost Total			Grand total of cost (9+13)
			a	b	c		a	b	c		a	b	c	
0.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.														
2.														
3.														
4.														
5.														
6.														
7.	Total													

(a) Home supplied (b) Purchased; (c) Total

Q.11. Insecticides/Pesticides/Weedicides

Sr. No.	Crop to which applied	Cost of: Insecticides & pesticides	Weedicides	Total	Name of: Insecticides	Weedicides
0.	1	2	3	4	5	6
1.						
2.						
3.						
4.						
5.						
6.						
7.						

Q.12.Seed

Sr. No.	Particulars	Unit	Crop						
0.	1	2	3	4	5	6	7	8	9
1.	Area sown	Jareeb							
2.	Seed rate per Jareeb	K.G							
3.	Total seed used	K.G							
4.	How much seed was purchased.	K.G							
5.	Market rate of seed per K.G	Rs							
6.	Total cost of seed								
7.	Transportation cost paid in cash.....	Rs							
8.	Family labour involved in transportation								
	a- Mandays	Days							
	b- Animal days	"							
	c- Vehicle	Hours							
9.	Imputed cost of family labour.								
	a- Mandays								
	b- Animal days								
	c- Vehicle								
	d- Total								
10	Grand total of cost: Seed +Transportation (6 + 7 + 9d)								
11.	Breakdown of total quantity of seed by variety:								
	a- Improved								
	b- Other								
	c- Total (Note from Row-3)								

Q.13.CANAL IRRIGATION

Sr. No.	Crop	Area Irrigated (Jareeb)	No. of irrigation	Water rate per Jareeb (Rs)	Total water rates (Rs)
0.	1	2	3	4	5
1.					
2.					
3.					
4.					
5.					
6.					
7.					

Q.13.b. Total area irrigated per turn./_____/ Jareeb.

Q.14.Dues of Artisans

a. Cash payment Rs.

i- Blacksmith

ii- Carpenter Total

b. Payment in kind.

Sr. No.	Commodity	Unit	Price per unit	Quantity & value given to: Blacksmith		Carpenter		Total	
				Qty	Rs	Qty	Rs	Qty	Rs
0.	1	2	3	4	5	6	7	8	9

Q.15. Labour Cost Account Crop .....:

Area sown.....: (Jareeb)

Sr. No.	Particulars	Unit	Operation											
			Plo	Lev	Plk	Sow	Wat	FYM	Che	Hoe	Har	Car	Thr	Win
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
I.	Number of operations													
II.	Manual labour													
	1.Days per operation per jareeb	Days												
	2.Total manday	Days												
	a.Hired	Days												
	b.Family	Days												
	3.Wage per manday	Rs												
	4. Wage bill	Rs												
	a.Cash													
	b.Imputed	Rs												
	c.Total	Rs												

(Contd...)

3. Ploughing
4. Levelling
5. Planking
6. Sowing
7. Watering
8. Farm Yard Manure application
9. Chemical fertilizer application
10. Hoeing Weeding
11. Harvesting
12. Carriage to threshing yard
13. Threshing
14. Winnowing

Q.15. Labour Cost Account Crop .....:

Area sown.....: (Jareeb)

Sr. No.	Particulars	Unit	Operation												
			Plo	Lev	Plk	Sow	Wat	FYM	Che	Hoe	Har	Car	Thr	Win
0.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
III	Animal labour													
	1.Days per operation per jareeb	Days												
	2.Total Animal days	"												
	a. Hired													
	b. Family	Days												
	3.Hire charge per pair per day	Rs												
	4.Total cost													
	a.Cash	Rs												
	b.Imputed	Rs												
	c.Total	Rs												
IV	Machine Labour													
	a.Hours used	H												
	b.Source													
	i.Own	Hour												
	ii.Hired	Hour												
	c.Rent per hour	Rs												
	d.Hire cost													
	i.Cash	Rs												
	ii.Imputed	Rs												
	iii.Total													

(Concluded)

3. Ploughing
4. Levelling
5. Planking
6. Sowing
7. Watering
8. Farm Yard Manure application
9. Chemical fertilizer application
10. Hoeing Weeding
11. Harvesting
12. Carriage to threshing yard
13. Threshing
14. Winnowing

Q.16. FRUIT PRODUCTION

Sr. No.	Particulars	Unit	Name of fruit									
			a	b	a	b	a	b	a	b	a	b
0.	1	2	3	4	5	6	7	8	9	10	11	12
1.	Total trees	No										
2.	Fruit bearing trees	No										
3.	Fruit production (last season)	Mds										
4.	Fruit sold	Mds or %										
5.	Total receipt from sale	Rs										

a= In the sample water course
b= Other places

Q.17. Livestock

Sr. No.	Kind of livestock	Minor (no.)	Adult (no.)	Total (no.)	In-milk (no.)
0	1	2	3	4	5
1.	Buffalo				
2.	Cow				
3.	Goat				
4.	Sheep				
5.	Bull				
6.	He Buffalo (Sanda)				
7.	Horse/Mule				
8.	Donkey				
9.	Camel				
10.	Poultry				

Q.18. Milk production and utilization

Sr. No.	Particulars	Unit	Milch animals				
			Buffalo	Cow	Goat	Sheep	Total
0.	1	2	3	4	5	6	7
1.	In-milk animals	Number					
2.	Average daily yield per head	Seers					
3.	Average monthly sale of milk	Seers					
4.	Average price of milk per seer	Rs					
5.	Average monthly sale proceed	Mds					

Q.19. Income from sale of dairy products (other than milk), poultry products and animals during last six months.

S.No.	I t e m	Gross income
0.	1	2
1.	Butter	
2.	Ghee	
3.	Curd	
4.	Eggs	
5.	Poultry	
6.	Animals	
7.	Meat	

Q.20. Other livestock products (last six months)

Sr. No.	Products	Unit	Production	Quantity sold	Gross sale proceed (Rs)
0.	1	2	3	4	5
1.	Hides	No.			
2.	Skin	No.			
3.	Wool	Kg			
4.	Hair	Kg			
5.	Manure				

Q.21. Other income from livestock (1984-85)

i- Income in cash from hiring out Rs. /_____/

ii- Payment received in kind:

S.No.	Commodity	Quantity received	Equivalent cash value
I.			
II.			
III.			
	Total		

Q.22. Households income from sources other than agriculture and wages/salary during the last six months.

S.No.	Item	Income
1.	Rent of land	
2.	Rent of other property.	
3.	Trade	
4.	Industry	
5.	Foreign Remittances	
6.	Home Remittances	
7.	Other (specify)	

Q.23. Permanent labour on the farm

23.a. Do you have permanent labourers ?

i- No /_____/

ii- Yes /_____/ go to 23.b.

Q.23.b. Particulars of labourers.

Sr. No.	Labourers Name	Rate of cash wages per month (Rs)	Total wages paid in the season (Rs)	What other payments are made/facilities provided	Average monthly value of 4. (Rs)
0.	1	2	3	4	5
1.					
2.					
3.					
4.					

Q.24. Capital Assets

Sr. No.	Item	Number	When purchased/ constructed	Cost Rs.
1.	Plough			
	a) Desi			
	b) Modern			
2.	MALA			
3.	Ghakhawar			
4.	Bailcha			
5.	Chari			
6.	Panghakhe			
7.	Ramba			
8.	Loor			
9.	Tractor			
10.	Trolly			
11.	Thrasher			
12.	Tube-Well			
13.	Bullock Cart			
14.	Tobacco barn			
15.	Cattle shed*			

*= i- Size
ii- Type of construction

INSTITUTE OF DEVELOPMENT STUDIES
N.W.F.P. AGRICULTURAL UNIVERSITY
PESHAWAR

BASE LINE SURVEY FOR COMMAND WATER PROJECT-WARSAK LIFT CANAL
Schedule-II for Farm Accounts (Rabi 1987-88)

Village_____ Interviewer:_____

R.D. No_____ Date of Interview_____

Q.1.(a) Name of farmer.

b) Sample farm

i- Sample number

ii- Sr.number in sample list

iii- Location:head /_____/ Middle /_____/ Tail/_____/

Q.2. Tenure status

i- Owner cultivator /_____/

ii- Owner-cum-tenant /_____/

iii- Tenant /_____/

Q.3. Land Holding

Sr. No.	Particulars	Total Area (Jareeb) A	B	All places (2+3)	Cash rent/ Batai rat
0	1	2	3	4	5
1.	Area owned				
2.	Area rented in:				
	a. on cash rent				
	b. batai (share produce)				
	c. Total				
3.	Area rented out:				
	a. on cash rent				
	b. batai (share produce)				
	c. Total				
4.	Area operated (1 + 2c - 3c)				

A) This water course B) Other places

Q.4. Land use (of operated holding in this water course)

Sr. No.	Particulars	Area (Jareeb)		
		Irrigated	Un-Irrigated	Total
0	1	2	3	4
1.	Total operated holding (note from Q.No.3 Col.2 row 4).			
2.	Land use.			
	2.1. Crops			
	2.2. Orchard			
	2.3. Not available for cultivation.			
	a-culturable waste			
	b-unfit for cultivation due to water logging/salinity.			
	c-other (specify)			

Q.5. Crops: Area and Production Rabi 1987-88 in this part of sample water course

Sr. No.	Crop	Area (Jareeb)	Yield per Jareeb (mds)	Total Output: Main product (md)	Total Output: By-product (md)	Crop in Rabi 86*: Name	Crop in Rabi 86*: Area	What part in orchard? (Jareeb)
0	1	2	3	4	5	6	7	8
1.								
2.								
3.								
4.								
5.								
6.								

*What was sown in Kharif 87 on the piece of land occupied by the Rabi 1987-88 crop shown in Col.1

Q.6. Area and production of Rabi crops on land operated in other places.

Sr. No.	Crops	Area (Jareeb)	Yield per Jareeb (Mds)	Total output (Mds): Main product	Total output (Mds): By product
0	1	2	3	4	5
1.					
2.					
3.					
4.					
5.					
6.					
7.					

Q.7. Farmgate prices: Rabi 1987-88

Sr. No.	Crop	Price of main product		Price of by-product	
		Unit	price	Unit	Price
0	1	2	3	4	5
1.					
2.					
3.					
4.					

Q.8. Disposal of farm output (other than fruit and dairy products) in and outside the water course.

(Mds)

Sr. No.	Particulars	Crop											
		MP	BP	MP	BP	MP	BP	MP	BP	MP	BP	MP	BP
0.	1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Total output (note from Q.6)												
2.	Disposal:												
	a. Retained for home use.												
	b. Sold												
	c. Landlord's share												
	d. Artisan's dues												
	e. Given to labourers												
	f. Seed												
	g. Usher/charity												
	h. Other (specify)												
3.	Break up of sales												
	a. In village												
	i- To Beopari												
	ii- To Shopkeepers												
	iii- To others												
	b. In other villages												
	i- To Beopari												
	ii- To Shopkeepers												
	iii- To others												
	c. In Peshawar												
	i- Through Commission agent.												
	ii- To wholesaler												
	iii- Others												
	d. In other urban centres												
	e. Total sales(=												

MP= Main product BP= By-product

Q.8(a) Disposal of sugarcane.

(Mds)

Sr. No.	Particulars	Quantity (Mds)	Gross sale proceeds (Rs)
0	1	2	3
1.	Total production		
2.	Disposal		
	a. Sold to sugarmills		
	b. Sold to others		
	c. Converted into Gur		
	d. Used as seed		
	e. Other uses (specify)		

Q.8(b) Disposal of Gur.

Sr. No.	Particulars	Unit	
0	1	2	3
1.	Gur produced	Mds	
2.	Disposal		
	a. Sold	Mds	
	b. Self-consumed	Mds	
	c. Other (specify)	Mds	
3.	Gross sale proceeds from Gur.	Rs.	

Q.9. Chemical fertilizers used

Sr. No.	Name of fertilizer	Unit	Price per unit	Crop-wise units used and total cost									
				a	b	a	b	a	b	a	b	a	b
0	1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Urea												
2.	DAP												
3.	NPK												
4.	NP												
5.	Ammonium sulphate												
6.	Ammonium Nitrate												
7.	Potash												
Area to which fertilizers applied													

a) Total units used b) Total cost

Q.10.Farm Yard Manure:

Sr. No.	Crop	Unit	Total units used			Price per unit (Rs)	Cost of FYM			Carriage cost per unit	Carriage cost Total			Grand total of cost (9+13)
			a	b	c		a	b	c		a	b	c	
0.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.														
2.														
3.														
4.														
5.														
6.														
7.	Total													

(a) Home supplied (b) Purchased; (c) Total

Q.11.Insecticides/Pesticides/Weedicides

Sr. No.	Crop to which applied	Cost of: Insecticides & pesticides	Weedicides	Total	Name of: Insecticides	Weedicides
0.	1	2	3	4	5	6
1.						
2.						
3.						
4.						
5.						
6.						
7.						

Q.12.Seed

Sr. No.	Particulars	Unit	Crop						
0.	1	2	3	4	5	6	7	8	9
1.	Area sown	Jareeb							
2.	Seed rate per Jareeb	K.G							
3.	Total seed used	K.G							
4.	How much seed was purchased.	K.G							
5.	Market rate of seed per K.G	Rs							
6.	Total cost of seed								
7.	Transportation cost paid in cash.....	Rs							
8.	Family labour involved in transportation								
	a- Mandays	Days							
	b- Animal days	"							
	c- Vehicle	Hours							
9.	Imputed cost of family labour.								
	a- Mandays								
	b- Animal days								
	c- Vehicle								
	d- Total								
10	Grand total of cost: Seed +Transportation (6 + 7 + 9d)								
11.	Breakdown of total quantity of seed by variety:								
	a- Improved								
	b- Other								
	c- Total (Note from Row-3)								

Q.13.CANAL IRRIGATION

Sr. No.	Crop	Area Irrigated (Jareeb)	No. of irrigation	Water rate per Jareeb (Rs)	Total water rates (Rs)
0.	1	2	3	4	5
1.					
2.					
3.					
4.					
5.					
6.					
7.					

Q.13.b. Total area irrigated per turn./_____/ Jareeb.

Q.14.Dues of Artisans

a. Cash payment Rs.

i- Blacksmith

ii- Carpenter Total

b. Payment in kind.

Sr. No.	Commodity	Unit	Price per unit	Quantity & value given to: Blacksmith Qty	Blacksmith Rs	Carpenter Qty	Carpenter Rs	Total Qty	Total Rs
0.	1	2	3	4	5	6	7	8	9

Q.15. Labour Cost Account Crop .....:

Area sown.....: (Jareeb)

Sr. No.	Particulars	Unit	Operation													
			Plo	Lev	Plk	Sow	Wat	FYM	Che	Hoe	Har	Car	Thr	Win
0.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
I.	Number of operations													
II.	Manual labour													
	1. Days per operation per jareeb	Days												
	2. Total manday	Days												
	a. Hired	Days												
	b. Family	Days												
	3. Wage per manday	Rs												
	4. Wage bill a. Cash	Rs												
	b. Imputed	Rs												
	c. Total	Rs												

(Contd...)

3. Ploughing
4. Levelling
5. Planking
6. Sowing
7. Watering
8. Farm Yard Manure application
9. Chemical fertilizer application
10. Hoeing Weeding
11. Harvesting
12. Carriage to threshing yard
13. Threshing
14. Winnowing

Q.15. Labour Cost Account Crop .....:

Area sown.....: (Jareeb)

Sr. No.	Particulars	Unit	Operation												
			Plo	Lev	Plk	Sow	Wat	FYM	Che	Hoe	Har	Car	Thr	Win
0.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
III	Animal labour													
	1.Days per operation per jareeb	Days												
	2.Total Animal days	"												
	a. Hired													
	b. Family	Days												
	3.Hire charge per pair per day	Rs												
	4.Total cost													
	a.Cash	Rs												
	b.Imputed	Rs												
	c.Total	Rs												
IV	Machine Labour													
	a.Hours used	Hrs												
	b.Source													
	i.Own	Hour												
	ii.Hired	Hour												
	c.Rent per hour	Rs												
	d.Hire cost													
	i.Cash	Rs												
	ii.Imputed	Rs												
	iii.Total													

(Concluded)

3. Ploughing
4. Levelling
5. Planking
6. Sowing
7. Watering
8. Farm Yard Manure application
9. Chemical fertilizer application
10. Hoeing Weeding
11. Harvesting
12. Carriage to threshing yard
13. Threshing
14. Winnowing

Q.16. FRUIT PRODUCTION

Sr. No.	Particulars	Unit	Name of fruit									
			a	b	a	b	a	b	a	b	a	b
0.	1	2	3	4	5	6	7	8	9	10	11	12
1.	Total trees	No										
2.	Fruit bearing trees	No										
3.	Fruit production (last season)	Mds										
4.	Fruit sold	Mds or %										
5.	Total receipt from sale	Rs										

a= In the sample water course
b= Other places

Q.17. Livestock

Sr. No.	Kind of livestock	Minor (no.)	Adult (no.)	Total (no.)	In-milk (no.)
0	1	2	3	4	5
1.	Buffalo				
2.	Cow				
3.	Goat				
4.	Sheep				
5.	Bull				
6.	He Buffalo (Sanda)				
7.	Horse/Mule				
8.	Donkey				
9.	Camel				
10.	Poultry				

Q.18. Milk production and utilization

Sr. No.	Particulars	Unit	Milch animals				
			Buffalo	Cow	Goat	Sheep	Total
0.	1	2	3	4	5	6	7
1.	In-milk animals	Number					
2.	Average daily yield per head	Seers					
3.	Average monthly sale of milk	Seers					
4.	Average price of milk per seer	Rs					
5.	Average monthly sale proceed	Mds					

Q.19. Income from sale of dairy products (other than milk), poultry products and animals during last six months.

S.No.	Item	Gross income
0.	1	2
1.	Butter	
2.	Ghee	
3.	Curd	
4.	Eggs	
5.	Poultry	
6.	Animals	
7.	Meat	

Q.20. Other livestock products (last six months)

Sr. No.	Products	Unit	Production	Quantity sold	Gross sale proceed (Rs)
0.	1	2	3	4	5
1.	Hides	No.			
2.	Skin	No.			
3.	Wool	Kg			
4.	Hair	Kg			
5.	Manure				

Q.21. Other income from livestock (1984-85)

i- Income in cash from hiring out Rs. /_____/

ii- Payment received in kind:

S.No.	Commodity	Quantity received	Equivalent cash value
I.			
II.			
III.			
	T o t a l		

Q.22. Households income from sources other than agriculture and wages/salary during the last six months.

S.No.	I t e m	I n c o m e
1.	Rent of land	
2.	Rent of other property.	
3.	Trade	
4.	Industry	
5.	Foreign Remittances	
6.	Home Remittances	
7.	Other (specify)	

Q.23. Permanent labour on the farm

23.a. Do you have permanent labourers ?

i- No /_____/

ii- Yes /_____/ go to 23.b.

Q.23.b. Particulars of labourers.

Sr. No.	Labourers Name	Rate of cash wages per month (Rs)	Total wages paid in the season (Rs)	What other payments are made/facilities provided	Average monthly value of 4. (Rs)
0.	1	2	3	4	5
1.					
2.					
3.					
4.					

Q.24. Capital Assets

Sr. No.	I t e m	Number	When purchased/ constructed	Cos Rs.
1.	Plough			
	a) Desi			
	b) Modern			
2.	MALA			
3.	Ghakhawar			
4.	Bailcha			
5.	Chari			
6.	Panghakhe			
7.	Ramba			
8.	Loor			
9.	Tractor			
10.	Trolly			
11.	Thrasher			
12.	Tube-Well			
13.	Bullock Cart			
14.	Tobacco barn			
15.	Cattle shed*			

*= i- Size
ii- Type of construction

1. *)M.Khan(*

2. Naeem Ullah Jan.

LIST OF PARTICIPANTS IN THE PROJECT

1. Prof.Dr. Nurul Islam Mian, Project Director
2. Mr. Muhammad Ahmad Khan, Deputy Project Director
3. Dr. Abdul Rashid, Soil Scientist
4. Mr. Abdul Ghaffar Khan, Agri: Engineer
5. Mr. Muhammad Iqbal, Junior Research Specialist
6. Mr. Abdul Hakim Khan, Agri: Engineer
7. Mr. Munir Khan, Investigator
8. Mr. Murad Ali, Investigator
9. Mr. Muhammad Zubair, Investigator
10. Mr. Abdul Qayum Khan, Investigator
11. Mr. Muhammad Tariq, Investigator
12. Mr. S.Sajad Ali Shah, Investigator
13. Mr. Zarshad Ali, Accountant
14. Mr. Maubali Khan, Senior Clerk/Computer Operator
15. Mr. Fazlullah, Junior Clerk/Computer Operator
16. Mr. Wali Muhammad, Senior Clerk/Computer Operator
17. Mr. Naeemullah Jan, Junior Clerk/Incharge Printing
18. Mr. Adbul Qayum, Driver
19. Mr. Gohar Ali, Driver
20. Mr. Ikramuddin, Driver
21. Mr. Faraz Khan, Peon
22. Mr. Muhammad Jameel, Peon
23. Mr. Kifayatullah, Peon

)M.khan