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GOVERNMENT OF PAKISTAN
MINISTRY OF FOOD, AGRICULTURE & COOPERATIVES
FOOD SECURITY MANAGEMENT PROJECT
(ECONOMIC & POLICY ANALYSIS)

STUDY ON
FARM PRODUCTIVITY BY SIZE & TENURE AND ESTIMATION OF DOMESTIC RESOURCE COST FOR MAJOR CROPS (NWFP PROVINCE)

MAY, 1991

CONDUCTED BY:
CENTER FOR APPLIED ECONOMIC STUDIES,
UNIVERSITY OF PESHAWAR,
PESHAWAR.

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PART I

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Chapter I

INTRODUCTION

This study was undertaken at the national level in all the four provinces of the country. The importance of this study lies in the fact that productivity plays a crucial role and its determination is a necessary and essential input in the formulation of the development strategy.

Empirical evidence exists to verify the statement that small farms tend to have higher cropping intensity and be more labour intensive rather than being capital intensive as compared to larger farms. They thus serve the purpose of being able to generate employment and promote the equity or income distribution objective of the government.

With this as the background, the first phase of the study was concerned with the estimation of Domestic Resource Costs (DRC's) of the major crops by farm size and tenurial status on the basis of existing studies and data. Phase one of this study also completed and provided an Interim Report, the other two components of which were reports on:

- Characteristic features of the Sample Farms and Respondents (based on Schedule 1), and
- Yield Levels and Per Arce Physical Input/Output Relationships for wheat in N.W.F.P.

Phase-II of the study was to collect new data and re-estimate the DRC's and also examine the effects of the prevailing tenurial systems and farm sizes on the productivity of the major crops.

OBJECTIVES

The main objectives of the study were to examine the:

- Agrarian structure and productivity under different tenurial systems for progressive and traditional farmers;
- Facrtors responsible for differences in productivity;
- Returns to scale;
- Agrarian structure and labour utilization;
- Agrarian structure and access to factor markets;
- Agrarian structure and cropping pattern/cropping intensities;
- Estimate domestic resource costs for major crops by farm size and tenure.

Finally, conclusions were to be drawn and recommendations to be developed to furnish bases for policy.

However, in the last analysis, the scope of work was redefined in a meeting held on February 17, 1991 in the EPA Project Office where it was decided to confine the study to the following:

- o Descriptive analysis of major crops.
- o Farm Income analysis aggregate.
- o Farm size productivity of major crops.

Such a redefining had become necessary as the scope of the study had in-between become too enlarged and the amount of data collected for the variety of crops including fruits, vegetables etc. could not be handled within the time frame of the project, especially with the inclusion of the minor crops etc. The work involved had become too cumbersome. The present exercise is thus confined to these three planks of study.

RESEARCH METHODOLOGY

A common research methodology was agreed upon and appended to the contract agreement. This methodology was as detailed below.

Analysis will be carried out on primary data and in consonance with the revised schedule the scope of work will comprise descriptive statistics, farm income and productivity analysis. This will consist of cropping pattern, land use pattern, yield rates, application of fertilizer, water, weeding and pesticides, labour use, cost and income analysis aggregated and productivity analysis by farm size and tenurial status.

COST ESTIMATION PROCEDURES

Estimation of the cost of production of a given farm enterprise is a complex issue. It involves estimation and allocation of the cost of fixed resources available on the farm. Pakistan is diversified agriculturally, encompassing a host of all-the-year-round farm enterprises. Together they utilize the services of many cost items in varying proportions and intensities. Unless all the necessary details are skillfully mapped, the cost of fixed items, which represent the major portion of the total farm expenditure, cannot be appropriately allocated to various farm enterprises.

The procedure to be adopted in estimating and subsequently apportioning cost of various items is detailed below:

A. Labour Input

Farm labour is of four types, each valued and utilized in a unique fashion.

1. **Family labour**: It has no price tag, nor can any value be offered to a family worker. It has been priced differently in different countries. In this study opportunity cost of family labour will be taken to be equal to the earnings of a permanent hired labourer.

However, where labour cost is a significant portion of the total cost, MVPs of the family labour will be the basis of imputing the cost of the family labour. This is done on the assumption that a family labour (which includes male, female and children who will be converted into male adult units and priced at market wage) unit can perfectly substitute for a permanent hired labour unit in an effective and satisfactory manner. Therefore, the family adult unit can earn at least as much as a permanent hired labour is earning in the village. Obviously this would neither pay for the managerial services of the family worker nor for his devotion and work efficiency. The cost of family labour will be, therefore, under-estimated to some extent.

2.**Permanent hired labour**: Its cost will be estimated by taking into account the actual cash payments plus the value of the supplementary payments made in kind.

Total cost of the family labour and permanent hired labour will be apportioned to each activity in proportion to the time spent on it.

3.**Casual hired labour**: Payment made to the casual hired labour will be allocated to the crop for which it was specifically used.

4.**Exchange labour**: To be valued at hired labour cost.

B.**Capital Input**

1.**Draught Animals**: The charge for draught animals input will include interest and depreciation on the capital value of draught animals, sheds and mangers, etc. Maintenance cost will include the cost of feed (at market prices), labour and other such variable items. Cost of draught animals will be charged to each crop in proportion to the time spent on each crop.

2.**Seed**: Prices prevailing at the sowing time will be used for estimating the cost of home produced seed. However, actual amounts to be spent on purchased seeds will be used for each crop.

3.**Manure**: Purchased farm yard manure will be priced at the prevailing village rate. Since the effect of farm yard manure lasts over time, therefore, the entire cost will be allocated to crops to which it was applied.

4.**Fertilizer**: The value of the fertilizer together with the cost of transportation and application will be charged directly to the concerned crop.

5.**Hand tools and bullock implements**: Annual cost of these items will comprise interest and depreciation. Interest will be charged at the rate of 12 per cent of their present value. Rate of depreciation will vary for different hand tools and implements. Both these charges on crop specific implements, will be debited only to the concerned crops, while cost of the general purpose tools and implements will be debited to different crops in proportion to the draught animals time spent on various crops.

6.**Payment to artisans**: Payment to be made to artisans for the repair of hand tools and implements will also be taken into account. Total payment to be made to artisans will be debited to various crops in proportion to the interest and depreciation cost of tools and implements allocated to various enterprises.

7.**Land revenue, water rates and other taxes**: The actual amount to be paid to the government for each crop will be debited to various crops.

8.**Cost of farm machinery and implements**: The value of hired machinery will be directly debited to the crop for which it will be used. For the owned machinery, operational expenditure per hour would include interest and depreciation on investment and housing, cost of fuel, lubrication, repair and maintenance, labour, etc.

Annual interest cost will be estimated by using the following formula:

$$I = \frac{(C + S)^{*}i}{2}$$

Where:

I = Annual interest cost
C = Market price of the machine
S = Salvage or trade in value of machine
i = Rate of interest.

Interest cost per hour will be estimated by dividing the annual interest cost by annual working hours of the machine.

Depreciation cost per hour will be calculated as follows:

$$D = \frac{C - S}{L}$$

Where:

D = Depreciation cost/hour
C & S = As already defined
L = Serviceable life in hours

C. Land Output

The rent prevailing in the area will be the opportunity cost of the land. The per acre allocation to different crops will be done on the basis of time the land has been under cultivation.

D. Composition and Sources of Gross Income

The basis of calculating gross income would be the following:

i) Crops alone
ii) i + livestock
iii) ii + income from tubewell/tractor implements (reapers, combines, threshers, cane crushers, sprayers etc.)
iv) iii + off farm income.

E. Farm Gate Prices

Farm gate prices at the time of sale will be used.

F. Basis of Measurement of Income Productivity

Possible alternatives could be income:

- Per farm acre
- Per cultivated acre
- Per cropped acre
- Per acre inch of water
- Per rupee of capital employed
- Per worker (aggregate input of labour)/man day
- Factor Productivity.

G. Appopriate Yield

Actual yield during the year will be used to estimate the income.

H. Nature of Net Income for Making Comparisons

- Gross farm income - Total cost
- Gross farm income - Variable cost
- Gross farm income - Rent
- Gross farm income - Family labour costs.

I. Factory Cost/Processing Costs

The level of processing of the farm products will be considered at the following stages:

- Raw products
- Rice husking
- Ginning of cotton
- Oil cakes, oil
- Refined sugar, khandsari, gur, cane etc.
- Other forms (wheat flour, etc.)
- Marketing and transportation costs.

J. Frequency of Data Collection

The farm data will be collected 5 times a year. This will be based on field visits. With these frequent visits the chance of inaccuracies will be lessened.

K. Standard Analysis Technique

Standard analysis techniques to be used.

SELECTION OF THE CROPPING REGION

One cropping region for each province was to be selected. The Northern irrigated region of the Peshawar Valley has been slected where the main crops grown are wheat, maize and sugarcane. Furthermore, each cropping region was to have two districts. In the case of N.W.F.Province, the two districts selected are Peshawar and Mardan.

SAMPLING AND SAMPLE SIZE

Each province was to have 250 respondents (except Baluchistan, which was to have 150 respondents) plus 10 per cent for the margin of error. A sampling frame was adopted where the number of respondents selected from each size class of holding was commensurate with the percentage distribution of farmers in each size class as given in the last Agricultural Census. The sample so chosen was further to be proportional to the representation of each size in the various tenurial categories - owner operators, tenants, owner-cum-tenants.

At the time of coordinating the sample and the slection of uniform size and tenurial categories for the three institutions, two departures were considered necessary for the N.W.F. Province part of the study: one, the inclusion of the 'under 5 acres' category as a category within the "under 12.5 acres" group; and two, the inclusion of the owner-cum-tenant category in the tenurial classes. The first departure from the common sample categories was aimed at allowing a better basis for analyzing the size productivity

relationship in the province in view of the fact that the farm distribution pattern is heavily skewed in favour of small farms, and within that group, in favour of the size of category of under 5 acres. For example, out of the 87 per cent of the farms falling in the category of 'under 12.5 acres' in the N.W.F. Province (95 per cent in District Peshawar and 93 per cent in District Mardan), 61 per cent are 'under 5 acres' (this being 69 per cent in District Peshawar and 67 per cent in Mardan).

The second departure had become necessary in view of the fact that unlike other provinces, the owner-cum-tenant category is an important tenurial category in the N.W.F. Province. In the two selected districts, for example, the percentage distribution of the three tenurial categories is:

District	Owners	Tenants	Owner-Cum-Tenants
Peshawar	58.7	29.1	12.2
Mardan	53.4	31.7	14.9

When we further progress from the total pricture to the size-wise distribution of farms, we find that in the farm sizes of 12.5 acres and above, the 'Owner-Cum-Tenant' category is as important as the 'tenants' in the Peshawar district, and more heavily represented than the 'tenants' in district Mardan. These points were discussed and agreed upon in meetings and through correspondence both with the Coordinator and the EAN Office. Another point that had to be accommodated was regarding the sample size of "large farm" categories. Since the representation of this category is barely 1 per cent amongst farm sizes, a few farmers had to be added to the original number and then picked up through purposive sampling.

Once the above bases were agreed upon, the proportional sample size was spread on a random basis over various villages in the two districts with two considerations: The villages chosen must be producing the three major crops selected in the case of N.W.F. Province, viz. wheat, maize and sugarcane, and contain the various size and tenurial categories as given above. Thus proceeding, a total sample of 294 respondents was distributed over the two districts as shown in the following tables.

DISTRICT PESHAWAR

Name of Village	Category of Farms			
	Owners	Owner-cum-Tenants	Tenants	Total
1. Akbar Pura	5	10	20	35
2. Garhi Momin	5	3	1	9
3. Zakhi Kabristan	15	3	1	19
4. Titara	9	1	4	14
5. Kurvi	19	4	2	25
6. Jabba Daudzai	6	3	1	10
7. Khush Muqam	27	3	12	42
Total	86	27	41	154

DISTRICT MARDAN

Name of Village	Category of Farms			
	Owners	Owner-cum-Tenants	Tenants	Total
1. Garo Shah	11	4	10	25
2. Mihtar Ghondai	35	-	9	44
3. Sro Koto	14	-	-	14
4. Khadi Kalay	4	6	8	18
5. Landai Wala	2	12	3	17
6. Shaikhano Kalay	9	-	13	22
Total	75	22	43	140

DESCRIPTION OF ANALYSIS AND FORMAT OF RESULTS

The farmlevel data have been analyzed employing discriptive techniques to reveal yield levels, input use, cultural practice, labour use, etc. This includes aggregate average productivities per farm area, per cultivated area, per rupee of capital employed, etc.

The different efficiency measures like net farm income, gross margin, family labour income etc. have been undertaken. These are estimated by using farm income analysis approach for different farm sizes and tenures. Itemized per acre costs and returns are also estimated to determine the relative profitability between various farm size groups and tenures. Productivity by farm sizes and tenures is also undertaken.

Chapter II

A STUDY IN PROFILES

A. THE ECONOMY OF THE NORTHERN IRRIGATED PLAINS OF PESHAWAR VALLEY

The N.W.F.P. represents five(5) out of the ten(10) Agro-Ecological regions identified by the Pakistan Agricultural Research Council for Pakistan. Peshawar and Mardan both greographically belong to the zone referred to as "The Northern Irrigated Plains of Peshawar Valley". It is a vividly green basin which is drained by the Kabul river and its numerous tributaries, the most important of these being the Swat river. The Bara also flows from the South-West and enters the Kabul near its confluence with the Swat river and the stream so merged then flows into the Indus. There is a good system of irrigation canals, water courses and rivers criscrossing this basin which is responsible for the well stimulated agriculture of the area with a variety of crops grown in the region.

The mean maximum temperature in the Peshawar region is 30.4^{o}C while for Mardan it is 30.9^{o}C. The mean minimum is 16.6 ^{o}C for Peshawar and 15.7^{o}C for Mardan. The average annual rainfall is 30.6mm for Peshawar district and 54.34mm for Mardan district. Summers are hot and winters are cold. The highest rainfall occurs in the month of March followed by the Monsoons in July-August. The winter rains fall in December and January and are also relatively heavy.

The agriculture sector plays a very important role in the economy of the province. Besides the provision of crops, the provincial economy is also dependent on this sector for employment of labour, providing incomes to households as well as giving rise to economic activities through the collection, storage and distribution of agricultural commodities. The agro-industries and the service sector are also dependent on the agriculture sector of the province.

- There are two main cropping seasons, Kharif and Rabi. The Kharif crops are sown during April to September and harvested between October and March, while the Rabi crops are sown during October to January and harvested between April and June. The main Kharif crop of the sample area is Maize while the main Rabi crops are Wheat, Gram and Tobacco. Sugarcane is grown over a 2 year cycle for 2 cuttings. The first crop is normally inter-planted with Wheat. Vegetables are grown during both the seasons.

- Fruits are also important agricultural products of this area. These include plums, peaches, pears, kinows, oranges, apples, parsimons, etc. Barseem is grown and used as fodder.

- The soil in the district of Mardan is clayey and alkaline and shows good response to nitrogen and phosphorous.

- Those areas of the 2 districts where drainage is poor, salinity and water logging occur. However, the overall soil of the 2 districts is fertile.

Mardan district is irrigated by two main canals, namely, the Upper Swat and the Lower Swat while Peshawar is irrigated by 3 main canals, namely, the Kabul, Jooey Sheikh, and Jooey Zardad. Tubewells and Persian wheels are also used for irrigation purpose.

Water is allocated to the farmers according to a given duration per week and the farmers then allocate the water between the crops according to the needs of the crops. The amount of water allocated does not normally change over the season and hence shortages may emerge when the demand for water is heavy.

The quantity of canal water available depends on the climate, i.e. the rainfall and the snows. When the weather is unfavourable shortages in the supply of water may and do occur.

Mardan is known to have a better supply of irrigation water than the Peshawar district and when there is a shortage of water, the Peshawar district feels it more acutely than the Mardan district. The only time during the survey when a shortage of water was felt in Mardan was when one of the main canals was damaged and took 2 months to repair.

Barter system and payment-in-kind is a common feature of the rural areas of the 2 districts. However, cash payment is made for fertilizers, pesticides, chemicals, hired tractors, seed and casual labour.

Cash crops play an important role in the profitability of the farm operations and the existence of sugar mills and tobacco processing factories and depots are an advantage in the sale of these crops. However, profitability in the sale of the crop is not the only factor that determines the cropping pattern of the farmers. The size and home consumption needs of the farmer, availability of inputs, credit, water, etc., also influence the decisions regarding the crop to be grown as farming in this area is not solely a commercial proposition but a way of life of the people of the area. Most of them will remain farmers even if they have to meet their ends some other way.

There is no shortage of casual labour in these districts. Women's participation in the agriculture sector in these 2 districts is limited to a few crop operations and poultry and livestocks. However, they participate more actively in the processing stages of the crops after harvesting where the activity can be undertaken at home and not in the field.

Although mechanization has reached these areas and use of tractors, threshers etc. is prevalent, the farmers do not possess any of the heavy machinery but hire them. Tractors are needed for various operations, firstly due to the need to save time, and secondly, for deeper ploughing. This is particularly so in areas where the soil

has been hardened (especially in the Mardan region) due to the use of chemcial fertilizers and heavy uptake of crops.

The financial position of the sector shows little savings being done in cash. The savings are generally used to purchase livestock (especially for the upto 12.5 acres category) since it can bring in an additional income.

Production loans are generally obtained from institutional sources while consumption loans are obtained from non-institutional sources like relatives, friends, landlords (sometimes) and private money lenders. The production loans as a percent of the total loans are much higher for all category of farmers but consumption loans from non-institutional sources are highest for the very small category of farmers.

As also mentioned in Chapter I, according to the Agriculture Census (1980) the tenurial classification of farms by farm size of the Peshawar-Mardan region reveal that 69 per cent of the total number of farms in Peshawar lie in the under-5-acres category and only 9.7 per cent of the farms belong to the 25-to-under-50 acres category while 59 per cent of the farms are owner operated. For Mardan district, the figures stand at 67 per cent and 9.9 per cent respectively for the under-5-acres and the 25-to-under-50 acres category while 53 per cent of the farms are owner operated.

Thus at a glance the farm size and tenurial status of the Peshawar-Mardan region reveals the bulk to be small sized holdings and mainly owner operated.

According to the 1985-86 indicators, the total cultivated area in Peshawar district is about 49 pe cent of the total land area while about 72 per cent of the cultivated area is irrigated. The land use intensity is about 70 per cent while the cropping intensity is 111 per cent.

For Mardan about 65 per cent of the area is cultivated, of which 57 per cent is irrigated. The land use intensity is about 86 per cent and cropping intensity is 121 per cent. For other selected land-use indicators of the two districts of Peshawar and Mardan, see the **Appendix** to this Chapter.

The labour force participation rate as a percentage of the total population is about 31 per cent. There is a heavy dependency on agriculture for absorbing labour either through self-employment, family labour or hired labour.

B. VILLAGE PROFILE

In order to obtain information regarding infrastructure available in the village and the expenditure on operation and maintenance of farm machinery a schedule of questions was evolved. Five representative farmers from each village were selected for interviewing. This gave us a figure of 30 farmers from Mardan district and 35 farmers from Peshawar district. Random sampling was done to select the farmers.

The survey shows some of the farmers to be located in areas that have both unmetalled and metalled roads so that they have to traverse an unmetalled road before they can reach a metalled road, which will then take him to the different institutions that they need to visit. This is more so for Mardan. In Mardan, the mandi town is located at about 7 - 12 miles away from the farmer and the first 3 miles of roads are unmetalled for about 75 per cent of the farmers. For Peshawar, the mandi town is located between 18 - 34 miles away. Except for a few cases where there is a one mile stretch of unmatalled road, the entire route is on metalled road.

The fertilizer and pesticide dealers in Mardan are located in the mandi town and hence the same route is traversed to reach them, while in Peshawar they are located closer to the farmers at about a distance of between 3 - 7 miles, normally in the neighbouring villages.

The farmers interviewed did not sell their wheat to the procurement centres nor do they know of any wheat procurement centre either in Mardan or in Peshawar. These farmers normally sell their wheat in the village or at the mandi.

For Mardan, the sugar mill is located at a distance of 7 - 12 miles with the first 3 miles being unmetalled, while in Peshawar the sugar mill is located at a greater distance from the farmer, where it lies at about 28 - 34 miles away for most of the farmers.

The farmers were not aware about the existence of any PASSCO office. Commercial banks were known to the farmers and in Mardan they are located within 4 - 6 miles radius for all the farmers surveyed, while in Peshawar the commercial banks can be found within 3 - 5 miles distance.

The ADBP is located at quite a distance from the farmers in Mardan as well as in Peshawar. In the former case, a farmer has to travel between 15 - 19 miles to reach the office of the ADBP using a 1 - 3 miles stretch of unmetalled road while for Peshawar it is a a distance of between 14 - 23 miles away.

The extension office is at a distance of about 4 - 10 miles for Mardan and between 8 - 14 miles in Peshawar.

The canal head is located at a dsistance of about 1 - 3 miles for the farmers of Mardan, and for the majority it lies at about a mile's distance. For Peshawar, it lies at about 1 - 2 miles away. Thus for Mardan, except for commercial banks and extension offices, most of the institutions are located at quite a distance away from the farmer. For Peshawar, except for fertilizer dealers and commercial banks all the other institutions are located at an even greater distance away than for the farmers of Mardan.

Expenditure on O & M for Farm Machinery

In the entire sample only 3 farmers in Peshawar and 4 farmers in Mardan possessed tractors and threshers. For Mardan, the average cost of operation and maintenance of of a tractor stands at about Rs.6,447 where the largest proportion of the cost goes into repairs. For thresher, the figure is about Rs.1,860 and for other machinery it is about Rs.443. For the district of Peshawar, the figures stand at Rs.3,595 for tractors, Rs.1,867 for thresher and Rs.413 for other machinery and implements.

Average expenditure on deisel per hour for tractors is Rs.17 for Mardan and Rs.18 for Peshawar, while expenses on Mobil oil is Rs.150 per 100 hours for Mardan and Rs.270 for Peshawar.

Filters show an average cost of Rs.30 per 100 hours for both the districts, while average annual cost on belt pulleys show the cost to be Rs.1,910 for Mardan and Rs.1,927 for Peshawar.

Appendix

SELECTED LAND USE INDICATORS FOR PESHAWAR & MARDAN (1985-86)

	Peshawar	Mardan
Population (000 Persons)	2,672	1,712
Geographical Area (000 Acres)	988.6	775.2
Cultivated Area (000 Acres)	482.8	501.9
Cultivated Area as per cent of Total Land Area	48.8	64.7
Irrigated Area (000 Acres)	349.4	288.4
Irrigated Area as per cent of Cultivated Area	72.4	57.4
Current Follow as per cent of Cultivated Land Area	19.5	19.1
Population per Cultivated Acre (Persons)	5.5	3.4
Population per Irrigated Acre (Persons)	7.6	5.9
Forest Area as per cent of Total Area	2.3	1.1
Land use Intensity(Per cent)	70.1	85.7
Cropping Intensity(Per cent)	111.0	121.0

Chapter III

DESCRIPTIVE STATISTICS OF THE SURVEY AREA

SIZE AND TENURIAL CLASSIFICATION

The data as projected in the Interm Report has already shown a preponderence of small farm agriculture (cf. Table-I) where nearly 66 per cent of the respondents were found in the less than 5.0 acres cohort, followed by about 26 per cent respondents in the 5.0 to 12.5 acres cohort, with about 6 per cent respondents in the 12.5 to 25.0 acres cohort and barely about 2 per cent in the 25 or above acres cohort. In common with other areas of the country, the land ownership pattern is highly skewed.

The size factor already predetermines the tenurial status of the respondents and the sample reveals about 74 per cent of the respondents to be owner-operators, 15 per cent tenant operators and about 11 per cent of the respondents to be owner-cum-tenants (cf. Table-I).

LOCATION ON THE WATER COURSE

There are more than 22 water courses in the sample survey areas. Table II to V show the location of the respondents on the water course by farm size and tenurial status. About 10 per cent of all the respondents are located at the head, about 54 per cent in the middle, and about 36 per cent on the tail.

MAJOR CROPS GROWN

The major crops grown in the survey districts are wheat, maize and sugarcane.

- Wheat is grown as a Rabi crop and has a 6 months' cycle.

- Wheat is also intercultured with sugarcane, the latter being a whole year crop. Where wheat is intercultured with sugarcane, the wheat crop benefits from the inputs as sugarcane requires more water, more labour and more of all the other inputs.

- Maize is a Kharif crop of 3 months maturity and it is possible to produce 2 crops in a season.

- Besides the major crops, the other crops grown include tobacco which is a profitable cash crop and in Mardan farmers allocate their best quality soil to this crop. This is also a Rabi crop.

- Fruits and vegetables are also grown and play an important role in raising the profits of the farm enterprise.

- The fruits grown include plums, peaches, kinows, oranges, pears, parsimons, melons, etc. while the vegetables grown include peas, tomatos, onion, garlic, spinach, cabbage, radish, okra, etc.

- In Peshawar where trees in the fruit orchards are widely spaced, the space is utilized for growing peas.

- Green fodder is also grown with the orchards. This crop is used as animal feed but can be, and is, also sold in the market.

WHEAT

The percentage of wheat in the total cropped area shows about 40 per cent of the total cropped area to be under this crop, while 45 per cent of the area is given to wheat by the less than 5 acres cohort and there is seen to be an inverse relationship between the mean percentage share of wheat in total cropped area and the size of the holding of the respondents. Further the owner-cum-tenant category has the largest proportion of the cropped area under wheat (Table-1).

When seen in terms of location on the water course, the bulk of the farms producing wheat by farm sizes seem to be located at the tail, except for the greater than 12.5 to 25 acres category where about 59 per cent of the cropped area under wheat lies at the head (cf. Table-2).

The yield of wheat per acre by the farm size and tenurial status shows little variation overall by farm size as the production lies between about 17.0 to 18 maunds per acre and there is no given pattern for the different farm sizes. In terms of tenurial status the tenant operators seem to have the highest yield for all sizes where it reaches to about 25 maunds per acre for the 12.5 to 25 acres category. This is followed by the owner operator category in this farm size. On an average, the smaller categories of farms (up to 25 acres) seem to perform better in terms of yield.

As regards location on the water course, those farms located at the head are relatively better off in terms of yield. However, the difference in yield between those located in the middle and the tail are insignificant (cf. Table-3). Tables 13 to 15 show the break-up of yield with location on the water course by tenurial status, demonstrating the same pattern of yield per acre by tenurial status as shown by Table-3.

According to the survey, location on the water course is not a major factor in determining the area devoted to wheat. Sufficient water is normally available for the crop. Water is crucial for the crop at 2 times. Firstly, about 15 days to one month after sowing and next about a month before harvesting, or alternatively when the grains have just emerged.

Straw, the bye-product of wheat is basically used for feeding animals.

MAIZE

The mean percentage of the total cropped area under maize is about 33 while the-up-to-5 acres category has about 38 per cent of the total area under this crop, which is the highest among all the size categories. In fact the very small (up-to-5 acres) category has the highest area under this crop from amongst all the tenurial groups.

Maize needs about 5 - 6 doses of irrigation. If there is too little supply of water during sowing, the crop may be damaged. On the other hand if there is heavy rain which results in standing water in the field the crop can also get damaged. The water requirements of this crop have therefore to be carefully balanced.

In terms of location on the water course, those farms located at the head have a larger proportion of the total area under this crop stretching from about 27 per cent to about 45 per cent (cf. Tables 5 and 6). The farms located at the middle and the tail seem to follow the same pattern with respect to allocating lands to the maize crop as a per cent of their total cropped area, showing further an inverse relationship with size of farms.

Among the major crops of the survey area maize takes third place in terms of area under the crop. During the thinning stage the bye-product of maize is also used as fodder.

Maize has a short production cycle of 3 months and it is possible to obtain two crops in a season. The overall yield per acre is about 13 maunds while the yield per acre by farm size and tenancy status shows a range stretching from about 13 maunds to about 16 maunds per acre. With respect to tenurial status the owner operators show similar yields while the owner-cum-tenants show comparatively lower yield. The tenant operators show relatively higher yields on an average.

When the yield per acre is seen with reference to location on the water course, the farms located at the tail show a relative disadvantage in the yield, while the small and medium farms located at the tail show falling levels of yield. The yield per acre by location on the water course by tenurial status is shown in tables 16 to 18.

SUGARCANE

Sugarcane is an important cash crop and has a one year cycle of production. Where it is intercultured with wheat, the crop is sown in November-December while in areas where it is grown as a single crop in the field, it is sown in February-March.

Two crops of sugarcane can be grown from one sowing activity where after harvesting the crop, the field is not ploughed and new shoots called ratoon appear to provide the second crop. However, the output of this crop is basically used for making Gur.

Sugarcane as a crop needs several doses of irrigation and is also labour intensive especially during the weeding and earthing stages. Sugar beet, which is used for producing sugar is also included. Farmers who produce sugarcane for the mills also cultivate sugar beet, since the sugar mills in this area also use sugar beet for producing sugar and buy off the stock of sugar beet. However a very small proportion of the farms in the survey area produce sugar beet and for purpose of analysis, in order to determine the cost and profits, sugar beet have been merged with that of sugarcane.

About 73 per cent of the total cropped area is under the sugarcane crop. In terms of farm size, the largest proportion of the cropped land given to sugarcane is seen to be the 0 - 5 acres category which stands at about 77 per cent of the total cropped area followed by the large farms (above 25 acres category) which stands at 76 per cent and the lowest is found in the 12.5 to 25 acres category which stands at about 63 per cent of the total area.

When viewed in terms of tenancy status, except for the owner-cum-tenant operator which stands at 68 per cent on an overall basis, both the owner and the tenant categories show about 73 per cent of the cropped land under this crop (cf. Table 9).

Table 10 shows the location of the areas producing sugarcane on the water course. The largest proportion of these areas seem to be located in the middle of the water course which stands at 74 per cent.

The overall yield per acre for sugarcane is about 255 mounds. The average overall yield per acre shows the very small category (less than 5 acres) to be at the top with 261 maunds per acre and the largest farm category (above 25 acres) to have the lowest yield with about 238 maunds per acre on an average.

The yield per acre with reference to the tenancy status shows the owner-cum-tenant to have the highest yield with about 337 maunds per acre on an average. However, the number of respondents in the owner-cum-tenant as well as tenant category producing sugarcane are significantly small and hence show a large average yield per acre (cf. Table-11).

The yield per acre by location on the water course shows those located at the tail to have the highest average yield, i.e. 291 maunds per acre while those at the head show an average of 216 maunds per acre.

However in this case the bulk of the sugarcane producing farms seem to be located in the middle of the water course and show an average yield of about 253 maunds. Table 19 through 21 shows the yield of sugarcane by location on the water course by tenurial status.

Despite the large area provided to sugarcane of the total cropped area it must be mentioned that only a small number of farmers produce this crop when compared to the number of farmers who produce wheat. More than 91 per cent of the total respondents produce wheat while a little over 44 per cent of the respondents grow sugarcane and about 59 per cent of the respondents produce maize.

COST OF PRODUCTION OF MAJOR CROPS

The cost of production of major crops covers the nominal cost of producing wheat, maize and sugarcane. This thus excludes the imputed cost of land and family labour.

LABOUR

There are basically 3 types of labour found in agricultural production, namely,

- Casual Labour
- Family Labour
- Obligation Labour.

Casual labour refers to the labour employed for daily wages. In no cases was permanent wage labour found in the sample. The number of labour employed varies with the season and the crop. Some crops are more labour intensive than others like cash crops and in some seasons the demand for labour increases due to the increase in labour intensive activities like harvesting of crops and fruit picking. Casual labour is normally used as alongside labour with mechanical operations, for purposes of harvesting, weeding and other seasonal operations.

Family labour refers to the labour provided by the farm family including men, women and children and where no cash wage payment is made. Family labour is normally used for ridge making by bullocks, seed placement, and placement of farm yard manure, weeding and cleaning of nursery, transportation by bullock, and tending livestock which includes activities such as fodder cutting, hauling to animal sheds, chaffing, watering, milking, grazing, dung removing, etc. Besides these, family labour is also used in cleaning and processing of vegetables like garlic, chillies, peas, etc. and picking of fruits (partly). However, there are no clear cut distinctions of types of work undertaken by family labour.

Obligation labour refers to the labour provided by one farmer to another with the understanding that the obligation so incurred will be reciprocated. There is thus no cash wage payment but service returned as obligation. There are no specific jobs undertaken by obligation.

According to the respondents casual labour wages vary between Rs. 20- Rs.25. Despite the fear of shortage of labour in other areas, the availability of labour was not a constraint in the survey area.

WATER

Water is a very important input. The main source of water for the survey area is canal water. Besides this, public tubewells are also used. None of the respondents owned a tubewell or bought water from any private tubewells. As a result water is free of cost for these farmers since there is no Abiana (water charge) in the area. The demand for water varies with the season with the peak demand emerging when the Kharif crops come close to ripening, and also around late April when wheat and tobacco both require water in large quantities. The availability of water may vary with the climate and overall availability for the region but none of the respondents felt any shortage in the required quantity of water for the crops during this survey time period.

MACHINERY

Although mechanization is practiced in the survey area but the farmers do not own any of the heavy machinery. The main machinery used are tractors and threshers. Tractors are used for planking for preparatory tillage, secondary tillage, drilling, ploughing, etc.

There is a well developed market for hiring tractor services and the cost is Rs.50 per hour for tractor plough and Rs.70 per hour for tractor leveller. Tractor trolleys are also an important source of transporting agricultural produce from the field to the home stead.

Thresher price is paid in kind at 5 kgs per maund, which was then converted into rupees to determine the cost by the price per maund of the crop.

SEED

Seed is a basic input and is also an important expenditure item. Wheat seeds cost about Rs.110 - 200 per maund and it requires about 32 - 50 kgs per acre i.e. about 0.64 to 1 maund per acre. Maize seeds cost between Rs.140 - Rs.200 per acre and are used at the rate of 12 - 20 kgs per acre i.e. between 0.24 - 0.40 maunds per acre. The quality of seed used affects the yield per acre of output. Seeds are not always purchased from the market. In many cases a certain quantity of output is retained as seed. Moreover, in the case of the second sugarcane crop there is no need for the use of additional seed as the new crop emerges from the roots of the previous crop left in the soil.

FERTILIZERS

Fertilizer is used for most of the crops. Only some require larger doses than others. The commonly used fertilizers are Urea, Nitrogen, DAP, Ammonium Sulphate, Ammonium Nitrate, Nitrophos etc. Fertilizer is purchased from the market. Urea costs Rs.135/- per bag, DAP Rs.185-195, Ammonium Nitrate Rs.75/-, Nitrophos costs Rs.145-160, Ammonium Siuphate Rs.55/- and other Rs.140/-.

Fertilizer was costed according to the price at which it was purchased. The cost of fertilizer is more for some farms due to distance from the market.

Farm yard manure is widely used for all the crops as well as vegetables. There is no market for the purchase or sale of farm yard manure. However, it may be borrowed from the farmers from the neighbourhood and later returned in kind.

Some crops use more fertilizers than the others and the type of fertilizer used depends on the crop as well as the type of soil where the crop is grown.

PESTICIDE

Pesticides are basically used for tobacco in large amounts, followed by sugarcane and sugar beet. The wheat crop needs pesticides sometimes before the ripening stage. Cash crops are the main users of pesticides.

COST OF INPUTS IN THE PRODUCTION OF WHEAT

Tables 22 through 26 show the production cost of wheat per acreby farm size and tenurial status and by location on the water course.

When looking at the cost it must be kept in mind that the cost of land, water, family and obligation labour are not included. This shows the nominal cost or cost of those factors of production for which payment is made in cash. This is the main reason for the low costs figures shown in the tables. The average per acre cost of inputs in the production of wheat is about Rs.675/-. According to Table 22 the cost is highest for the very small category of farm (0 - 5 acres) where the cost stretches from Rs.500 to about Rs.794 on an average. The lowest cost is for the large farms (25 acres and above) which lies in the range of about Rs.467 to Rs.477.

In terms of tenurial status the owner operators have the highest cost with an average of Rs.739. Even in this category the large farms are the most competitive with an average cost of Rs.467 only. The owner-cum-tenants have the second highest cost with an overall average of Rs.569. In this category the medium sized farms (12.5 to 25 acres) are the most cost effective with an average of Rs.354/- only. The tenant operators have the lowest cost per acre with an overall average of Rs.459. Here again the medium size farms (12.5 - 25 acres) show the lowest cost with about Rs.159 per acre on an average.

By location on the water course, those at the head have the highest average cost with about Rs.890 followed by those at the middle incuring about Rs.687 on an average while those at the tail have an average input cost of Rs.593.

In terms of farm size the same pattern is followed with the highest cost going to the vary small farms (0 - 5 acres) and lowest to the large farms (over 25 acres cf. Table 23 - 26). In fact for the very small farms of owner operator the cost goes up to Rs.1,068 per acre where the overall average per acre cost is about Rs.739 (cf. Table 24).

MAIZE

The production cost of maize as revealed by Table 27 shows input cost on an average to be Rs.688/- while the very small (0 - 5 acres) and small farms (5 - 12.5 acres) have relatively lower cost of production with an overall average cost of about Rs.640 and Rs.708 respectively. While the cost of production for medium sized farms (12.5 - 25 acres) is the highest standing at about Rs.943 on an average followed by the large sized farms which shows an average cost of Rs.873.

In terms of tenurial status, the highest cost is shown by the owner operator category where the average total is about Rs.750. However the medium farms show an average cost of about Rs.1,273/- per acre and the large farms show a per acre cost of about Rs.1,014/-.

The tenant operators have the second highest cost per acre where the total average cost per acre stands at about Rs.512 followed by owner-cum-tenants whose per acre cost stands at about Rs.482.

Tables 28 through 31 show the production cost per acre by farm size and tenurial status by location on the water course. The bulk of the maize producing farms are located in the middle of the water course and have the highest per acre cost of production, which ranges from Rs.675/-(for the very small farm size) to Rs.1,341 (for the large farms). The overall average cost for those located in the middle is about Rs.759. This is followed by those located at the head where the range is about Rs.588 (for very small farms) to about Rs.1,933/- (medium size farms) with an overall cost of Rs.757. Those at the tail

have an overall average cost of about Rs.562 and the range stretches from Rs.202 (large farms) to Rs.609 (very small farms). There does not seem to be any significant relationship between location on the water course and cost of production. This becomes more obvious in the case of the tenant operator (Table 27) who has the lowest cost of production (Rs.512.2) and has no maize producing farm located at the head of the water course (Table 30). One of the reasons is that the cost of production is more dependent on the quality of soil and the price of inputs rather than location on the water course. Water is of course an important input but it does not have a cash price on its use while the cost of inputs especially fertilizer is higher for farms that are at a greater distance from the market.

SUGARCANE

Sugarcane which is a cash crop has a much higher cost of production than either wheat or maize. The sugarcane crop is more input intensive than either of the other two crops. Sugarcane needs more fertilizers, water and labour inputs. The production cost of sugarcane by farm size and tenurial status and by location on the water course is given in Table 32 through Table 36. The overall average cost is about Rs.1,328 (Table 32) while the overall average cost by farm sizes stretches from about Rs.1,573 (very small farms) to about Rs.700 (large farms).

The very small farms (0 - 5 acres) thus have the highest cost of production of sugarcane which is about Rs.1,588 for owner operator, Rs.1,617 for tenant operators and about Rs.1,120 for owner-cum-tenants. In terms of tenurial status the majority of the producers are owner operators who lie midway between the highest cost (Rs.1,438, for tenant operators) and lowest (Rs.1,022, owner-cum-tenant) cost producers with about Rs.1,334 per acre.

In terms of location on the water course more than 70 per cent of the farmers are located in the middle of the water course with

an overall average cost of about Rs.1,324, while those located at the head have the lowest cost, about Rs.1,187 and those at the tail have a cost of about Rs.1,456 per acre.

All the tenant operators and owner-cum-tenant operators are located in the middle. (cf. table 35 and 36).

SUMMARY/CONCLUSIONS

The state of agriculture reflects a situation where small and marginal holdings predominate. In terms of tenurial status the owner operators are to be found in the largest number. Wheat, maize and sugarcane are the main crops grown.

WHEAT

Forty per cent of the total cropped area is diverted to wheat. Size wise, the very small sized holdings have the largest area under this crop (44 per cent) while large farms have only about 19 per cent of the area under this crop. Bulk of the wheat growing farms are located at the tail of the land. The average yield per acre for the Peshawar-Mardan surveyed farmers is 18 maunds. This is essentially the yield shown by the small farms while large farms show about 17 maunds per acre yield. This figure is in consonance with the district wise data of government of N.W.F.Province where the yield per acre for the irrigated areas of Peshawar is about 17 maunds and Mardan is about 12 maunds per acre.

Small sized holdings thus show better yield per acre as well as devote the bulk of their area to this crop.

In terms of location the bulk of the area producing wheat is located at the tail of the canal. However those located at the head have a much higher yield (about 20 maunds).

MAIZE

Maize occupies about 33 per cent of the total cropped area where the very small farmers devote about 38 per cent of their total area and the large farmers devote about 18 per cent of their total area to maize. Bulk of the maize producing farms are located at the head of the canal.

The overall average yield per acre is about 13 maunds. The small farmers have an average similar to the overall average of 13 maunds while the large farms show an average yield per acre of 16 maunds. For farms located at the head of the canal the average yield goes up to 14 maunds. The yield of the surveyed villages do not show any major deviation from the provincial averages which stand at about 14 maunds for Peshawar and about 15 maunds for Mardan irrigated areas.

SUGARCANE

Sugarcane has the highest area as a per cent of the total area under crops standing as it does at about 73 per cent while for very small farms it stands at about 77 per cent and for large farms it is about 76 per cent. In terms of location at the water courses, the majority of the farms are located at the middle on the canal.

The average yield per acre is about 255 maunds for all farms while for the very small it is about 261 maunds and for the large farms it is 238 maunds per acre. At the disaggregated level for the very small farms of tenant operators it stands at an average of 337 maunds.

For those farms located at the tail of the canal the average per acre yield stands at about 291 maunds.

The very small sized farms seem to show better yield per acre for wheat as well as sugarcane. Only for maize the large farms are relatively better in terms of yield per acre.

- When analyzing the area under the specific crops as a proportion of the total area, it must be kept in mind that the crops are the Rabi (Wheat) and Kharif (Maize) crops and some crops are intercultured with others (Sugarcane and Wheat) while other crops may give more than one harvest in a season (maize). As such, since the same land is used the total percentage does not add up to 100. Besides, these are not the only crops grown as tobacco, vegetables, fruits and barseem are also grown as part of the cropping pattern.

COST OF PRODUCTION

The cash expenditure on the inputs is shown in the cost of production and excludes the cost of land, family labour, water and interest rates but includes casual labour, seed, fertilizer, pesticidies, tractor, thresher and bullock labour.

The average cost of (inputs) production for wheat stands at Rs.675 per acre while for the very small farmers it is about Rs.738 and for large farmers it is about Rs.468.

In terms of location on the water course, the highest cost is shown for farmers located at the head where the average cost goes up to about Rs.890 per acre.

The average cost of (inputs) production for maize is about Rs.688. For very small farmers it is about Rs.640 while of large farmers it is about Rs.873.

Those farms located at the head have the highest average cost in terms of location on the water course where this cost goes up to an average of Rs.759.

The average cost of sugarcane is about Rs.1,328, which for very small farmers is about Rs.1,537 and for large farmers it is Rs.700.

For those farms located at the tail the average cost of (input) production is the highest and stands at Rs.1,456 per acre.

Thus the large farmers have lower cost of production for wheat and sugarcane while the small farmers have lower cost of production for maize.

The cost of production and location on the water course shows no discernible relationship.

The cost of input (production) seem to depend on the inputs used; market where the inputs are bought from since distance from the market tends to lead to an increase in the price of input especially fertilizer and timely availability of the input; and the overall management of the production process. Moreover, the cost of (inputs) production is high for the very small category as they also have higher yield than the large farmers for wheat and sugarcane, the latter being an input intensive crop.

Table No. I

DISTRIBUTION OF FARMS BY TENURIAL STATUS AND TOTAL FARM SIZE

(Nos.)

Farm Tenure	No. of Farms by Farm Size Category				Total
	Upto 5.0 Acres	> 5 to 12.5 Acres	> 12.5 to 25 Acres	25 or above Acres	
Owner Operator	152 69.7 77.9 51.7	49 22.5 65.3 16.7	11 5.0 64.7 3.7	6 2.8 85.7 2.0	218 74.1
Tenant Operator	26 59.1 13.3 8.8	15 34.1 20.0 5.1	3 6.8 17.6 1.0		44 15.0
Owner Cum Tenant	17 53.1 8.7 5.8	11 34.4 14.7 3.7	3 9.4 17.6 1.0	1 3.1 14.3 0.3	32 10.9
Total	195 66.3	75 25.5	17 5.8	7 2.4	294 100.0

Subsequent Three Figures are Row, Column and Total Percentages.

Table No. II

LOCATION OF FARM ON WATER COURSE - ALL OPERATORS

(Nos.)

Location on Water Course	No. Of Farm by Farm Size Category				Total
	Upto 5.0 Acres	> 5 to 12.5 Acres	> 12.5 to 25 Acres	25 or Above Acres	
Head	18 (9.2)	8 (10.7)	2 (11.8)	1 (14.3)	29 9.9
Middle	103 (52.8)	44 (58.6)	9 (52.9)	4 (57.1)	160 54.4
Tail	74 (37.9)	23 (30.7)	6 (35.2)	2 (28.5)	105 35.7
Total	195 66.3	75 25.5	17 5.8	7 2.4	294 100

Parentheses figures are column percentages.

Table No. III

LOCATION OF FARM ON WATER COURSE - OWNER OPERATORS

(Nos.)

Location on Water Course	No. Of Farm by Farm Size Category				Total
	Upto 5.0 Acres	> 5 to 12.5 Acres	> 12.5 to 25 Acres	25 or Above Acres	
Head	16 (10.5)	5 (10.2)	2 (18.2)	1 (16.7)	24 11.0
Middle	86 (56.6)	32 (65.3)	6 (54.5)	4 (66.7)	128 58.7
Tail	50 (32.9)	12 (24.5)	3 (27.3)	1 (16.7)	66 30.3
Total	152 69.7	49 22.5	11 5.0	6 2.8	218 100

Parentheses figures are column percentages.

Table No. IV

LOCATION OF FARM ON WATER COURSE - TENANT OPERATORS

(Nos.)

Location on Water Course	No. Of Farm by Farm Size Category				Total
	Upto 5.0 Acres	> 5 to 12.5 Acres	> 12.5 to 25 Acres	25 or Above Acres	
Head		1 (6.7)	-		1 2.3
Middle	10 (38.5)	6 (40.0)	1 (33.3)		17 39.6
Tail	16 (61.5)	8 (59.3)	2 (66.7)		26 59.1
Total	26 59.1	15 34.1	3 6.9		44 100

Parentheses figures are column percentages.

Table No. V

LOCATION OF FARM ON WATER COURSE - OWNER-CUM-TENANTS

(Nos.)

Location on Water Course	No. Of Farm by Farm Size Category				Total
	Upto 5.0 Acres	> 5 to 12.5 Acres	> 12.5 to 25 Acres	25 or Above Acres	
Head	2 (11.8)	2 (18.2)	-		4 12.5
Middle	7 (41.2)	6 (54.5)	2 (66.7)		15 46.9
Tail	8 (47.1)	3 (27.3)	1 (33.3)	1 (100.0)	13 40.6
Total	17 53.1	11 34.4	3 9.4	1 3.1	32 100

Parentheses figures are column percentages.

TABLE # 1

MEAN % AGE SHARE OF MAJOR CROPS, WHEAT IN TOTAL CROPPED AREA BY FARM SIZE AND TENANCY STATUS

(in per cent)

TENANCY STATUS FARM SIZE		OWNER	TENANT	OWNER CUM TENANT	TOTAL
VERY SMALL	x	42.8	55.6	40.8	44.5
0-5	a	21.5	28.7	20.5	23.0
SMALL	x	29.6	35.8	33.6	31.5
> 5 - 12.5	a	15.2	21.9	18.6	17.2
MEDIUM	x	29.1	32.4	40.2	30.9
> 12.5 - 25	a	23.1	15.5	35.6	22.5
LARGE	x	18.9	-	24.1	18.9
> 25	a	4.2	-	0.0	4.2
	x	38.2	37.7	47.9	39.7
TOTAL	a	21.1	27.6	20.0	22.3

TABLE # 2

MEAN % AGE SHARE OF MAJOR CROPS WHEAT IN TOTAL CROPPED AREA BY FARM SIZE AND LOCATION ON W/C

(in per cent)

LOCATION ON W/C FARM SIZE		HEAD	MIDDLE	TAIL	TOTAL
VERY SMALL 0-5	x a	33.6 17.4	43.4 22.6	48.6 23.9	44.5 23.0
SMALL 75 - 12.5	x a	27.3 12.7	27.5 15.3	41.5 19.0	31.5 17.2
MEDIUM > 12.5 - 25	x a	59.2 48.3	23.0 12.3	32.0 20.6	31.0 23.0
LARGE > 25	x a	17.3 0.0	17.6 5.2	21.7 3.5	18.9 4.2
TOTAL	x a	33.1 19.3	37.0 21.6	45.6 23.1	39.7 22.3

TABLE # 3

YIELD (OUTPUT/ACRE) OF MAJOR CROP WHEAT BY FARM SIZE AND TENANCY

(in maunds)

TENANCY STATUS FARM SIZE		OWNER	TENANT	OWNER CUM TENANT	TOTAL
VERY SMALL	x	18.4	19.8	17.5	18.4
	a	6.5	6.0	6.4	6.4
SMALL	x	17.5	17.6	15.0	17.0
	a	4.0	8.5	5.0	5.1
MEDIUM	x	18.1	25.4	14.3	18.6
	a	5.2	16.0	3.3	6.8
LARGE	x	17.1	-	18.0	17.3
	a	5.4	-	-	4.9
OVERALL	x	18.1	16.5	19.3	18.0
	a	5.9	6.0	7.4	6.0
CORRELATION COEF.		-0.0105	-0.2522	0.1437	

TABLE # 4

YIELD (OUTPUT/ACRE) OF MAJOR CROP WHEAT BY FARM SIZE AND LOCATION W/C

(in maunds)

FARM SIZE		HEAD	MIDDLE	TAIL	TOTAL
VERY SMALL	x	20.1	18.0	18.5	18.4
	a	7.9	6.6	5.7	6.4
SMALL	x	18.8	17.3	15.7	17.0
	a	6.7	5.2	4.1	5.1
MEDIUM	x	17.0	18.6	19.1	18.6
	a	3.8	8.2	6.3	8.2
LARGE	x	22.2	18.4	13.0	17.3
	a	0.0	1.5	7.1	4.9
OVERALL	x	19.6	17.8	17.9	18.0
	a	7.1	6.2	5.6	6.1
CORRELATION COEFF.		-0.0641	0.0672	-0.1407	

TABLE # 5

MEAN % AGE SHARE OF MAJOR CROPS MAIZE IN TOTAL CROPPED AREA BY FARM SIZE AND TENANCY STATUS

(in per cent)

TENANCY STATUS / FARM SIZE		OWNER	TENANT	OWNER CUM TENANT	TOTAL
VERY SMALL	x	38.6	36.3	34.2	37.8
	a	22.2	22.0	24.7	22.4
SMALL	x	30.5	19.1	17.0	26.6
	a	15.7	18.1	12.7	16.4
MEDIUM	x	31.4	13.4	18.8	26.0
	a	18.8	8.5	6.9	17.2.
LARGE	x	18.4	-	17.2	18.2
	a	7.2	-	-	6.5
TOTAL	x	35.5	26.6	26.8	33.4
	a	20.7	20.7	21.5	21.0

TABLE # 6

MEAN % AGE SHARE OF MAJOR CROPS MAIZE IN TOTAL CROPPED AREA BY FARMS SIZE AND LOCATION ON W/C

(in per cent)

LOCATION ON W/C FARM SIZE		HEAD	MIDDLE	TAIL	TOTAL
VERY SMALL	x	45.2	36.5	37.5	37.8
	a	22.3	23.7	21.0	22.4
SMALL	x	26.6	30.0	19.4	26.6
	a	17.9	16.6	14.0	16.4
MEDIUM	x	42.5	23.3	24.4	26.0
	a	24.8	18.8	11.4	17.2
LARGE	x	30.8	15.2	16.3	18.2
	a	0.0	3.0	1.3	6.5
TOTAL	x	39.7	33.0	32.1	33.4
	a	20.6	21.5	20.4	21.0

TABLE # 7

YIELD (OUTPUT/ACRE) OF MAJOR CROP MAIZE BY FARM SIZE AND TENANCY STATUS

(in maunds)

TENANCY STATUS / FARM SIZE		OWNER	TENANT	OWNER CUM TENANT	TOTAL
VERY SMALL	x	12.8	14.2	10.2	12.6
	a	5.8	6.7	6.0	6.0
SMALL	x	13.7	11.7	12.2	13.2
	a	6.3	4.0	6.8	6.1
MEDIUM	x	15.4	17.8	7.7	14.3
	a	6.6	10.6	3.7	7.1
LARGE	x	16.8	-	9.3	15.6
	a	12.4	-	-	11.6
TOTAL	x	13.3	13.4	10.5	13.0
	a	6.2	6.1	6.0	6.2
CORRELATION COEFF.		0.1127	-0.044	0.0214	

TABLE # 8

YIELD (OUTPUT/ACRE) OF MAJOR CROP MAIZE BY FARM SIZE AND LOCATION ON W/C

(in maunds)

FARM SIZE		HEAD	MIDDLE	TAIL	TOTAL
VERY SMALL	x	13.1	13.0	12.0	12.6
	a	7.1	6.5	4.7	6.0
SMALL	x	16.4	13.3	11.6	13.2
	a	8.6	4.6	7.8	6.1
MEDIUM	x	17.1	17.1	9.6	14.3
	a	1.7	6.0	7.5	7.1
LARGE	x	12.6	23.2	5.5	15.6
	a	0.0	11.1	5.3	11.5
TOTAL	x	14.3	13.7	11.6	13.0
	a	7.1	6.3	5.7	6.2
CORRELATION COEFF.		0.0600	0.2323	-0.2281	

TABLE # 9

MEAN % AGE SHARE OF MAJOR CROPS SUGAR CANE IN TOTAL CROPPED AREA BY FARM SIZE AND TENANCY STATUS

(in per cent)

TENANCY STATUS FARM SIZE		OWNER	TENANT	OWNER CUM TENANT	TOTAL
VERY SMALL	x	76.7	90.0	68.8	76.7
	a	25.4	14.1	30.0	25.5
SMALL	x	64.6	38.5	65.2	63.8
	a	23.4	0.0	-	23.1
MEDIUM	x	63.3	-	-	63.3
	a	34.8	-	-	34.9
LARGE	x	76.2	-	-	76.2
	a	18.8	-	-	18.9
OVERALL	x	72.9	72.8	68.0	72.7
	a	25.9	31.4	26.1	25.8

TABLE # 10

MEAN % AGE SHARE OF MAJOR CROPS SUGAR CANE IN TOTAL CROPPED AREA BY FARM SIZE AND LOCATION ON W/C

(in per cent)

LOCATION ON W/C FARM SIZE		HEAD	MIDDLE	TAIL	TOTAL
VERY SMALL	x	67.2	78.5	75.5	76.7
	a	30.1	23.6	28.9	25.4
SMALL	x	68.6	63.9	55.1	63.8
	a	21.8	23.9	23.5	23.1
MEDIUM	x	39.2	67.2	77.1	63.3
	a	8.2	41.9	31.5	34.9
LARGE	x	80.8	74.6	-	76.8
	a	0.0	22.8	-	18.8
TOTAL	x	65.2	74.0	73.0	72.7
	a	26.4	25.2	28.2	25.8

TABLE # 11

YIELD (OUTPUT/ACRE) OF MAJOR CROP SUGAR CANE BY FARM SIZE AND TENANCY STATUS

(in maunds)

TENANCY STATUS FARM SIZE		OWNER	TENANT	OWNER CUM TENANT	TOTAL
VERY SMALL	x	255.0	300.8	336.1	260.6
	a	117.6	151.0	137.9	112.1
SMALL	x	239.5	174.8	338.3	240.6
	a	102.2	0.0	0.0	101.1
MEDIUM	x	259.5	-	-	259.5
	a	69.6	-	-	69.6
LARGE	x	237.8	-	-	237.8
	a	23.4	-	-	23.4
OVERALL	x	250.6	258.8	336.5	254.5
	a	107.8	129.2	119.4	109.1
CORRELATION COEFF.		-0.0753	0.0191	-0.0743	

TABLE # 12

YIELD (OUTPUT/ACRE) OF MAJOR CROP SUGAR CANE BY FARM SIZE AND LOCATION ON W/C

(in maunds)

FARM SIZE		HEAD	MIDDLE	TAIL	TOTAL
VERY SMALL	x	162.3	267.5	284.8	260.6
	a	86.5	109.5	151.8	119.1
SMALL	x	253.5	227.5	327.9	240.6
	a	42.5	92.8	194.1	101.1
MEDIUM	x	309.4	232.8	276.3	259.5
	a	107.2	49.9	90.4	69.6
LARGE	x	254.8	232.2	-	237.8
	a	0.0	25.2	-	23.4
TOTAL	x	216.0	253.1	291.0	254.5
	a	90.6	101.5	146.5	109.1
CORRELATION COEFF.		0.4324	-0.1242	-0.0850	

TABLE # 13

YIELD (OUTPUT/ACRE) OF WHEAT BY OWNER OPERATOR ON WC

(in maund)

TENANCY STATUS FARM SIZE		HEAD	MIDDLE	TAIL	TOTAL
VERY SMALL	x	19.6	18.1	18.4	18.4
	a	8.1	6.6	5.7	6.5
SMALL	x	16.2	18.1	16.4	17.5
	a	2.4	4.5	2.3	4.0
MEDIUM	x	16.9	15.7	22.1	18.1
	a	3.8	4.4	5.4	5.2
LARGE	x	22.2	18.4	8.0	17.1
	a	6.0	1.5	0.0	5.4
TOTAL	x	18.8	18.0	18.1	18.2
	a	5.8	5.9	5.5	5.9

TABLE # 14

YIELD (OUTPUT/ACRE) OF WHEAT BY TENANT OPERATOR ON WC

(in maund)

LOCATION ON W/C FARM SIZE		HEAD	MIDDLE	TAIL	TOTAL
VERY SMALL	x	-	16.2	18.4	17.5
	a	-	7.2	5.8	6.4
SMALL	x	25.3	14.2	14.0	14.9
	a	0.0	4.7	4.1	5.03
MEDIUM	x	-	16.6	12.0	14.3
	a	-	0.0	0.0	3.3
LARGE	x	-	-	-	
	a	-	-	-	
TOTAL	x	25.3	15.5	16.8	16.5
	a	-	6.2	5.6	6.0

TABLE # 15

YIELD (OUTPUT/ACRE) OF WHEAT BY OWNER-CUM-TENANT ON WC

(in maunds)

LOCATION ON W/C FARM SIZE		HEAD	MIDDLE	TAIL	TOTAL
VERY SMALL	x	23.8	19.1	19.5	19.8
	a	4.0	6.0	6.5	5.9
SMALL	x	22.3	16.2	17.2	17.6
	a	13.8	8.2	8.6	8.5
MEDIUM	x	-	30.6	14.1	25.4
	a	-	0.0	-	15.9
LARGE	x	-	-	18.0	18.0
	a	-	-	-	-
TOTAL	x	23.0	19.1	18.4	19.3
	a	8.3	8.3	6.3	7.4

TABLE # 16

YIELD (OUTPUT/ACRE) OF MAIZE BY OWNER OPERATOR ON WC

(in maunds)

TENANCY STATUS FARM SIZE		HEAD	MIDDLE	TAIL	ROW TOTAL
VERY SMALL	x	11.5	13.5	11.7	12.6
	a	5.2	6.5	5.0	5.8
SMALL	x	17.3	14.1	10.2	13.7
	a	9.3	4.7	8.0	6.2
MEDIUM	x	42.2	16.7	11.8	20.0
	a	37.3	5.5	10.7	17.4
LARGE	x	12.6	23.2	1.8	16.8
	a	0.0	11.1	0.0	12.4
COLUMN TOTAL	x	15.8	14.2	11.3	13.5
	a	13.7	6.3	5.9	7.6

TABLE # 17

YIELD (OUTPUT/ACRE) OF MAIZE BY TENANT OPERATOR ON WC

(in maunds)

TENANCY STATUS FARM SIZE		HEAD	MIDDLE	TAIL	ROW TOTAL
VERY SMALLY	x	–	5.3	13.0	9.6
	a	–	5.9	4.1	6.2
SMALL	x	–	9.6	8.3	8.9
	a	–	3.4	10.9	8.06
MEDIUM	x	–	11.1	6.0	7.7
	a	–	0.0	3.1	3.7
LARGE	x	–	–	–	
	a	–	–	–	
COLUMN TOTAL	x	–	7.3	10.7	9.2
	a	–	5.3	7.3	6.6
CORRELATION COEFF.					

TABLE # 18

YIELD (OUTPUT/ACRE) OF MAIZE BY OWNER CUM TENANT OPERATOR ON WC

(in maund)

TENANCY STATUS FARM SIZE		HEAD	MIDDLE	TAIL	ROW TOTAL
VERY SMALL	x	24.0	12.1	9.9	13.0
	a	10.8	3.0	6.1	7.6
SMALL	x	12.0	10.0	10.5	10.4
	a	0.0	6.6	5.5	5.4
MEDIUM	x	-	12.6	10.3	11.8
	a	-	17.9	0.0	12.7
LARGE	x	-	-	9.3	9.3
	a	-	-	-	-
COLUMN TOTAL	x	20.0	11.2	10.1	11.8
	a	10.3	7.3	5.0	7.2

CORRELATION COEFF.

TABLE # 19

YIELD (OUTPUT/ACRE) OF SUGAR CANE
BY OWNER OPERATOR ON WC

(in maund)

TENANCY STATUS FARM SIZE		HEAD	MIDDLE	TAIL	TOTAL
VERY SMALL	x	113.6	217.3	186.1	199.3
	a	105.5	145.2	168.2	148.3
SMALL	x	202.8	206.1	327.9	217.0
	a	119.2	109.5	194.1	120.3
MEDIUM	x	309.4	232.8	276.3	259.5
	a	107.2	49.9	90.4	69.6
LARGE	x	254.8	232.2	-	237.8
	a	0.0	25.2	-	23.4
TOTAL	x	168.0	215.7	213.7	208.0
	a	121.9	129.8	168.5	135.9

CORRELATION COEFF.

TABLE # 20

YIELD (OUTPUT/ACRE) OF SUGAR CANE BY TENANT OPERATOR ON WC

(in maund)

TENANCY STATUS FARM SIZE		HEAD	MIDDLE	TAIL	TOTAL
VERY SMALL	x	-	269.0	537.6	336.1
	a	-	37.9	-	137.8
SMALL	x	-	338.3	-	338.3
	a	-	-	-	-
MEDIUM	x	-	-	-	-
	a	-	-	-	-
LARGE	x	-	-	-	-
	a	-	-	-	-
TOTAL	x	-	286.3	537.6	336.5
	a	-	46.5	-	119.4
CORRELATION COEFF.					

TABLE # 21

YIELD (OUTPUT/ACRE) OF SUGAR CANE BY OWNER CUM TENANT
ON WC

(in maund)

TENANCY STATUS FARM SIZE		HEAD	MIDDLE	TAIL	TOTAL
VERY SMALL	x	-	300.8	-	300.8
	a	-	151.0	-	151.0
SMALL	x	-	174.8	-	174.8
	a	-	-	-	-
MEDIUM	x	-	-	-	-
	a	-	-	-	-
LARGE	x	-	-	-	-
	a	-	-	-	-
TOTAL	x	-	258.8	-	258.7
	a	-	129.2	-	129.2
CORRELATION COEFF.					

TABLE # 22

PRODUCTION COST OF WHEAT PER ACRE BY FARM SIZE AND TENANCY STATUS

(Rs.)

TENANCY STATUS FARM SIZE		OWNER	OWNER-CUM TENANT	TENANT	TOTAL
VERY SMALL	x	794.4	658.6	500.1	737.6
	a	489.1	243.6	189.1	449.6
SMALL	x	646.6	497.4	424.7	579.7
	a	391.7	372.7	187.4	365.8
MEDIUM	x	603.6	353.9	158.6	507.2
	a	173.6	196.5	31.1	228.5
LARGE	x	466.7	477.1		468.4
	a	246.1	0.0		220.1
TOTAL	x	739.4	568.9	459.2	675.4
	a	455.2	298.2	197.2	421.8
CORRELATION COEFF.					

TABLE # 23

PRODUCTION COST OF WHEAT PER ACRE BY FARM SIZE ON WC

(Rs.)

TENANCY STATUS / FARM SIZE		HEAD	MIDDLE	TAIL	TOTAL
VERY SMALL	x	1030.7	728.8	672.2	737.6
	a	1024.7	314.5	317.7	449.6
SMALL	x	644.2	662.7	375.5	597.7
	a	326.6	411.1	137.4	365.8
MEDIUM	x	751.4	450.4	510.9	507.2
	a	66.6	227.0	232.6	228.5
LARGE	x	602.0	544.3	287.8	468.4
	a	0.0	187.6	267.6	220.1
TOTAL	x	890.1	687.6	593.1	675.4
	a	835.8	345.3	309.1	421.8
CORRELATION COEFF.					

TABLE # 24

PRODUCTION COST OF WHEAT PER ACRE BY FARM SIZE AND BY OWNER OPERATOR ON WC

(Rs.)

TENANCY STATUS FARM SIZE		HEAD	MIDDLE	TAIL	TOTAL
VERY SMALL	x	1068.0	764.5	744.3	794.4
	a	1082.8	320.7	342.9	489.1
SMALL	x	575.6	746.0	373.8	646.5
	a	108.1	431.7	146.1	391.7
MEDIUM	x	751.4	524.1	649.1	603.6
	a	66.6	201.1	109.3	173.8
LARGE	x	602.0	544.2	98.6	466.7
	a	0.0	187.6	0.0	246.1
OVERALL	x	919.6	740.4	665.5	739.4
	a	902.6	350.4	340.8	455.2

CORRELATION COEFF.

TABLE # 25

PRODUCTION COST OF WHEAT PER ACRE BY FARM SIZE AND BY TENANT OPERATOR ON WC

(Rs.)

TENANCY STATUS FARM SIZE		HEAD	MIDDLE	TAIL	TOTAL
VERY SMALL	x	-	492.1	506.4	500.8
	a	-	182.7	198.7	189.1
SMALL	x	609.3	416.3	405.6	424.7
	a	0.0	267.0	102.4	187.3
MEDIUM	x	-	136.6	180.6	158.6
	a	-	-	-	31.1
LARGE	x	-	-	-	
	a	-	-	-	
OVERALL	x	609.3	444.5	463.4	459.2
	a	-	220.6	185.1	197.1
CORRELATION COEFF.					

TABLE # 26

PRODUCTION COST OF WHEAT PER ACRE BY FARM SIZE AND BY OWNER CUM TENANT OPERATOR ON WC

(Rs.)

TENANCY STATUS / FARM SIZE		HEAD	MIDDLE	TAIL	TOTAL
VERY SMALL	x	732.6	706.1	598.4	658.6
	a	243.6	273.9	233.0	243.6
SMALL	x	833.1	478.8	310.7	497.4
	a	777.2	271.5	205.8	372.7
MEDIUM	x	-	386.3	289.0	353.8
	a	-	266.3	0.0	196.5
LARGE	x	-	-	477.0	477.0
	a	-	-	0.0	0.0
TOTAL	x	782.9	572.6	498.8	568.9
	a	475.4	284.9	240.6	298.1

CORRELATION COEFF.

TABLE # 27

PRODUCTION COST OF MAIZE PER ACRE BY FARM SIZE AND TENANCY STATUS

(Rs.)

TENANCY STATUS / FARM SIZE		OWNER	OWNER-CUM-TENANT	TENANT	TOTAL
VERY SMALL	x	676.0	520.6	492.8	640.4
	a	347.0	389.4	213.4	342.4
SMALL	x	782.9	493.6	604.9	707.9
	a	861.4	157.3	444.5	740.0
MEDIUM	x	1272.6	288.2	387.7	942.7
	a	645.2	89.3	115.9	689.7
LARGE	x	1013.8	293.3	-	873.0
	a	644.6	0.0	-	647.3
TOTAL	x	750.1	402.2	512.2	687.6
	a	561.3	286.7	312.0	519.7
CORRELATION COEFF.					

TABLE # 28

PRODUCTION COST OF MAIZE PER ACRE BY FARM SIZE
ON WC

(Rs.)

TENANCY STATUS FARM SIZE		HEAD	MIDDLE	TAIL	TOTAL
VERY SMALL	x	588.2	675.3	609.6	640.2
	a	251.0	368.1	329.4	342.4
SMALL	x	757.4	806.1	484.1	707.9
	a	461.0	889.0	327.0	740.1
MEDIUM	x	1932.9	1038.3	469.3	942.7
	a	420.8	629.4	419.2	689.7
LARGE	x	936.8	1340.7	201.8	893.7
	a	0.0	509.6	129.3	647.3
TOTAL	x	757.0	759.2	562.4	687.6
	a	482.2	608.8	337.4	519.7
CORRELATION COEFF.					

TABLE # 29

PRODUCTION COST OF MAIZE PER ACRE BY FARM SIZE AND BY OWNER OPERATOR ON WC

(Rs.)

TENANCY STATUS FARM SIZE		HEAD	MIDDLE	TAIL	TOTAL
VERY SMALL	x	543.1	704.1	677.2	676.1
	a	155.9	371.6	349.7	347.1
SMALL	x	795.5	892.3	435.7	782.9
	a	504.7	1009.5	243.3	861.5
MEDIUM	x	1932.9	1346.1	685.5	1272.6
	a	420.8	539.3	544.5	645.2
LARGE	x	936.8	1340.7	110.4	1013.9
	a	0.0	509.7	-	644.6
TOTAL	x	754.3	817.8	626.9	750.1
	a	494.4	654.0	354.7	561.3
CORRELATION COEFF.					

TABLE # 30

PRODUCTION COST OF MAIZE PER ACRE BY FARM SIZE AND TENANT OPERATOR ON WC

(Rs.)

TENANCY STATUS FARM SIZE		HEAd	MIDDLE	TAIL	TOTAL
VERY SMALL	x	-	505.0	483.1	492.9
	a	-	244.6	198.2	213.4
SMALL	x	-	629.2	584.8	604.9
	a	-	433.8	493.5	444.0
MEDIUM	x	-	375.0	244.8	288.2
	a	-	0.0	68.1	89.3
LARGE	x	-	-	-	-
	a	-	-	-	-
TOTAL	x	-	540.1	490.5	512.2
	a	-	309.8	320.9	312.0

CORRELATION COEFF.

TABLE # 31

PRODUCTION COST OF MAIZE PER ACRE BY FARM SIZE AND OWNER CUM TENANT OPERATOR ON WC

(Rs.)

TENANCY STATUS FARM SIZE		HEAD	MIDDLE	TAIL	TOTAL
VERY SMALL	x	881.4	583.6	358.3	520.5
	a	625.9	495.6	144.6	389.4
SMALL	x	566.7	500.6	427.7	483.6
	a	0.0	190.6	132.4	157.3
MEDIUM	x	-	446.5	270.0	387.7
	a	-	78.0	0.0	115.8
LARGE	x	-	-	293.3	293.3
	a	-	-	0.0	0.0
TOTAL	x	776.5	520.9	358.3	482.3
	a	478.4	302.8	144.6	286.7

CORRELATION COEFF.

TABLE # 32

PRODUCTION COST OF SUGAR CANE BY FARMS SIZE AND TENANCY STATUS

(Rs.)

TENANCY STATUS / FARM SIZE		OWNER	TENANT	OWNER CUM TENANT	TOTAL
VERY SMALL	x	1588.1	1617.4	1119.9	1573.3
	a	816.6	432.3	321.4	800.7
SMALL	x	860.8	1078.0	728.6	863.4
	a	331.1	0.0	0.0	323.9
MEDIUM	x	874.7	-	-	874.7
	a	315.8	-	-	315.8
LARGE	x	699.9	-	-	699.9
	a	586.2	-	-	586.2
OVERALL	x	1334.3	1437.6	1022.1	1327.5
	a	755.2	436.4	327.4	760.5
CORRELATION COEFF.					

TABLE # 33

PRODUCTION COST OF SUGARCANE PER ACRE BY FARM SIZE AND ON WC

(Rs.)

TENANCY STATUS FARM SIZE		HEAD	MIDDLE	TAIL	TOTAL
VERY SMALL	x	1387.5	1594.3	1603.4	1573.3
	a	909.7	759.0	921.0	800.7
SMALL	x	974.1	821.3	1042.8	863.4
	a	196.3	336.4	369.8	324.0
MEDIUM	x	1128.8	792.1	827.2	874.7
	a	712.9	174.2	24.3	315.8
LARGE	x	362.2	812.3	-	699.9
	a	0.0	662.8	-	586.2
OVERALL	x	1186.9	1324.4	1456.4	1327.5
	a	744.6	743.2	859.7	760.5
CORRELATION COEFF.					

TABLE # 34

PRODUCTION COST OF SUGAR CANE PER ACRE BY FARM SIZE AND BY OWNER OPERATOR ON WC

(Rs.)

TENANCY STATUS FARM SIZE		HEAD	MIDDLE	TAIL	TOTAL
VERY SMALL	x	1387.5	1617.6	1603.4	1588.0
	a	909.7	778.9	921.1	816.5
SMALL	x	974.1	814.5	1042.8	860.8
	a	196.3	346.1	369.8	331.1
MEDIUM	x	1128.8	792.1	827.2	874.7
	a	712.9	174.2	24.3	315.8
LARGE	x	362.2	812.5	-	699.9
	a	0.0	662.8	-	586.2
OVERALL	x	1186.9	1333.9	1456.4	1334.0
	a	744.6	763.4	859.6	775.2
CORRELATION COEFF.					

TABLE # 35

PRODUCTION COST OF SUGAR CANE PER ACRE BY FARM SIZE AND BY TENANT OPERATOR ON WC

(Rs.)

TENANCY STATUS FARM SIZE		HEAD	MIDDLE	TAIL	TOTAL
VERY SMALL	x	-	1119.9	-	1119.9
	a	-	321.4	-	321.4
SMALL	x	-	728.5	-	728.5
	a	-	0.0	-	0.0
MEDIUM	x	-	-	-	
	a	-	-	-	
LARGE	x	-	-	-	
	a	-	-	-	
OVERALL	x	-	1021.1	-	1021.1
	a	-	327.3	-	327.3
CORRELATION COEFF.					

TABLE # 36

PRODUCTION COST OF SUGAR CANE PER ACRE BY FARM SIZE AND BY OWNER CUM TENANT OPERATOR

(Rs.)

TENANCH STATUS FARM SIZE		HEAD	MIDDLE	TAIL	TOTAL
VERY SMALL	x	-	1617.4	-	1617.4
	a	-	432.3	-	432.3
SMALL	x	-	1078.0	-	1078.0
	a		0.0	-	0.0
MEDIUM	x	-	-	-	-
	a	-	-	-	-
LARGE	x	-	-	-	-
	a	-	-	-	-
OVERALL	x	-	1437.6	-	1437.6
	a	-	436.4	-	436.4
CORRELATION COEFF.					

PART II

PART II

A. AGGREGATE FARM INCOME ANALAYSIS

The agriculture of the sample area can be termed as semi-subsistence farming which is basically a household enterprise. Small sized holdings predominate and use of family labour is a common feature of the production process. Barter trade in farm yard manure, payment for thresher and obligation labour (among others) is also widely prevalent. Barter method of payment is also in existence in the landlord-tenant relationship.

- Crops are grown firstly, with the aim of providing for home consumption, like wheat and maize and as shown by the data, major producers are small sized holdings; and secondly with the aim of earning income. Under the latter category come crops like tobacco and sugarcane. Vegetables and fruits are also important sources of income.
- Another major method of creating savings and source of income is the livestock/poultry category where money spent in livestock is an investment and outputs like milk, eggs, and meat bring in daily income.
- The bye-products of certain crops, like gur from sugarcane, are also a good source of income which basides selling at high market value is also relatively cheaper input wise, derived as it is from the retoon crop of sugarcane. Straw, a bye-product of wheat is either used as an input in the livestock sector or sold in the market. Bye-product derived from maize during the thinning activity is also used as animal feed. Tobacco stalks can be used as fuel, while farm yard manure serves an important fertilizer.

The farm household production activity is thus a complex and inter-related one where decisions regarding growing a certain combination of crops is dictated by various endogeneous as well as exogeneous factors. Endogeneous factors being the economic position and family structure of the farmer in terms of availability of family labour and other resources; and exogenous factors being the price of output in the market and availability and attainability of credit and all the necessary inputs.

Every farmer is a risk taker in the production stages but the kind of risks that he can take is also limited by the financial and economic position of the household. He cannot risk his family starving, due to high prices of grains in the market after harvest, while he grows cash crops, in the hope of earning more income. The crop pattern thus shows diversification where the farmer grows some grain crops and also cash crops and vegetables. The livestock/poultry plays a big role and acts as a buffer to absorb some of the risks where the crops fail or when agricultural market prices get depressed.

The farmer in the area thus aims at maximization of the overall utility for the farm family which is not necessarily through the maximization of the farm income by concentrating on certain crops only.

The farmer does respond positively to stimuli through government price policies for crops but price of output alone is insufficient to bring about any major shifts in the decision of the farmer regarding the cropping patter.

The availability and prices of inputs, like seed, fertilizer, pesticides, credit, transport facilitiy, role of extension agents, mechanization practiced, the type of soil, location of the market and availability of information all play an important role in influencing the decision of the farmer to grow a certain type of crop.

INCOME

In order to analyze the income of the farmer who produces different crops, and undertakes other income earning activities like livestock/poultry raising, the farm household's total agricultural output is considered covering the Rabi and Kharif season. Besides, there may be more than one type of crop grown on a piece of land where interculturing is done, and also more than one crop for the same grains in one season (e.g. maize). All these will be reflected in the Gross Income of the farmer for all crops and all agricultural activities for the year.

GROSS INCOME

The Gross Income here is shown in the aggregate form. This includes:-

- Income from crops (all crops), including vegetable and fruits
- Income from bye-products
- Income from livestock/poultry
  - o Milk
  - o Eggs
  - o Chicken
- Livestock value.

These together show the Gross Income of the farm. The crops are valued at the farm gate prices at the point of first sale. The bye-product that is used as an input in the production stage is excluded as it would lead to double counting when calculating the expenditure.

NET FARM INCOME

When the value of variable expenditure and fixed expenditure are subtracted from the Gross Income we arrive at the Net Income. The variable expenditure includes:

- Cost of Seed
- Cost of Fertilizer
- Cost of Tractor hire
- Cost of Thresher hire
- Labour
  - o Casual Labour(This includes manual as well as bullock labour)
  - o Family and Obligation Labour
    - + Labour for livestock
    - + Cost of poultry and livestock raising.

Seed and fertilizer are valued at the market price for the farmers, tractor hire is also costed at the price paid by the farmer while the thresher hire cost which is paid in kind is converted into its rupee value by multiplying the given quantity by the market price of the output.

Casual labour is costed by the wage paid to labour while there is no permanent labour. Obligation labour and family labour is costed through imputed values. The labour of women and children are convereted into adult male labour and then paid at Rs.20 per day since the bulk of the casual labour is paid Rs.20 and only in some cases it is paid Rs.25.

The cost of raising poultry and livestock is determined by summing up the cost of feed, medicine, etc.

- Livestock value is the difference between purchase and sale of livestock multiplied by its cost.
- Payment to artisan is taken at 1 per cent of the Gross Income.
- Land rent is an imputed value and considering that the province is a land scarce area, the rent is fixed at Rs.800 per acre which reflects the opportunity cost of land.
- Marketing Cost:- Marketing cost or marketing margin includes the cost of cartage, octroi, market fee, commission fee, and other charges. Where payments is made in kind, it is converted into rupees by multiplying the quantity by the market price of the commodity.
- Interest Rate:- Interest rate is the rate of interest paid by the farmer on borrowed capital. It is taken at 14 per cent after determining the rate of interest in the market for institutional as well as non-institutional sources.
- Depreciation is shown for machinery as well as livestock

Table 1 through table 4 show the aggregate farm income for all the farm activities by farm size and tenurial status. Gross mean includes income from all the crops, vegetables, fruits and bye-products. It is noticed that vegetables are more important for the smaller farm sizes and their value has an inverse relationship with the farm sizes while income from fruits and crop-bye-products increases with the size of holding. The value of fruit has an obvious relationship with the farm sizes since small farms do not have sufficient lands available with them which they can allocate to fruits/orchards, while the high value of bye-product is mainly due to the value of Gur which is very profitable (income-wise), and about 76 per cent of the large size farms grow sugarcane with relatively cheaper cost of production (c.f. table 32 part 1). Two versions of net income are shown. In the first version expenditures on all farm activities are shown except the imputed values of permanent family labour. While in the second version permanent family labour is also included.

Depreciation includes the depreciation on machinery as well as livestock. However it must be kept in mind that there is hardly any heavy machinery (except for a few cases where they own tractors).

Among the variable costs, the highest cost is that of casual labour followed by fertilizers and seed cost. When compared with casual labour, family (permanent) labour seems to play a minor role in the agricultural activities, in terms of costs (even though family labour has been valued by the same prices as casual labour. Interestingly the large farm sizes tend to use more family labour. One of the reasons for this is the fact that in the survey area labour from the very small size holdings normally move out to earn an income from non-farm activities (outside their own farms). The reason

becomes more obvious when we notice the mean net income for the very small size holdings which stands at under Rs.5,000 for all farm activities and it is not possible for the farm household to even eke out an existence at this income for the entire year especially when the mean family size is normally between 10 to 9 members (c.f. table 9 of interim report).

The mean net income thus stretches from Rs.4,916for the very small category to about Rs.71,691, for the large category of farmers when family labour cost is excluded and with family labour cost it stretches from about 4414 to about Rs.70,446 for the very small and large farm sizes respectively (Table 1).

The mean net income shows three distinct cohorts. It is under Rs.5,000for the very small size holdings, under Rs.20,000 for the small and medium size holding and about Rs.72,000 for the large size holdings. In any case the income ranges do not show the agriculture practiced to be a viable proposition for the farmers. But it must be kept in mind that agriculture here is not a commercial propsition but a set way of life of the people of the area. The farmer remains attached to the land and wedded to his traditional choice of crops and the cropping/agricultural practices of the area.

Table 2 through 5 shows a grim picture, where only in the case of owner operators is the net income higher than that of the overall mean net income for all size categories, where it stretches from Rs.6,605 to about Rs.95,065. For the tenant operator group, the net income of all categories go into the negative except for the very small group. There are no large size holdings in this category. In the case of owner-cum-tenant group only the small size holdings (5 - 21.5 acres) show positive mean net income.

However some of the factors that deserve a mention are that barter system in this sector is widely practiced in the input as well as output market which helps the farmer to tide over critical times. Moreover payment for land is also made in kind and there is a close inter-relationship between the owner and tenant in terms of agricultural decision making.

B. PRODUCTIVITY OF MAJOR CROPS

The productivity of major crops is determined by calculating the per acre income and expenditure of the major crops i.e. wheat, maize and sugarcane.

The productivity of wheat is shown in table 5 through table 8. In the aggregate (table 5) the large farms show better mean net income from the crop where their cost of production is much lower. The gross income shows a difference of about Rs.157 while the difference in expenditure between these two categories is much higher for the smaller size holdings. However for the tenant operators and owner-cum tenant operators the very small size holdings seem to perform relatively better productivity wise. The productivity of maize is shown in table 9 through 12.

The very small size holdings are not too far behind the large holdings in terms of per acre net income (with only casual labour expenditure). However for this particular crop the smaller farm size holdings use relatively more family (permanent) labour than the large farm category. Moreover the smaller size holdings earn more income from bye-products than from the crop itself as compared to the large size holdings.

Table-1

FARM INCOME AND EXPENDITURE BY FARM SIZE
(AGGREGATE)

(in Rs.)

	Very Small (0 - 5)	Small (5-12.5)	Medium (12.5-25)	Large (> 25)
Vegetable Income	179.49	76.00	44.44	.00
Fruit Income	1470.77	2262.67	2316.67	11950.00
Crops Income	8657.44	23047.30	43722.23	83674.88
Crop Bye-Product Income	3682.48	6858.29	9360.94	25448.33
Gross Income	13990.18	32244.26	55444.29	121073.22
1) Net Income	4916.08	17099.88	19712.19	71691.77
2) Net Income	4413.83	15876.26	17797.55	70445.84
Depreciation	3810.30	5928.58	15039.72	20230.00
Tractor Cost	263.98	423.22	859.55	1266.59
Casual Labour Cost	1304.14	2929.28	7079.31	17730.94
Permanent Labour Cost	502.25	1223.62	1914.64	1245.93
Thresher Cost	146.11	317.52	479.63	741.03
Bullock Labour	49.71	95.10	156.31	209.42
Seed Cost	793.86	769.47	1117.03	1434.75
Fertilizer Cost	1138.00	1559.35	2219.72	2626.50
Pesticide Cost	367.92	657.17	1396.12	1300.00
Transportation Cost	165.65	345.01	689.78	90.00
Interest Rate	894.52	1857.23	6140.49	2541.49
Paid to Artisans	139.90	322.44	554.44	1210.73
Cost of Land	2466.46	6374.61	12357.78	25200.00
1) Expenditure	9074.10	15144.38	35732.10	49381.45
2) Expenditure	9576.35	16368.01	37646.74	50627.37

Table-2

FARM INCOME AND EXPENDITURE BY FARM SIZE AND BY OWNER OPERATOR

(in Rs.)

	Very Small (0 - 5)	Small (5-12.5)	Medium (12.5-25)	Large (> 25)
Vegetable Income	131.25	.00	.00	.00
Fruit Income	1680.92	2789.80	2783.33	7800.00
Crops Income	9628.38	30330.38	61460.98	96825.70
Crop Bye-Product Income	4214.77	10209.00	10334.58	30518.00
Gross Income	15655.32	43329.17	74578.90	135143.70
1) Net Income	6605.29	26427.90	31119.11	95065.84
2) Net Income	6139.57	25072.03	30118.98	93674.69
Depreciation	3930.09	6476.94	18878.75	15946.00
Tractor Cost	293.92	533.00	1192.24	1319.91
Casual Labour Cost	884.26	2618.94	7683.41	13269.49
Permanent Labour Cost	465.72	1355.87	1000.14	1391.15
Thresher Cost	135.95	288.74	544.44	700.23
Bullock Labour	53.98	130.34	173.10	231.84
Seed Cost	760.23	803.67	1287.77	1517.70
Fertilizer Cost	1215.76	1886.56	2612.32	2564.80
Pesticide Cost	423.61	889.55	1742.10	1336.00
Transportation Cost	111.02	138.06	116.67	100.00
Interest Rate	1084.67	2702.79	8483.20	1740.45
Paid to Artisans	156.55	433.29	745.79	1351.44
Cost of Land	2393.47	6495.84	12573.33	25600.00
1) Expenditure	9050.03	16901.27	43459.79	40077.86
2) Expenditure	9515.75	18257.14	44459.92	41469.01

Table -3

FARM INCOME AND EXPENDITURE BY FARM SIZE AND BY TENANT OPERATOR

(in Rs.)

	Very Small (0 - 5)	Small (5-12.5)	Medium (12.5-25)	Large (> 25)
Vegetable Income	375.00	106.67	.00	
Fruit Income	57.69	.00	.00	
Crops Income	5427.51	8198.01	5723.73	
Crop Bye-Product Income	689.15	166.87	46.67	
Gross Income	6549.36	8471.54	5770.40	
1) Net Income	556.68	-631.42	-8098.10	
2) Net Income	-53.00	-1684.92	-10059.97	
Depreciation	2884.62	4888.91	7100.00	
Tractor Cost	174.32	200.24	153.33	
Casual Labour Cost	518.25	993.37	1093.52	
Permanent Labour Cost	609.68	1053.50	1961.88	
Thresher Cost	183.97	466.67	303.33	
Bullock Labour	20.69	27.83	145.92	
Seed Cost	607.19	520.27	876.50	
Fertilizer Cost	827.38	851.13	1139.33	
Pesticide Cost	152.88	160.67	653.33	
Transportation Cost	320.48	710.03	2081.67	
Interest Rate	237.39	199.12	263.85	
Paid to Artisans	65.49	84.72	57.70	
Cost of Land	2682.77	6640.00	11200.00	
1) Expenditure	5992.68	9102.96	13868.50	
2) Expenditure	6602.36	10156.46	15830.37	

Table -4

FARM INCOME AND EXPENDITURE BY FARM SIZE AND BY OWNER-CUM-TENANT OPERATOR

(in Rs.)

	Very Small (0 - 5)	Small (5-12.5)	Medium (12.5-25)	Large (> 25)
Vegetable Income	311.76	372.73	266.67	.00
Fruit Income	1752.94	3000.00	2766.67	32700.00
Crops Income	4915.91	10853.55	10765.73	17920.80
Crop Bye-Product Income	283.35	656.18	80.67	100.00
Gross Income	7263.97	14882.46	13879.73	50720.80
1) Net Income	-939.56	5509.71	-3571.00	-7477.46
2) Net Income	-1604.13	4643.20	-9096.42	-7997.25
Depreciation	4155.00	4903.64	7623.33	41650.00
Tractor Cost	133.38	238.29	235.00	1000.00
Casual Labour Cost	494.07	771.81	1561.49	2337.08
Permanent Labour Cost	664.57	866.52	5525.42	519.79
Thresher Cost	179.12	242.35	396.67	945.00
Bullock Labour	55.93	29.85	99.58	97.29
Seed Cost	1380.03	550.57	674.58	1020.00
Fertilizer Cost	917.76	1067.55	1729.67	2935.00
Pesticide Cost	198.82	299.09	755.00	1120.00
Transportation Cost	417.35	769.09	1590.33	40.00
Interest Rate	199.43	351.69	2646.28	6546.68
Paid to Artisans	72.64	148.82	138.80	507.21
Cost of Land	2788.24	5472.73	12533.33	23200.00
1) Expenditure	8203.53	9372.75	17450.73	58198.26
2) Expenditure	8868.10	10239.26	22976.15	58718.05

The productivity of sugarcane is shown in table 13 through 16. In terms of net income the large size holdings are better off and their overall mean expenditure is also much smaller. However the very small and small category of farmers do better in terms of income from bye-products. One of the reason is that the price of Gur is much higher than the price of sugarcane and implicit in this is the fact that those who produce better crop tend to sell it more as Gur rather than as sugarcane to the mill.

There are no medium and large size producers of sugarcane in the tenant and owner-cum-tenant category. The medium and large producers are found only in the owner operator category of farmers.

We have taken output per acre of cultivated land as the measure of efficiency through productivity, where the large farms tend to show better results. However there are two points to be kept in view. Firstly, the size distribution of the sample, where there are only 7 cases of the large farms and 17 cases of medium farms while there are 195 very small farms and 75 small size farms in the sample. The size distribution of the sample selected reflects the size distribution of farms in the province and hence was the reason for selecting this sample.

However, when comparisons are made between them on the mean values, the smaller sample size i.e. large farms, shows a more favourable result, and hence large farm sizes seem to be more efficient in this study.

Secondly, the large farm sizes also seem to be more cost effective than the smaller farms due to the combination of crops they select, which are normally those that have higher net returns e.g. sugarcane as compared to wheat. Moreover where they have orchards they also grow crops between the rows of trees and thus get more output from the same land using less input. Those who practice interculture also benefit from using the same fertilizer, water, land, etc. for both the crops that yield higher incomes. Although in terms of yield per acre for the major crops the small farms lag slightly behind the large farms, their cost of production is much higher. The small farmers make adjustments through the sale of the crop and sale of the bye-products and thus try to maximize the farm income.

Thus there are various factors that influence the productivity of the farmer. The major ones discussed have been the types of crops grown; variable and fixed expenditure on the crop; cultural practices in vogue; availability of water (even though it does not carry a price); prices of inputs, outputs and bye-product; availability of inputs and the tenurial system practiced; and the implicit impact of these on the farm sizes.

It has been noticed that except for one case all the large farms are in the owner operator category and there are no tenant operator in the large farm group.

Besides these variables there are also other variables that influence the productivity of the farmer, these include the size and age distribution of the household where the larger the number of men in the active working age group, the higher the availability of family

labour for the farm and this group of labour is not paid cash income and thus the nominal cost of production will be lower. The characteristics of the sample farms and respondents have shown the large farms to have relatively greater percent of males in the working age group as compared to the other size holdings.

Location on the water course and availability of water are also important determinants of the type of crops that can be grown. Even in this respect the large farms are better off than the smaller size holdings where only 29 per cent of the large farms are located at the tail while 71 per cent are located at the head and in the middle of the water course. They also have the highest water availability in the sample.

The education level of the farm family also has a direct bearing on their ability to absorb and practice new methods or better ways of utilizing the present resources owned through better decision-making.

Finally, the location of the farms in terms of distance from the infrastructure and institutions has a direct bearing on the productivity and cost effective position of the farmers. Where there are good metalled roads, fertilizer suppliers, extension agents, commercial banks and other input suppliers close to the farms, those farmers produce better results at lower relative costs.

There are thus a variety of factors other than the size of holdings that do influence the productivity of the farmers and in this study since the number of large farmers selected is very small and they already possess these other facilities, the results thus show them to be better placed in terms of productivity.

Table-5

PRODUCTIVITY OF WHEAT BY FARM SIZE

(in Rs.)

	Very Small (0 - 5)	Small (5 - 12.5)	Medium (12.5 - 25)	Large (> 25)
Crops Income	1802.72	1687.83	1712.14	1691.27
Crop Bye-Product Income	253.86	233.44	219.79	208.33
Gross Income	2056.58	1921.27	1931.93	1899.60
1) Net Income (Casual Labour)	1452.97	1479.77	1594.83	1667.49
2) Net Income (Permanent Labour)	1362.78	1384.18	1539.13	1631.06
Tractor Cost	2.11	1.56	1.86	1.61
Casual Labour Cost	101.14	76.37	111.38	76.45
Permanent Labour Cost	99.18	95.59	55.65	36.44
Bullock Labour	3.73	5.90	.58	1.57
Seed Cost	77.49	56.14	8.22	10.09
Thresher Cost	111.49	94.75	80.33	63.22
Fertilizer Cost	306.85	203.72	134.73	78.24
Pesticide Cost	.80	3.05	.00	.93
1) Expenditure (Casual Labour)	603.61	441.50	337.10	232.11
2) Expenditure (Permanent Labour)	693.80	537.09	392.75	268.54

Table-6

PRODUCTIVITY OF WHEAT BY FARM SIZE
OWNER OPERATOR

(in Rs.)

	Very Small (0 - 5)	Small (5 - 12.5)	Medium (12.5 - 25)	Large (> 25)
Crops Income	1801.40	1760.45	1776.68	1676.72
Crop Bye-Product Income	250.99	227.36	215.08	207.14
Gross Income	2052.39	1987.81	1991.76	1883.86
1) Net Income (Casual Labour)	1412.31	1531.47	1608.38	1667.65
2) Net Income (Permanent Labour)	1327.60	1445.17	1559.51	1626.57
Tractor Cost	2.62	2.21	2.63	1.93
Casual Labour Cost	98.88	70.52	135.09	64.31
Permanent Labour Cost	84.71	86.30	48.87	41.08
Bullock Labour	4.95	9.16	.81	1.88
Seed Cost	80.65	53.85	4.41	12.11
Thresher Cost	112.10	91.77	83.31	53.86
Fertilizer Cost	339.83	224.08	157.12	81.00
Pesticide Cost	1.06	4.74	.00	1.12
1) Expenditure (Casual Labour)	640.08	456.34	383.38	216.21
2) Expenditure (Permanent Labour)	724.79	542.64	432.25	257.29

Table -7

PRODUCTIVITY OF WHEAT BY FARM SIZE
TENANT OPERATOR

(in Rs.)

	Very Small (0 - 5)	Small (5 - 12.5)	Medium (12.5 - 25)	Large (> 25)
Crops Income	1718.72	1434.73	1404.67	
Crop Bye-Product Income	245.90	227.27	215.38	
Gross Income	1964.62	1662.00	1620.05	
1) Net Income (Casual Labour)	1501.70	1272.95	1461.40	
2) Net Income (Permanent Labour)	1388.49	1169.40	1383.90	
Tractor Cost	.47	.26	.00	
Casual Labour Cost	105.17	107.04	9.36	
Permanent Labour Cost	113.20	103.54	77.50	
Bullock Labour	.00	.00	.00	
Seed Cost	66.52	53.84	12.50	
Thresher Cost	106.55	86.69	95.13	
Fertilizer Cost	184.22	141.23	41.67	
Pesticide Cost	.00	.00	.00	
1) Expenditure (Casual Labour)	462.92	389.06	158.65	
2) Expenditure (Permanent Labour)	576.13	492.60	236.15	

Table -8

PRODUCTIVITY OF WHEAT BY FARM SIZE
OWNER-CUM-TENANT OPERATOR

(in Rs.)

	Very Small (0 - 5)	Small (5 - 12.5)	Medium (12.5 - 25)	Large (> 25)
Crops Income	1941.47	1722.72	1658.95	1764.00
Crop Bye-Product Income	288.29	267.77	241.57	214.29
Gross Income	2229.76	1990.49	1900.52	1978.29
1) Net Income (Casual Labour)	1694.09	1540.91	1629.60	1666.71
2) Net Income (Permanent Labour)	1596.61	1416.45	1561.37	1653.50
Tractor Cost	.64	.57	.00	.00
Casual Labour Cost	112.50	59.55	84.56	137.14
Permanent Labour Cost	97.48	124.46	68.23	13.21
Bullock Labour	.00	.00	.00	.00
Seed Cost	69.79	69.08	20.63	.00
Thresher Cost	114.36	118.47	58.56	110.00
Fertilizer Cost	238.38	201.92	107.18	64.43
Pesticide Cost	.00	.00	.00	.00
1) Expenditure (Casual Labour)	535.67	449.58	270.93	311.57
2) Expenditure (Permanent Labour)	633.16	574.04	339.15	324.79

Table -9

PRODUCTIVITY OF MAIZE BY FARM SIZE

(in Rs.)

	Very Small (0 - 5)	Small (5 - 12.5)	Medium (12.5 - 25)	Large (> 25)
Crops Income	1577.17	1463.60	1939.75	1831.83
Crop Bye-Product Income	108.93	81.92	67.65	5.61
Gross Income	1686.10	1545.52	2007.40	1837.45
1) Net Income (Casual Labour)	1082.43	904.63	1114.35	1105.06
2) Net Income (Permanent Labour)	639.17	495.08	486.69	951.47
Tractor Cost	152.45	88.13	131.02	62.83
Casual Labour Cost	111.89	240.85	574.19	592.91
Permanent Labour Cost	443.26	409.55	627.66	153.60
Bullock Labour	5.06	8.96	2.67	3.63
Seed Cost	37.18	9.44	15.14	3.54
Fertilizer Cost	295.24	291.48	169.03	69.47
Pesticide Cost	1.86	2.03	.00	.00
1) Expenditure (Casual Labour)	603.67	640.89	893.05	732.38
2) Expenditure (Permanent Labour)	1046.94	1050.45	1520.71	885.98

Table--10

PRODUCTIVITY OF MAIZE BY FARM SIZE
OWNER OPERATOR

(in Rs.)

	Very Small (0 - 5)	Small (5 - 12.5)	Medium (12.5 - 25)	Large (> 25)
Crops Income	1646.01	1650.31	2399.87	1975.29
Crop Bye-Product Income	94.57	57.24	104.55	6.74
Gross Income	1740.58	1707.55	2504.42	1982.02
1) Net Income (Casual Labour)	1109.90	1005.77	1308.58	1160.43
2) Net Income (Permanent Labour)	716.19	701.37	1128.07	991.59
Tractor Cost	161.27	92.09	171.12	63.40
Casual Labour Cost	117.48	273.13	797.12	679.69
Permanent Labour Cost	393.71	304.40	180.51	168.84
Bullock Labour	4.21	10.99	.48	1.68
Seed Cost	35.67	7.92	24.95	4.25
Fertilizer Cost	309.70	314.70	202.17	72.56
Pesticide Cost	2.35	2.95	.00	.00
1) Expenditure (Casual Labour)	630.68	701.78	1195.84	821.59
2) Expenditure (Permanent Labour)	1024.39	1006.18	1376.34	990.43

Table-11

PRODUCTIVITY OF MAIZE BY FARM SIZE
TENANT OPERATOR

(in Rs.)

	Very Small (0 - 5)	Small (5 - 12.5)	Medium (12.5 - 25)	Large (> 25)
Crops Income	1150.15	1066.83	771.20	
Crop Bye-Product Income	221.83	220.40	.00	
Gross Income	1371.98	1287.23	771.20	
1) Net Income (Casual Labour)	880.93	759.65	483.01	
2) Net Income (Permanent Labour)	334.93	121.07	-251.27	
Tractor Cost	126.04	90.97	35.00	
Casual Labour Cost	91.04	211.94	147.08	
Permanent Labour Cost	546.00	638.58	734.27	
Bullock Labour	4.85	1.21	4.44	
Seed Cost	59.02	17.82	.00	
Fertilizer Cost	210.10	205.64	101.67	
Pesticide Cost	.00	.00	.00	
1) Expenditure (Casual Labour)	491.05	527.58	288.19	
2) Expenditure (Permanent Labour)	1037.05	1166.15	1022.47	

Table -12

PRODUCTIVITY OF MAIZE BY FARM SIZE
OWNER-CUM-TENANT OPERATOR

(in Rs.)

	Very Small (0 - 5)	Small (5 - 12.5)	Medium (12.5 - 25)	Large (> 25)
Crops Income	1558.00	1035.73	1421.20	1114.56
Crop Bye-Product Income	77.19	33.33	.00	.00
Gross Income	1635.20	1069.07	1421.20	1114.56
1) Net Income (Casual Labour)	1121.42	587.36	1033.53	828.23
2) Net Income (Permanent Labour)	357.40	-56.37	-1127.09	750.85
Tractor Cost	107.50	65.28	80.00	60.00
Casual Labour Cost	89.51	118.35	183.89	159.00
Permanent Labour Cost	764.02	643.73	2160.62	77.38
Bullock Labour	13.53	8.52	8.89	13.33
Seed Cost	18.92	6.67	.00	.00
Fertilizer Cost	284.32	282.90	114.89	54.00
Pesticide Cost	.00	.00	.00	.00
1) Expenditure (Casual Labour)	513.78	481.71	387.67	286.33
2) Expenditure (Permanent Labour)	1277.80	1125.44	2548.29	363.71

Table-13

PRODUCTIVITY OF SUGARCANE BY FARM SIZE

(in Rs.)

	Very Small (0 - 5)	Small (5 - 12.5)	Medium (12.5 - 25)	Large (> 25)
Crops Income	2892.94	2804.96	3469.86	3024.92
Crop Bye-Product Income	2803.95	2864.54	1875.45	2139.02
Gross Income	5696.89	5670.49	5345.31	5163.94
1) Net Income (Casual Labour)	4474.36	5139.17	4893.91	5026.28
2) Net Income (Permanent Labour)	4468.44	5137.39	4888.14	5026.04
Tractor Cost	42.76	19.40	23.33	1.84
Casual Labour Cost	328.76	186.09	168.09	63.58
Permanent Labour Cost	5.92	1.78	5.77	.25
Bullock Labour	26.54	18.09	14.70	4.39
Seed Cost	516.89	187.51	147.95	47.71
Fertilizer Cost	296.02	118.48	96.50	20.14
Pesticide Cost	11.56	1.26	.83	.00
1) Expenditure (Casual Labour)	1222.54	531.32	451.40	137.66
2) Expenditure (Permanent Labour)	1228.46	533.10	457.17	137.90

Table-14

PRODUCTIVITY OF SUGARCANE BY FARM SIZE
OWNER OPERATOR

(in Rs.)

	Very Small (0 - 5)	Small (5 - 12.5)	Medium (12.5 - 25)	Large (> 25)
Crops Income	2819.83	2735.03	3469.86	3024.92
Crop Bye-Product Income	2924.96	2962.87	1875.45	2139.02
Gross Income	5744.79	5697.90	5345.31	5163.94
1) Net Income (Casual Labour)	4493.01	5176.00	4893.91	5026.28
2) Net Income (Permanent Labour)	4486.97	5174.13	4888.14	5026.04
Tractor Cost	45.25	18.52	23.33	1.84
Casual Labour Cost	337.15	184.44	168.09	63.58
Permanent Labour Cost	6.04	1.88	5.77	.25
Bullock Labour	27.28	18.54	14.70	4.39
Seed Cost	528.33	183.73	147.95	47.71
Fertilizer Cost	301.55	115.54	96.50	20.14
Pesticide Cost	12.23	1.14	.83	.00
1) Expenditure (Casual Labour)	1251.78	521.90	451.40	137.66
2) Expenditure (Permanent Labour)	1257.82	523.77	457.17	137.90

Table-15

PRODUCTIVITY OF SUGARCANE BY FARM SIZE
TENANT OPERATOR

(in Rs.)

	Very Small (0 - 5)	Small (5 - 12.5)	Medium (12.5 - 25)	Large (> 25)
Crops Income	4123.00	2709.40		
Crop Bye-Product Income	900.00	2484.00		
Gross Income	5023.00	5193.40		
1) Net Income (Casual Labour)	4165.27	4266.38		
2) Net Income (Permanent Labour)	4163.70	4266.38		
Tractor Cost	.00	.00		
Casual Labour Cost	206.69	320.02		
Permanent Labour Cost	1.57	.00		
Bullock Labour	16.25	16.00		
Seed Cost	390.63	375.00		
Fertilizer Cost	244.17	216.00		
Pesticide Cost	.00	.00		
1) Expenditure (Casual Labour)	857.73	927.02		
2) Expenditure (Permanent Labour)	859.30	927.02		

Table-16

PRODUCTIVITY OF SUGARCANE BY FARM SIZE
OWNER-CUM-TENANT OPERATOR

(in Rs.)

	Very Small (0 - 5)	Small (5 - 12.5)	Medium (12.5 - 25)	Large (> 25)
Crops Income	4168.57	5243.13		
Crop Bye-Product Income	604.44	.00		
Gross Income	4773.02	5243.13		
1) Net Income (Casual Labour)	4145.66	4796.53		
2) Net Income (Permanent Labour)	4140.22	4796.11		
Tractor Cost	.00	68.00		
Casual Labour Cost	169.72	123.38		
Permanent Labour Cost	5.43	.42		
Bullock Labour	12.23	5.56		
Seed Cost	273.24	125.00		
Fertilizer Cost	172.17	118.00		
Pesticide Cost	.00	6.67		
1) Expenditure (Casual Labour)	627.36	446.60		
2) Expenditure (Permanent Labour)	632.79	447.03		

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GOVERNMENT OF PAKISTAN
MINISTRY OF FOOD, AGRICULTURE & COOPERATIVES
FOOD SECURITY MANAGEMENT PROJECT
(ECONOMIC & POLICY ANALYSIS)

STUDY ON
FARM PRODUCTIVITY BY SIZE & TENURE AND ESTIMATION OF DOMESTIC RESOURCE COST FOR MAJOR CROPS (PUNJAB PROVINCE)

MAY, 1991.

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INTRODUCTION

BACKGROUND:

Development is not a simple phenomenon, but it is rather a multi-dimensional process involving reorganization and reorientation of the political, economic and social systems. In overwhelmingly agricultural and developing countries like that of Pakistan, development aims at a progressive improvement in the level of living, to be achieved, amongst others, through increased output, productivity and income of the farming community. The agricultural policy framework of the Government of Pakistan has always been directed towards bringing about such socio-economic and technological changes as a means to modernize the sector of agriculture. This commitment has been regularly reaffirmed in the successive Five year plans, perspective plans and the recent report of the National Commission on Agriculture.

Unfortunately, however, there has been very little economic analysis programmes to document, on an annual basis, variation in farm families incomes together with the underlying variables by regions on a comparable accounting basis for objective comparisons of the farm population economic welfare. Without this kind of basic information especially relating to input-output relationships, the policy makers have been disadvantaged in devising new policy solutions for raising farm income. This basic problem in generating this information has been a lack of systematic measures of farm income and estimates of the financial impacts

of alternative policies on farm incomes.

In view of the importance and high priority being given by the government to add to the capacity of the agriculture sector for improved performance, the Ministry of Food and Agriculture, Government of Pakistan, in collaboration with US-AID initiated a very well planed and phased programme of "National Farm Income and cost Analysis" through a series of farm level studies. The major objective of the programme has been to develop estimates of farm income and costs for different farm categories on zonal, provincial and national basis. The envisaged series of studies under this programme will be completed in five phases.

The first phase has been devoted to prepare farm budgets regarding the cost of production of major crops and the gross and net income that accrue to the farmers. In so far as the farm budgeting is concerned it is a method of analysing plans for the use of agricultural resources at the command of the farmer. A farm plan is a programme of the total farm activity of a farmer drawn in advance. A farm plan should show the crops to be grown; the practices to be followed in their production; the combinations of other enterprizes; use of labour, the investments to be made in equipment and buildings and similar other details. The impression of such a farm plan in monetary terms by estimation of receipts, expenses and net income, is called budgeting. In other words, farm budgeting is a process of estimating costs, returns and net profit of a

farm or a particular enterprise. Further, farm budgeting plays a pivotal role in preparing alternative farm plans. We can, therefore, say that farm budgets act as a foundation stone for farm planning which is an essential element and plays an extremely important role in improved and sustainable agriculture in the long-run. As far as farm costs are concerned, these are the money value of goods and services acquired and used on the farm for production of crops and livestock. Cost items include expenditure incurred on various types of farm inputs like, land, human and bullock labour, capital, seed, fertilizer, pesticides, irrigation water and farm equipment, etc.

II. METHODOLOGY

2.1 Universe

This type of study demands that it should be conducted in various crop ecological zones of the Punjab Province. However, due to limitations of funds, the present study was confined to the mixed cropping system zone of the Punjab Province. This zone has unique characteristics with regard to climate, cropping patterns, rainfall, soils, etc. Its height from the sea level is 250 meters. Rainfall varies from 200 to 400 mm. Climate in general is semi and subtropical continental with means maximum temperature of 42 C^0. The mean minimum temperature ranges from 4.5 C^0 to 5.5 C^0. Soil type is haplic yermosols. Sugarcane, cotton and kharif fodders are the major crops during the kharif season, while wheat and

rabi fodders are the important crops during the rabi season. About 92.5% of farm land is canal irrigated.

2.2 Sampling

2.2.1 Selection of Districts:

In the mixed cropping zone, the study was conducted in the Jhang and Toba Tek Singh districts. The district of Jhang lies from 30 - 38 to 32 - 00 north latitude and 71^0 - 37^0 and 73^0 - 13^0 east latitudes, while Toba Tek Singh district lies between 31.17 north latitude and 72.30 east latitude. The total area of Jhang district is 8,809 sq. kilometers and that of Toba Tek Singh district 3260 sq. kilometers.

The total population of the Jhang district is 1978 thousands, of which 22.40% is urban and 76.60% rural. The total population of T.T. Singh is 1127 thousands, of which 16.5% urban and 83.5% rural.

Jhang district comprises 2432 chaks/mauzas with a cropped area of 724 thousand hectares. T.T. Singh district, on the other hand, comprises 539 chaks/mauzas with a cropped area of 356 thousand hectares.

2.2.2 Selection of Villages:

Two clusters of villages, one each from Jhang and T.T. Singh districts were selected for this study. The cluster in the Jhang district comprised chak No.256/J.B, 160/J.B., 168/J.B. and 251/J.B. while in the T.T. Singh district, this cluster consisted of Chak No.316/G.B., 315/G.B., 407/J.B. and 409/J.B.

2.2.3 Selection of Respondents:

In so far as sampling of the respondents is concerned, first of all, the farmers in each of the selected villages were enlisted in an ascending order with respect to the farm size. Secondly, a proportionate sample was drawn adopting the stratified random sampling technique and this very statistical technique was employed owing to the following advantages.

a) It increases the precision of the over-all population estimates.

b) The sub-division of the population results in relatively homogeneous groups as it minimises heterogeneity.

c) It reduces the standard error.

The sample of respondents thus drawn is shown in Table 1.

The required primary data on various aspects of farming business for each of the sampled farmers were collected by interviewing the sampled respondents using five sets of well-designed and pre-tested interviewing schedules. In all, six visits were made to the respondents during the period September, 1988 to April 1990. The data were subsequently processed and analysed and farm budgets for the major crops (i.e. wheat, sugarcane, maize and cotton) were prepared and cost of production was computed on per acre basis which comprised the following items.

TABLE NO. 1

DISTRIBUTION OF RESPONDENTS BY FARM SIZE AND TENURIAL STATUS

	Farm Size			
Tenure type	Small 0-12.5 Acres	Medium 12.5-25.00 Acres	Large 25 Acres & above	Total
Owner Operators	166	29	17	212
Owner-cum-tenants	49	14	13	76
Tenants	15	2	1	18
Total	230	45	31	306

2.3 Cost Estimation Procedure

Estimation of the cost of production of a given farm enterprise is a complex issue. It involves estimation and allocation of the cost of fixed resources available on farm. Pakistan is diversified agriculturally, encompassing a host of all-the-year-round farm enterprises, all of which are interdependent and interrelated. Together they utilize the services of many cost items in varying proportions and intensities. Unless all the necessary details are skillfully mapped, the cost of fixed items, which represent the major portion of the total farm expenditure, cannot be appropriately allocated to various farm enterprises.

In the study in hand, the procedure adopted in estimating and apportioning cost of various items is as under.

2.3.1 Labour Input:

Farm labor, which was estimated in hours per acre, is of four types, each valued and utilized in a unique fashion.

2.3.1.1 Family Labour:

It has no price tag, nor can any value be offered to a family worker. It has been priced differently in different countries. In this study opportunity cost of family labor was taken to be equal to the earnings of a permanent hired laborer, however, where labor cost is a significant portion of the total cost, MVPs of the family labor was the basis of imputing the cost of the family labor. This was done on the

assumption that a family labor (which included male, female and children who were to be converted into male adult units and priced at market wage) unit could perfectly substitute for a permanent hired labor unit in an effective and satisfactory manner. Labor units of members of the family were, thus, estimated on the basis of actual time devoted to farm works. Further, while estimating contribution of family labor, sex and age of the members of family were also kept in view; a male member between 12-16 years of age was considered equivalent to half adult unit and that of 16 years or above, was taken as full adult unit. Females were considered equivalent to 0.75 unit of the corresponding age group of males. This was done owing to the varying capacity, of doing a job, of different age groups. Finally, the total labor hours were imputed and per acre cost of labour in hours and consequently in rupees by multiplying hours with per hour wages in rupees was determined.

2.3.1.2 Permanent Hired Labor:

The cost incurred on the permanently hired labor was estimated by taking into account the actual cash payments plus the value of the supplementary payments in kind. Total cost of the family labor and permanent hired labor was apportioned to each activity commensurate with the time spent on it.

2.3.1.3 Casual Hired Labor:

The actual payment made, in cash/or and in kind, to casual hired labourers engaged in the farm for different

agricultural operations for instance, harvesting and sowing operations, was recorded and allocated to the crop for which it was specifically used.

2.4 Capital Input

2.4.1 Seed:

Information was collected regarding the seed rate and it was taken in kgs per acre. Cost incurred on seed of a fore said major crops was computed as if the seed was purchased according to the actual quantities used and according to the amount of money paid by the farmers at the prevailing market price.

2.4.2 Chemical Fertilizer:

The value of the fertilizer together with the cost of transportation and application was charged directly to the concerned crop. Moreover, nitrogen and phosphorous used was dealt with separately and estimated in nutrient kgs. per acre.

2.4.3 Draught Animals:

Bullock power plays an extremely important role in the process of crop production, generally, at large farms and particularly and more significantly at small and medium sized farms. The charges for draught animals input included interest and depreciation on the capital value of draught animals, sheds and mangers, etc. Maintenance cost comprised the cost of feed, labor and other such variable items. Cost of draught animals was charged to each crop, in bullock hours per acre, in proportion to the time spent on each crop.

2.4.4 Mechanical Power:

The total mechanical traction power employed in the process of crop production was computed on per acre basis separately as hired and owned. Further, the cost of total bullock and tractor hours was calculated by using the per hour prevailing price in the project area.

2.5 Irrigation Water Charges, Land Revenue, Water Rates and Other Taxes

The actual amount paid to the government for each crop was debited to various crops. In so far as irrigation water charges were concerned, the cost incurred on this vital input was estimated by calculating the irrigation charges separately in hours per acre. Moreover, the conventional current per hour price of tubewell water in the project area was used while computing the actual cost incurred in rupees on this very input.

2.6 Land Input

The rent prevailing in the area was taken as the opportunity cost of the land. The per acre allocation to major crops was done on the basis of time a given crop occupied the land.

2.7 Payment to Artisans

Payment made to artisans for the repair of hand tools and implements was also taken into account. Total payments made to artisans were debited to major crops in proportion to the cost of interest and depreciation of tools and implements allocated to various enterprises. Finally, the total cost of production

of a certain crop was computed by taking the simple averages and summing up. As a final measure, the percentage of distribution of farm expenditure by items of cost was estimated to determine the contribution of different farm inputs.

2.8 Estimation of Gross and Net Income

In the context of the methodology given in the proceeding pages, cost per acre and per unit of output for each crop namely wheat, cotton, sugarcane and maize was estimated. Gross income, gross margin and net income per acre for each crop was estimated by taking into account the value of the main as well as the by-products. For the estimation of these values, farm gate sale prices for the study year (i.e. 1989-90) were used. Moreover, the actual yield during the year was used to estimate the gross income per harvested acre and finally the net income was calculated by deducting the total cost of production of a particular crop from the gross income. Gross margin per acre was estimated by deducting the total variable cost from the gross income. The crop enterprise budgets thus prepared by using the methodology outline above and presented in table 2 to 105.

Table-2

ENTERPRISE BUDGET OF WHEAT ON SMALL FARMS IN DISTRICT TOBA TEK SINGH.
(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	34.14	20.71	706.94	28.59
B) TRACTOR TIME	Hrs	1.16	--	78.33	3.17
a) OWNED	Hrs	0.52	65.00	34.01	1.38
b) HIRED	Hrs	0.63	70.00	44.32	1.79
C) SEED	Kgs	42.31	2.06	87.26	3.53
D) FERTILIZER	Kgs	50.05	--	318.50	12.88
a) NITROGEN	Kgs	36.50	5.74	209.49	8.47
b) PHOSPHOROUS	Kgs	13.56	8.04	109.01	4.41
E) IRRIGATION TIME	Hrs	14.80	--	190.87	7.72
i) CANAL (C)	Hrs	12.61	--	93.71	3.79
a) OWNED	Hrs	9.48	0.00	0.00	0.00
b) PURCHASED	Hrs	3.12	30.00	93.71	3.79
ii) TUBE WELL(T.W) TIME	Hrs	0.55	--	13.47	0.54
a) OWNED	Hrs	0.11	22.00	2.32	0.09
b) HIRED	Hrs	0.45	25.00	11.15	0.45
iii) C+T.W TIME	Hrs	1.64	--	83.69	3.38
a) OWNED	Hrs	0.20	22.00	4.31	0.17
b) HIRED	Hrs	1.44	55.00	79.38	3.21
F) LABOUR USE BEFORE HARVESTING	Hrs	22.28	--	89.15	3.61
a) PERMANENT	Hrs	20.06	3.89	78.01	3.15
b) CASUAL	Hrs	2.23	5.00	11.13	0.45
G) HARVESTING TIME	Hrs	32.58	--	215.56	8.72
a) PERMANENT	Hrs	20.29	6.30	127.82	5.17
b) CASUAL	Hrs	12.29	7.14	87.74	3.55
H) TRACTOR-CUM-LABOUR THRESHING	Hrs	1.80	--	168.94	6.83
a) OWNED	Hrs	0.91	89.25	81.22	3.28
b) HIRED	Hrs	0.89	99.10	87.72	3.55
I) LAND.REVENUE	Rs.	-	-	29.60	1.20
J) RENT	Rs.	-	-	587.75	23.77
TOTAL COST (TC)	Rs.	-	-	2472.91	*100
GROSS INCOME	Kgs	892.72	2.44	2176.01	-
VARIABLE COST(VC)	Rs.	-	-	828.77	-
GROSS MARGIN	Rs.	-	-	1347.25	-
NET INCOME	Rs./Acre	-	-	-296.90	-
COST PER UNIT OF OUTPUT	Rs./40Kg	-	-	110.80	-

*=(A+B+C+D+E+F+G+H+I+J)
VC =(COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF OWNED TRACTOR AND 50% OF OWNED TUBE WELL COST).

able-3

NTERPRISE BUDGET OF WHEAT ON MEDIUM FARMS IN DISTRICT TOBA TEK SINGH.
(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
) BULLOCK PAIR TIME	Hrs	31.53	14.74	464.75	19.80
) TRACTOR TIME	Hrs	1.59	--	106.93	4.56
a) OWNED	Hrs	0.92	65.00	60.07	2.56
b) HIRED	Hrs	0.67	70.00	46.85	2.00
) SEED	Kgs	41.31	2.06	85.21	3.63
) FERTILIZER	Kgs	54.46	--	350.78	14.95
a) NITROGEN	Kgs	37.84	5.74	217.23	9.26
b) PHOSPHOROUS	Kgs	16.61	8.04	133.55	5.69
) IRRIGATION TIME	Hrs	15.21	--	184.26	7.85
i) CANAL (C)	Hrs	12.36	--	69.94	2.98
a) OWNED	Hrs	10.03	0.00	0.00	0.00
b) PURCHASED	Hrs	2.33	30.00	69.94	2.98
.i) TUBE WELL(T.W) TIME	Hrs	0.71	--	16.17	0.69
a) OWNED	Hrs	0.50	22.00	10.94	0.47
b) HIRED	Hrs	0.21	25.00	5.23	0.22
.ii) C+T.W TIME	Hrs	2.14	--	98.14	4.18
a) OWNED	Hrs	0.60	22.00	13.20	0.56
b) HIRED	Hrs	1.54	55.00	84.94	3.62
) LABOUR USE BEFORE HARVESTING	Hrs	21.81	--	88.43	3.77
a) PERMANENT	Hrs	18.56	3.89	72.21	3.08
b) CASUAL	Hrs	3.24	5.00	16.22	0.69
) HARVESTING TIME	Hrs	32.89	--	226.74	9.66
a) PERMANENT	Hrs	9.63	6.30	60.67	2.59
b) CASUAL	Hrs	23.26	7.14	166.07	7.08
) TRACTOR-CUM-LABOUR THRESHING	Hrs	1.80	--	171.92	7.33
a) OWNED	Hrs	0.66	89.25	59.01	2.51
b) HIRED	Hrs	1.14	99.10	112.91	4.81
) LAND.REVENUE	Rs.	-	-	29.60	1.26
) RENT	Rs.	-	-	638.25	27.20
TOTAL COST (TC)	Rs.	-	-	2346.87	*100
GROSS INCOME	Kgs	936.84	2.44	2285.88	-
VARIABLE COST(VC)	Rs.	-	-	986.90	-
GROSS MARGIN	Rs.	-	-	1298.98	-
NET INCOME	Rs./Acre	-	-	-61.00	-
COST PER UNIT OF OUTPUT	Rs./40Kg	-	-	100.20	-

k=(A+B+C+D+E+F+G+H+I+J)
VC =(COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF OWNED TRACTOR AND 50% OF OWNED TUBE WELL COST).

Table-4

ENTERPRISE BUDGET OF WHEAT ON LARGE FARMS IN DISTRICT TOBA TEK SINGH.
(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	25.98	10.22	265.50	11.15
B) TRACTOR TIME	Hrs	2.53	--	167.98	7.05
a) OWNED	Hrs	1.85	65.00	120.25	5.05
b) HIRED	Hrs	0.68	70.00	47.73	2.00
C) SEED	Kgs	41.82	2.06	86.25	3.62
D) FERTILIZER	Kgs	60.32	--	391.91	16.46
a) NITROGEN	Kgs	40.45	5.74	232.21	9.75
b) PHOSPHOROUS	Kgs	19.86	8.04	159.70	6.71
E) IRRIGATION TIME	Hrs	18.27	--	262.95	11.04
i) CANAL (C)	Hrs	12.57	--	65.45	2.75
a) OWNED	Hrs	10.39	0.00	0.00	0.00
b) PURCHASED	Hrs	2.18	30.00	65.45	2.75
ii) TUBE WELL(T.W) TIME	Hrs	1.82	--	40.00	1.68
a) OWNED	Hrs	1.82	22.00	40.00	1.68
b) HIRED	Hrs	0.00	25.00	0.00	0.00
iii) C+T.W TIME	Hrs	3.89	--	157.50	6.61
a) OWNED	Hrs	1.70	22.00	37.50	1.57
b) HIRED	Hrs	2.18	55.00	120.00	5.04
F) LABOUR USE BEFORE HARVESTING	Hrs	22.01	--	93.04	3.91
a) PERMANENT	Hrs	15.33	3.89	59.63	2.50
b) CASUAL	Hrs	6.68	5.00	33.41	1.40
G) HARVESTING TIME	Hrs	31.64	--	227.26	9.54
a) PERMANENT	Hrs	1.45	6.30	9.16	0.38
b) CASUAL	Hrs	30.55	7.14	218.09	9.16
H) TRACTOR-CUM-LABOUR THRESHING	Hrs	1.83	--	175.22	7.36
a) OWNED	Hrs	0.64	89.25	57.22	2.40
b) HIRED	Hrs	1.19	99.10	118.00	4.96
I) LAND.REVENUE	Rs.	-	-	29.60	1.24
J) RENT	Rs.	-	-	681.48	28.62
TOTAL COST (TC)	Rs.	-	-	2381.19	*100
GROSS INCOME	Kgs	998.56	2.44	2433.99	-
VARIABLE COST(VC)	Rs.	-	-	1233.49	-
GROSS MARGIN	Rs.	-	-	1200.50	-
NET INCOME	Rs./Acre	-	-	52.81	-
COST PER UNIT OF OUTPUT	Rs./40Kg	-	-	95.38	-

*=(A+B+C+D+E+F+G+H+I+J)
VC =(COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF OWNED TRACTOR AND 50% OF OWNED TUBE WELL COST).

Table-5

ENTERPRISE BUDGET OF WHEAT ON ALL FARMS IN DISTRICT TOBA TEK SINGH.
(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	32.78	16.46	539.60	22.58
B) TRACTOR TIME	Hrs	1.76	--	117.75	4.93
a) OWNED	Hrs	1.10	65.00	71.44	2.99
b) HIRED	Hrs	0.66	70.00	46.30	1.94
C) SEED	Kgs	41.98	2.06	86.59	3.62
D) FERTILIZER	Kgs	52.09	--	333.27	13.95
a) NITROGEN	Kgs	37.18	5.74	213.40	8.93
b) PHOSPHOROUS	Kgs	14.91	8.04	119.87	5.02
E) IRRIGATION TIME	Hrs	15.17	--	194.11	8.12
i) CANAL (C)	Hrs	12.53	--	84.69	3.54
a) OWNED	Hrs	9.71	0.00	0.00	0.00
b) PURCHASED	Hrs	2.82	30.00	84.69	3.54
ii) TUBE WELL(T.W) TIME	Hrs	0.69	--	16.17	0.68
a) OWNED	Hrs	0.34	22.00	7.57	0.32
b) HIRED	Hrs	0.34	25.00	8.61	0.36
iii) C+T.W TIME	Hrs	1.95	--	93.25	3.90
a) OWNED	Hrs	0.42	22.00	9.31	0.39
b) HIRED	Hrs	1.53	55.00	83.94	3.51
F) LABOUR USE BEFORE HARVESTING	Hrs	22.12	--	89.22	3.73
a) PERMANENT	Hrs	19.28	3.89	74.98	3.14
b) CASUAL	Hrs	2.85	5.00	14.23	0.60
G) HARVESTING TIME	Hrs	32.60	--	219.69	9.19
a) PERMANENT	Hrs	15.80	6.30	99.54	4.17
b) CASUAL	Hrs	16.83	7.14	120.15	5.03
H) TRACTOR-CUM-LABOUR THRESHING	Hrs	1.80	--	170.27	7.13
a) OWNED	Hrs	0.82	89.25	72.96	3.05
b) HIRED	Hrs	0.98	99.10	97.30	4.07
I) LAND.REVENUE	Rs.	-	-	29.60	1.24
J) RENT	Rs.	-	-	609.34	25.50
TOTAL COST (TC)	Rs.	-	-	2389.43	*100
GROSS INCOME	Kgs	913.31	2.44	2226.87	-
VARIABLE COST(VC)	Rs.	-	-	939.73	-
GROSS MARGIN	Rs.	-	-	1287.15	-
NET INCOME	Rs./Acre	-	-	-162.56	-
COST PER UNIT OF OUTPUT	Rs./40kg	-	-	104.65	-

*=(A+B+C+D+E+F+G+H+I+J)
VC =(COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF OWNED TRACTOR AND 50% OF OWNED TUBE WELL COST).

Table-6

ENTERPRISE BUDGET OF WHEAT ON OWNER FARMS IN DISTRICT TOBA TEK SINGH.
(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
) BULLOCK PAIR TIME	Hrs	31.45	17.04	535.94	22.17
) TRACTOR TIME	Hrs	1.66	--	111.20	4.60
a) OWNED	Hrs	0.99	65.00	64.46	2.67
b) HIRED	Hrs	0.67	70.00	46.75	1.93
) SEED	Kgs	42.00	2.06	86.63	3.58
) FERTILIZER	Kgs	53.05	--	341.01	14.11
a) NITROGEN	Kgs	37.19	5.74	213.46	8.83
b) PHOSPHOROUS	Kgs	15.86	8.04	127.55	5.28
) IRRIGATION TIMF	Hrs	15.20	--	196.17	8.11
i) CANAL (C)	Hrs	12.34	--	80.83	3.34
a) OWNED	Hrs	9.65	0.00	0.00	0.00
b) PURCHASED	Hrs	2.69	30.00	80.83	3.34
.i) TUBE WELL(T.W) TIME	Hrs	0.75	--	17.65	0.73
a) OWNED	Hrs	0.41	22.00	8.96	0.37
b) HIRED	Hrs	0.35	25.00	8.70	0.36
(ii) C+T.W TIME	Hrs	2.11	--	97.69	4.04
a) OWNED	Hrs	0.55	22.00	12.16	0.50
b) HIRED	Hrs	1.56	55.00	85.53	3.54
F) LABOUR USE BEFORE HARVESTING	Hrs	22.04	--	88.87	3.68
a) PERMANENT	Hrs	19.22	3.89	74.75	3.09
b) CASUAL	Hrs	2.82	5.00	14.12	0.58
G) HARVESTING TIME	Hrs	32.22	--	218.08	9.02
a) PERMANENT	Hrs	14.25	6.30	89.78	3.71
b) CASUAL	Hrs	17.97	7.14	128.30	5.31
H) TRACTOR-CUM-LABOUR THRESHING	Hrs	1.80	--	170.36	7.05
a) OWNED	Hrs	0.81	89.25	72.61	3.00
b) HIRED	Hrs	0.99	99.10	97.75	4.04
I) LAND.REVENUE	Rs.	-	-	29.60	1.22
J) RENT	Rs.	-	-	639.76	26.46
TOTAL COST (TC)	Rs.	-	-	2417.62	*100
GROSS INCOME	Kgs	939.75	2.44	2290.63	-
VARIABLE COST(VC)	Rs.	-	-	944.03	-
GROSS MARGIN	Rs.	-	-	1346.61	-
NET INCOME	Rs./Acre	-	-	-126.99	-
COST PER UNIT OF OUTPUT	Rs./40Kg	-	-	102.91	-

*=(A+B+C+D+E+F+G+H+I+J)
VC =(COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF OWNED TRACTOR AND 50% OF OWNED TUBE WELL COST).

Table-7

ENTERPRISE BUDGET OF WHEAT ON OWNER-CUM-TENANT FARMS
IN DISTRICT TOBA TEK SINGH. (Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	34.96	17.22	601.99	25.66
B) TRACTOR TIME	Hrs	0.79	--	54.78	2.33
a) OWNED	Hrs	0.15	65.00	9.89	0.42
b) HIRED	Hrs	0.64	70.00	44.89	1.91
C) SEED	Kgs	42.17	2.06	86.98	3.71
D) FERTILIZER	Kgs	51.63	--	325.11	13.86
a) NITROGEN	Kgs	39.13	5.74	224.61	9.57
b) PHOSPHOROUS	Kgs	12.50	8.04	100.50	4.28
E) IRRIGATION TIME	Hrs	15.56	--	210.24	8.96
i) CANAL (C)	Hrs	13.72	--	123.91	5.28
a) OWNED	Hrs	9.59	0.00	0.00	0.00
b) PURCHASED	Hrs	4.13	30.00	123.91	5.28
ii) TUBE WELL(T.W) TIME	Hrs	0.25	--	5.50	0.23
a) OWNED	Hrs	0.25	22.00	5.50	0.23
b) HIRED	Hrs	0.00	25.00	0.00	0.00
iii) C+T.W TIME	Hrs	1.59	--	80.83	3.44
a) OWNED	Hrs	0.20	22.00	4.30	0.18
b) HIRED	Hrs	1.39	55.00	76.52	3.26
F) LABOUR USE BEFORE HARVESTING	Hrs	20.65	--	82.89	3.53
a) PERMANENT	Hrs	18.37	3.89	71.44	3.04
b) CASUAL	Hrs	2.29	5.00	11.45	0.49
G) HARVESTING TIME	Hrs	34.09	--	232.13	9.89
a) PERMANENT	Hrs	13.39	6.30	84.37	3.60
b) CASUAL	Hrs	20.70	7.14	147.77	6.30
H) TRACTOR-CUM-LABOUR THRESHING	Hrs	1.76	--	166.30	7.09
a) OWNED	Hrs	0.78	89.25	69.78	2.97
b) HIRED	Hrs	0.97	99.10	96.52	4.11
I) LAND.REVENUE	Rs.	-	-	29.60	1.26
J) RENT	Rs.	-	-	556.31	23.71
TOTAL COST (TC)	Rs.	-	-	2346.33	*100
GROSS INCOME	Kgs	877.11	2.44	2142.52	-
VARIABLE COST(VC)	Rs.	-	-	885.85	-
GROSS MARGIN	Rs.	-	-	1256.66	-
NET INCOME	Rs./Acre	-	-	-203.81	-
COST PER UNIT OF OUTPUT	Rs./40Kg	-	-	107.00	-

*=(A+B+C+D+E+F+G+H+I+J)
VC =(COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIREL, WATER PURCHASED,50% OF OWNED TRACTOR AND 50% OF OWNED TUBE WELL COST).

Table-8

ENTERPRISE BUDGET OF WHEAT ON TENANT FARMS IN DISTRICT TOBA TEK SINGH.
(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	37.31	14.59	544.31	24.92
B) TRACTOR TIME	Hrs	0.89	--	60.77	2.78
a) OWNED	Hrs	0.35	65.00	22.44	1.03
b) HIRED	Hrs	0.55	70.00	38.33	1.75
C) SEED	Kgs	41.67	2.06	85.94	3.93
D) FERTILIZER	Kgs	47.57	--	302.03	13.83
a) NITROGEN	Kgs	34.98	5.74	200.76	9.19
b) PHOSPHOROUS	Kgs	12.60	8.04	101.27	4.64
E) IRRIGATION TIME	Hrs	11.56	--	165.77	7.59
i) CANAL (C)	Hrs	12.22	--	61.79	2.83
a) OWNED	Hrs	10.15	0.00	0.00	0.00
b) PURCHASED	Hrs	2.06	30.00	61.79	2.83
ii) TUBE WELL(T.W) TIME	Hrs	0.82	--	20.18	0.92
a) OWNED	Hrs	0.12	22.00	2.62	0.12
b) HIRED	Hrs	0.70	25.00	17.56	0.80
iii) C+T.W TIME	Hrs	1.52	--	83.81	3.84
a) OWNED	Hrs	0.00	22.00	0.00	0.00
b) HIRED	Hrs	1.52	55.00	83.81	3.84
F) LABOUR USE BEFORE HARVESTING	Hrs	24.16	--	97.95	4.48
a) PERMANENT	Hrs	20.58	3.89	80.07	3.67
b) CASUAL	Hrs	3.57	5.00	17.86	0.82
G) HARVESTING TIME	Hrs	32.95	--	214.40	9.81
a) PERMANENT	Hrs	26.48	6.30	166.80	7.64
b) CASUAL	Hrs	6.67	7.14	47.60	2.18
H) TRACTOR-CUM-LABOUR THRESHING	Hrs	1.84	--	174.14	7.97
a) OWNED	Hrs	0.88	89.25	78.30	3.58
b) HIRED	Hrs	0.97	99.10	95.85	4.39
I) LAND.REVENUE	Rs.	-	-	29.60	1.36
J) RENT	Rs.	-	-	509.57	23.33
TOTAL COST (TC)	Rs.	-	-	2184.47	*100
GROSS INCOME	Kgs	815.72	2.44	1988.32	-
VARIABLE COST(VC)	Rs.	-	-	747.39	-
GROSS MARGIN	Rs.	-	-	1240.93	-
NET INCOME	Rs./Acre	-	-	-196.15	-
COST PER UNIT OF OUTPUT	Rs./40Kg	-	-	107.12	-

*=(A+B+C+D+E+F+G+H+I+J)
VC =(COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF OWNED TRACTOR AND 50% OF OWNED TUBE WELL COST).

Table-9

ENTERPRISE BUDGET OF WHEAT ON SMALL FARMS IN DISTRICT JHANG.
(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
) BULLOCK PAIR TIME	Hrs	32.54	19.96	649.51	25.70
) TRACTOR TIME	Hrs	1.04	--	71.25	2.32
a) OWNED	Hrs	0.31	65.00	20.31	0.80
b) HIRED	Hrs	0.73	70.00	50.94	2.02
) SEED	Kgs	40.13	2.06	82.78	3.27
) FERTILIZER	Kgs	50.56	--	332.93	13.17
a) NITROGEN	Kgs	32.01	5.74	183.71	7.27
b) PHOSPHOROUS	Kgs	18.56	8.04	149.22	5.90
E) IRRIGATION TIME	Hrs	12.83	--	236.55	9.36
i) CANAL (C)	Hrs	6.51	--	32.14	1.27
a) OWNED	Hrs	5.44	0.00	0.00	0.00
b) PURCHASED	Hrs	1.07	30.00	32.14	1.27
ii) TUBE WELL(T.W) TIME	Hrs	1.82	--	40.56	1.60
a) OWNED	Hrs	1.64	22.00	36.09	1.43
b) HIRED	Hrs	0.18	25.00	4.46	0.18
iii) C+T.W TIME	Hrs	4.50	--	163.85	6.48
a) OWNED	Hrs	2.54	22.00	55.93	2.21
b) HIRED	Hrs	1.96	55.00	107.91	4.27
F) LABOUR USE BEFORE HARVESTING	Hrs	24.63	--	92.97	3.68
a) PERMANENT	Hrs	22.86	3.68	84.13	3.33
b) CASUAL	Hrs	1.77	5.00	8.84	0.35
G) HARVESTING TIME	Hrs	33.07	--	221.00	8.74
a) PERMANENT	Hrs	25.64	6.55	167.96	6.64
b) CASUAL	Hrs	7.43	7.14	53.04	2.10
H) TRACTOR-CUM-LABOUR THRESHING	Hrs	1.67	--	160.38	6.34
a) OWNED	Hrs	0.83	92.52	76.43	3.02
b) HIRED	Hrs	0.85	99.10	83.95	3.32
I) LAND.REVENUE	Rs.	-	-	29.60	1.17
J) RENT	Rs.	-	-	650.77	25.75
TOTAL COST (TC)	Rs.	-	-	2527.73	*100
GROSS INCOME	Kgs	930.82	2.44	2268.87	-
VARIABLE COST(VC)	Rs.	-	-	754.57	-
GROSS MARGIN	Rs.	-	-	1514.30	-
NET INCOME	Rs./Acre	-	-	-258.86	-
COST PER UNIT OF OUTPUT	Rs./40Kg	-	-	108.62	-

*=(A+B+C+D+E+F+G+H+I+J)
VC =(COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF OWNED TRACTOR AND 50% OF OWNED TUBE WELL COST).

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TERPRISE BUDGET OF WHEAT ON MEDIUM FARMS IN DISTRICT JHANG.
(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
BULLOCK PAIR TIME	Hrs	30.84	12.16	375.05	15.95
TRACTOR TIME	Hrs	1.40	--	93.87	3.99
a) OWNED	Hrs	0.87	65.00	56.61	2.41
b) HIRED	Hrs	0.53	70.00	37.26	1.58
SEED	Kgs	40.32	2.06	83.17	3.54
FERTILIZER	Kgs	54.29	--	361.11	15.35
a) NITROGEN	Kgs	32.77	5.74	188.12	8.00
b) PHOSPHOROUS	Kgs	21.52	8.04	172.99	7.36
IRRIGATION TIME	Hrs	13.59	--	212.58	9.04
) CANAL (C)	Hrs	7.52	--	32.90	1.40
a) OWNED	Hrs	6.42	0.00	0.00	0.00
b) PURCHASED	Hrs	1.10	30.00	32.90	1.40
) TUBE WELL(T.W) TIME	Hrs	1.39	--	42.29	1.80
a) OWNED	Hrs	1.63	22.00	35.84	1.52
b) HIRED	Hrs	0.26	25.00	6.45	0.27
i) C+T.W TIME	Hrs	4.19	--	137.38	5.84
a) OWNED	Hrs	2.81	22.00	61.92	2.63
b) HIRED	Hrs	1.37	55.00	75.46	3.21
) LABOUR USE BEFORE HARVESTING	Hrs	24 81	--	95.76	4.07
a) PERMANENT	Hrs	21.44	3.68	78.90	3.35
b) CASUAL	Hrs	3.37	5.00	16.85	0.72
) HARVESTING TIME	Hrs	33.03	--	227.48	9.67
a) PERMANENT	Hrs	14.19	6.55	92.97	3.95
b) CASUAL	Hrs	18.84	7.14	134.51	5.72
) TRACTOR-CUM-LABOUR THRESHING	Hrs	1.62	--	157.14	6.68
a) OWNED	Hrs	0.53	92.52	49.14	2.09
b) HIRED	Hrs	1.09	99.10	108.00	4.59
) LAND.REVENUE	Rs.	-	-	29.60	1.26
) RENT	Rs.	-	-	716.21	30.45
TOTAL COST (TC)	Rs.	-	-	2351.96	*100
GROSS INCOME	Kgs	982.33	2.44	2392.99	-
VARIABLE COST(VC)	Rs.	-	-	921.30	-
GROSS MARGIN	Rs.	-	-	1471.69	-
NET INCOME	Rs./Acre	-	-	41.03	-
COST PER UNIT OF OUTPUT	Rs./40Kg	-	-	95.77	-

=(A+B+C+D+E+F+G+H+I+J)
'C =(COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED,
WATER PURCHASED,50% OF OWNED TRACTOR AND 50% OF OWNED TUBE WELL COST).

Table-11

ENTERPRISE BUDGET OF WHEAT ON LARGE FARMS IN DISTRICT JHANG.
(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	26.79	9.90	266.79	11.14
B) TRACTOR TIME	Hrs	1.79	--	117.50	4.91
a) OWNED	Hrs	1.50	65.00	97.50	4.07
b) HIRED	Hrs	0.29	70.00	20.00	0.84
C) SEED	Kgs	40.00	2.06	82.50	3.45
D) FERTILIZER	Kgs	60.29	--	398.94	16.66
a) NITROGEN	Kgs	37.29	5.74	214.02	8.94
b) PHOSPHOROUS	Kgs	23.00	8.04	184.92	7.72
E) IRRIGATION TIME	Hrs	16.14	--	298.29	12.46
i) CANAL (C)	Hrs	7.79	--	60.00	2.51
a) OWNED	Hrs	5.79	0.00	0.00	0.00
b) PURCHASED	Hrs	2.00	30.00	60.00	2.51
ii) TUBE WELL(T.W) TIME	Hrs	2.71	--	62.29	2.60
a) OWNED	Hrs	1.86	22.00	40.86	1.71
b) HIRED	Hrs	0.86	25.00	21.43	0.90
iii) C+T.W TIME	Hrs	5.64	--	176.00	7.35
a) OWNED	Hrs	4.07	22.00	89.57	3.74
b) HIRED	Hrs	1.57	55.00	86.43	3.61
F) LABOUR USE BEFORE HARVESTING	Hrs	24.33	--	94.90	3.96
a) PERMANENT	Hrs	20.26	3.68	74.55	3.11
b) CASUAL	Hrs	4.07	5.00	20.36	0.85
G) HARVESTING TIME	Hrs	32.00	--	223.09	9.32
a) PERMANENT	Hrs	9.14	6.55	59.89	2.50
b) CASUAL	Hrs	22.86	7.14	163.20	6.82
H) TRACTOR-CUM-LABOUR THRESHING	Hrs	1.72	--	167.27	6.99
a) OWNED	Hrs	0.51	92.52	46.72	1.95
b) HIRED	Hrs	1.22	99.10	120.55	5.04
I) LAND.REVENUE	Rs.	-	-	29.60	1.24
J) RENT	Rs.	-	-	715.29	29.88
TOTAL COST (TC)	Rs.	-	-	2394.16	*100
GROSS INCOME	Kgs	1019.18	2.44	2484.26	-
VARIABLE COST(VC)	Rs.	-	-	1120.08	-
GROSS MARGIN	Rs.	-	-	1364.18	-
NET INCOME	Rs./Acre	-	-	90.10	-
COST PER UNIT OF OUTPUT	Rs./40Kg	-	-	93.96	-

*=(A+B+C+D+E+F+G+H+I+J)
VC =(COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF OWNED TRACTOR AND 50% OF OWNED TUBE WELL COST).

Table-12

ENTERPRISE BUDGET OF WHEAT ON ALL FARMS IN DISTRICT JHANG.
(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
) BULLOCK PAIR TIME	Hrs	31.92	16.16	515.84	21.12
) TRACTOR TIME	Hrs	1.41	--	94.21	3.86
a) OWNED	Hrs	0.89	65.00	58.14	2.38
b) HIRED	Hrs	0.52	70.00	36.07	1.48
) SEED	Kgs	40.17	2.06	82.84	3.39
) FERTILIZER	Kgs	51.79	--	341.83	14.00
a) NITROGEN	Kgs	32.41	5.74	186.04	7.62
b) PHOSPHOROUS	Kgs	19.38	8.04	155.80	6.38
) IRRIGATION TIME	Hrs	13.14	--	234.47	9.60
i) CANAL (C)	Hrs	6.78	--	33.60	1.38
a) OWNED	Hrs	5.66	0.00	0.00	0.00
b) PURCHASED	Hrs	1.12	30.00	33.60	1.38
i) TUBE WELL(T.W) TIME	Hrs	1.88	--	41.93	1.72
a) OWNED	Hrs	1.65	22.00	36.26	1.48
b) HIRED	Hrs	0.23	25.00	5.67	0.23
ii) C+T.W TIME	Hrs	4.49	--	158.94	6.51
a) OWNED	Hrs	2.67	22.00	58.74	2.41
b) HIRED	Hrs	1.82	55.00	100.20	4.10
) LABOUR USE BEFORE HARVESTING	Hrs	24.65	--	93.63	3.83
a) PERMANENT	Hrs	22.45	3.68	82.60	3.38
b) CASUAL	Hrs	2.21	5.00	11.03	0.45
) HARVESTING TIME	Hrs	33.01	--	222.44	9.11
a) PERMANENT	Hrs	22.51	6.55	147.42	6.04
b) CASUAL	Hrs	10.51	7.14	75.02	3.07
) TRACTOR-CUM-LABOUR THRESHING	Hrs	1.66	--	160.03	6.55
a) OWNED	Hrs	0.75	92.52	69.40	2.84
b) HIRED	Hrs	0.91	99.10	90.63	3.71
) LAND.REVENUE	Rs.	-	-	29.60	1.21
) RENT	Rs.	-	-	667.31	27.32
TOTAL COST (TC)	Rs.	-	-	2442.21	*100
GROSS INCOME	Kgs	945.59	2.44	2304.58	-
VARIABLE COST(VC)	Rs.	-	-	846.17	-
GROSS MARGIN	Rs.	-	-	1458.40	-
NET INCOME	Rs./Acre	-	-	-137.64	-
COST PER UNIT OF OUTPUT	Rs./40Kg	-	-	103.31	-

k=(A+B+C+D+E+F+G+H+I+J)
/C =(COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED,
WATER PURCHASED,50% OF OWNED TRACTOR AND 50% OF OWNED TUBE WELL COST).

Table-13

ENTERPRISE BUDGET OF WHEAT ON OWNER FARMS IN DISTRICT JHANG.
(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs	COST(Rs)	% OF TC
) BULLOCK PAIR TIME	Hrs	31.50	17.40	548.05	22.12
) TRACTOR TIME	Hrs	1.19	--	80.68	3.26
a) OWNED	Hrs	0.47	65.00	30.85	1.25
b) HIRED	Hrs	0.71	70.00	49.83	2.01
) SEED	Kgs	40.38	2.06	83.29	3.36
) FERTILIZER	Kgs	50.68	--	333.88	13.48
a) NITROGEN	Kgs	31.99	5.74	183.64	7.41
b) PHOSPHOROUS	Kgs	18.69	8.04	150.25	6.06
) IRRIGATION TIME	Hrs	13.29	--	239.84	9.68
i) CANAL (C)	Hrs	6.94	--	35.34	1.43
a) OWNED	Hrs	5.76	0.00	0.00	0.00
b) PURCHASED	Hrs	1.18	30.00	35.34	1.43
i) TUBE WELL(T.W) TIME	Hrs	1.85	--	41.28	1.67
a) OWNED	Hrs	1.65	22.00	36.40	1.47
b) HIRED	Hrs	0.19	25.00	4.87	0.20
ii) C+T.W TIME	Hrs	4.50	--	163.22	6.59
a) OWNED	Hrs	2.55	22.00	56.12	2.27
b) HIRED	Hrs	1.95	55.00	107.10	4.32
) LABOUR USE BEFORE HARVESTING	Hrs	24.57	--	93.59	3.78
a) PERMANENT	Hrs	22.16	3.68	81.57	3.29
b) CASUAL	Hrs	2.40	5.00	12.02	0.49
) HARVESTING TIME	Hrs	33.08	--	223.19	9.01
a) PERMANENT	Hrs	22.10	6.55	144.77	5.84
b) CASUAL	Hrs	10.98	7.14	78.42	3.17
) TRACTOR-CUM-LABOUR THRESHING	Hrs	1.65	--	158.71	6.41
a) OWNED	Hrs	0.76	92.52	70.54	2.85
b) HIRED	Hrs	0.89	99.10	88.17	3.56
) LAND.REVENUE	Rs.	-	-	29.60	1.19
) RENT	Rs.	-	-	686.59	27.71
TOTAL COST (TC)	Rs.	-	-	2477.41	*100
GROSS INCOME	Kgs	961.58	2.44	2342.71	-
VARIABLE COST(VC)	Rs.	-	-	807.57	-
GROSS MARGIN	Rs.	-	-	1535.13	-
NET INCOME	Rs./Acre	-	-	-134.70	-
COST PER UNIT OF OUTPUT	Rs./40Kg	-	-	103.06	-

*=(A+B+C+D+E+F+G+H+I+J)
VC =(COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF OWNED TRACTOR AND 50% OF OWNED TUBE WELL COST).

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:NTERPRISE BUDGET OF WHEAT ON OWNER-CUM-TENANT FARMS
'N DISTRICT JHANG. (Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
\) BULLOCK PAIR TIME	Hrs	37.82	12.02	454.60	19.11
3) TRACTOR TIME	Hrs	0.56	--	37.50	1.58
a) OWNED	Hrs	0.38	65.00	24.38	1.02
b) HIRED	Hrs	0.19	70.00	13.13	0.55
:) SEED	Kgs	40.00	2.06	82.50	3.47
)) FERTILIZER	Kgs	55.00	--	368.60	15.49
a) NITROGEN	Kgs	32.00	5.74	183.68	7.72
b) PHOSPHOROUS	Kgs	23.00	8.04	184.92	7.77
:) IRRIGATION TIME	Hrs	12.81	--	247.75	10.41
i) CANAL (C)	Hrs	6.38	--	30.00	1.26
a) OWNED	Hrs	5.38	0.00	0.00	0.00
b) PURCHASED	Hrs	1.00	30.00	30.00	1.26
.i) TUBE WELL(T.W) TIME	Hrs	2.13	--	48.63	2.04
a) OWNED	Hrs	1.50	22.00	33.00	1.39
b) HIRED	Hrs	0.63	25.00	15.63	0.66
(ii) C+T.W TIME	Hrs	4.31	--	169.13	7.11
a) OWNED	Hrs	2.06	22.00	45.38	1.91
b) HIRED	Hrs	2.25	55.00	123.75	5.20
?) LABOUR USE BEFORE HARVESTING	Hrs	22.28	--	82.82	3.48
a) PERMANENT	Hrs	21.66	3.68	79.70	3.35
b) CASUAL	Hrs	0.63	5.00	3.13	0.13
:) HARVESTING TIME	Hrs	32.00	--	211.96	8.91
a) PERMANENT	Hrs	28.00	6.55	183.40	7.71
b) CASUAL	Hrs	4.00	7.14	28.56	1.20
4) TRACTOR-CUM-LABOUR THRESHING	Hrs	1.69	--	163.10	6.86
a) OWNED	Hrs	0.72	92.52	66.82	2.81
b) HIRED	Hrs	0.97	99.10	96.28	4.05
I) LAND.REVENUE	Rs.	-	-	29.60	1.24
J) RENT	Rs.	-	-	700.79	29.45
TOTAL COST (TC)	Rs.	-	-	2379.22	*100
GROSS INCOME	Kgs	1004.30	2.41	2423.61	-
VARIABLE COST(VC)	Rs.	-	-	801.50	-
GROSS MARGIN	Rs.	-	-	1622.11	-
NET INCOME	Rs./Acre	-	-	44.39	-
COST PER UNIT OF OUTPUT	Rs./40Kg	-	-	94.76	-

*=(A+B+C+D+E+F+G+H+I+J)
VC =(COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF OWNED TRACTOR AND 50% OF OWNED TUBE WELL COST).

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NTERPRISE BUDGET OF WHEAT ON TENANT FARMS IN DISTRICT JHANG.

(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
) BULLOCK PAIR TIME	Hrs	32.04	14.21	455.27	20.08
) TRACTOR TIME	Hrs	1.17	--	78.85	3.48
a) OWNED	Hrs	0.56	65.00	36.56	1.61
b) HIRED	Hrs	0.60	70.00	42.29	1.87
) SEED	Kgs	39.17	2.06	80.78	3.56
) FERTILIZER	Kgs	56.17	--	371.99	16.41
a) NITROGEN	Kgs	34.60	5.74	198.63	8.76
b) PHOSPHOROUS	Kgs	21.56	8.04	173.36	7.65
) IRRIGATION TIME	Hrs	12.52	--	203.69	8.99
i) CANAL (C)	Hrs	6.08	--	26.25	1.16
a) OWNED	Hrs	5.21	0.00	0.00	0.00
b) PURCHASED	Hrs	0.88	30.00	26.25	1.16
i) TUBE WELL(T.W) TIME	Hrs	1.92	--	42.92	1.89
a) OWNED	Hrs	1.67	22.00	36.67	1.62
b) HIRED	Hrs	0.25	25.00	6.25	0.28
ii) C+T.W TIME	Hrs	4.52	--	134.52	5.93
a) OWNED	Hrs	3.46	22.00	76.08	3.36
b) HIRED	Hrs	1.06	55.00	58.44	2.58
) LABOUR USE BEFORE HARVESTING	Hrs	25.85	--	97.47	4.30
a) PERMANENT	Hrs	24.09	3.68	88.67	3.91
b) CASUAL	Hrs	1.76	5.00	8.80	0.39
) HARVESTING TIME	Hrs	33.00	--	222.25	9.80
a) PERMANENT	Hrs	22.67	6.55	148.47	6.55
b) CASUAL	Hrs	10.33	7.14	73.78	3.25
) TRACTOR-CUM-LABOUR THRESHING	Hrs	1.72	--	165.52	7.30
a) OWNED	Hrs	0.70	92.52	64.68	2.85
b) HIRED	Hrs	1.02	99.10	100.84	4.45
) LAND.REVENUE	Rs.	-	-	29.60	1.31
) RENT	Rs.	-	-	561.34	24.76
TOTAL COST (TC)	Rs.	-	-	2266.76	*100
GROSS INCOME	Kgs	847.40	2.45	2077.42	-
VARIABLE COST(VC)	Rs.	-	-	800.31	-
GROSS MARGIN	Rs.	-	-	1277.11	-
NET INCOME	Rs./Acre	-	-	-189.34	-
COST PER UNIT OF OUTPUT	Rs./40Kg	-	-	107.00	-

=(A+B+C+D+E+F+G+H+I+J)

C =(COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF OWNED TRACTOR AND 50% OF OWNED TUBE WELL COST).

Table-13

ENTERPRISE BUDGET OF WHEAT ON SMALL FARMS IN DISTRICTS TOBA TEK SINGH AND JHANG. (Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) MULCHING PAID TIME	Hrs	33.34	19.77	675.76	27.05
B) TRACTOR TIME	Hrs	1.20	--	34.79	2.99
a) OWNED	Hrs	0.33	83.00	27.10	1.09
b) HIRED	Hrs	0.53	90.00	47.63	1.91
C) SEED	Kgs	41.22	2.06	85.02	3.40
D) FERTILIZER	Kgs	80.31	--	325.71	13.04
a) NITROGEN	Kgs	34.25	5.74	196.60	7.87
b) PHOSPHOROUS	Kgs	16.06	8.04	129.11	5.17
E) IRRIGATION TIME	Hrs	13.21	--	213.71	8.56
i) CANAL (C)	Hrs	3.58	--	62.93	2.52
a) OWNED	Hrs	7.46	0.00	0.00	0.00
b) PURCHASED	Hrs	3.10	30.00	62.93	2.52
ii) TUBE WELL(T.W) TIME	Hrs	1.19	--	27.01	1.08
a) OWNED	Hrs	0.37	25.00	19.21	0.77
b) HIRED	Hrs	0.31	25.00	7.81	0.31
iii) OWN LIFT	Hrs	3.07	--	123.77	4.95
a) OWNED	Hrs	1.37	22.00	30.12	1.21
b) HIRED	Hrs	1.70	55.00	93.65	3.75
F) LABOUR USE BEFORE HARVESTING	Hrs	33.15	--	91.31	3.65
a) PERMANENT	Hrs	21.46	2.79	61.33	2.45
b) CASUAL	Hrs	2.00	5.00	9.99	0.40
G) HARVESTING TIME	Hrs	22.82	--	313.06	12.52
a) PERMANENT	Hrs	22.37	6.43	147.67	5.91
b) CASUAL	Hrs	9.80	7.14	70.39	2.82
H) TRACTOR-CUM-LABOUR THRESHING	Hrs	1.72	--	164.23	6.57
a) OWNED	Hrs	0.87	90.69	78.90	3.16
b) HIRED	Hrs	0.87	98.16	85.33	3.41
I) LAND REVENUE	Rs.	-	-	29.30	1.17
J) RENT	Rs.	-	-	610.26	24.42
TOTAL COST (TC)	Rs.	-	-	2497.96	100
GROSS INCOME	Kgs	911.77	2.44	2222.44	-
VARIABLE COST(VC)	Rs.	-	-	1391.67	-
GROSS MARGIN	Rs.	-	-	1430.77	-
NET INCOME	Rs./Acre	-	-	-275.52	-
COST PER UNIT OF OUTPUT	Rs./40Kg.	-	-	109.59	-

- A)-(MECHANIZED PADDLING)
C -(COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF OWNED TRACTOR AND 50% OF OWNED TUBE WELL COST).

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Table-17

ENTERPRISE BUDGET OF WHEAT ON MEDIUM FARMS IN DISTRICTS TOBA TEK SINGH AND JHANG.

(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	31.19	13.50	421.02	17.91
B) TRACTOR TIME	Hrs	1.50	--	100.40	4.27
a) OWNED	Hrs	0.90	65.00	58.34	2.48
b) HIRED	Hrs	0.60	70.00	42.06	1.79
C) SEED	Kgs	40.82	2.06	84.19	3.58
D) FERTILIZER	Kgs	54.37	--	355.95	15.14
a) NITROGEN	Kgs	35.31	5.74	202.68	8.62
b) PHOSPHOROUS	Kgs	19.06	8.04	153.27	6.52
E) IRRIGATION TIME	Hrs	14.40	--	198.42	8.44
i) CANAL (C)	Hrs	9.94	--	51.42	2.19
a) OWNED	Hrs	8.22	0.00	0.00	0.00
b) PURCHASED	Hrs	1.71	30.00	51.42	2.19
ii) TUBE WELL(T.W) TIME	Hrs	1.30	--	29.23	1.24
a) OWNED	Hrs	1.06	22.00	23.39	0.99
b) HIRED	Hrs	0.23	25.00	5.84	0.25
iii) C+T.W TIME	Hrs	3.17	--	117.76	5.01
a) OWNED	Hrs	1.71	22.00	37.56	1.60
b) HIRED	Hrs	1.46	55.00	80.20	3.41
F) LABOUR USE BEFORE HARVESTING	Hrs	23.31	--	92.34	3.93
a) PERMANENT	Hrs	20.00	3.79	75.81	3.22
b) CASUAL	Hrs	3.31	5.00	16.54	0.70
G) HARVESTING TIME	Hrs	32.96	--	226.88	9.65
a) PERMANENT	Hrs	11.91	6.43	76.59	3.26
b) CASUAL	Hrs	21.05	7.14	150.29	6.39
H) TRACTOR-CUM-LABOUR THRESHING	Hrs	1.71	--	164.64	7.00
a) OWNED	Hrs	0.60	90.89	54.19	2.31
b) HIRED	Hrs	1.11	99.10	110.46	4.70
I) LAND.REVENUE	Rs.	-	-	29.60	1.26
J) RENT	Rs.	-	-	677.23	28.81
TOTAL COST (TC)	Rs.	-	-	2350.67	*100
GROSS INCOME	Kgs	958.78	2.44	2339.43	-
VARIABLE COST(VC)	Rs.	-	-	954.10	-
GROSS MARGIN	Rs.	-	-	1385.33	-
NET INCOME	Rs./Acre	-	-	-11.23	-
COST PER UNIT OF OUTPUT	Rs./40Kg	-	-	98.07	-

*=(A+B+C+D+E+F+G+H+I+J)

VC =(COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF OWNED TRACTOR AND 50% OF OWNED TUBE WELL COST).

Table-18

ENTERPRISE BUDGET OF WHEAT ON LARGE FARMS IN DISTRICTS TOBA TEK SINGH AND JHANG.

(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	26.38	10.11	266.72	11.08
B) TRACTOR TIME	Hrs	2.44	--	160.91	6.69
a) OWNED	Hrs	1.95	65.00	127.05	5.28
b) HIRED	Hrs	0.48	70.00	33.86	1.41
C) SEED	Kgs	40.91	2.06	84.38	3.51
D) FERTILIZER	Kgs	60.30	--	395.43	16.43
a) NITROGEN	Kgs	38.87	5.74	223.11	9.27
b) PHOSPHOROUS	Kgs	21.43	8.04	172.31	7.16
E) IRRIGATION TIME	Hrs	17.21	--	280.62	11.66
i) CANAL (C)	Hrs	10.18	--	62.73	2.61
a) OWNED	Hrs	8.09	0.00	0.00	0.00
b) PURCHASED	Hrs	2.09	30.00	62.73	2.61
ii) TUBE WELL(T.W) TIME	Hrs	2.27	--	51.14	2.13
a) OWNED	Hrs	1.84	22.00	40.43	1.68
b) HIRED	Hrs	0.43	25.00	10.71	0.45
iii) C+T.W TIME	Hrs	4.76	--	166.75	6.93
a) OWNED	Hrs	2.89	22.00	63.54	2.64
b) HIRED	Hrs	1.88	55.00	103.21	4.29
F) LABOUR USE BEFORE HARVESTING	Hrs	23.17	--	94.32	3.92
a) PERMANENT	Hrs	17.79	3.79	67.44	2.80
b) CASUAL	Hrs	5.38	5.00	26.88	1.12
G) HARVESTING TIME	Hrs	31.82	--	224.72	9.34
a) PERMANENT	Hrs	5.30	6.43	34.07	1.42
b) CASUAL	Hrs	26.70	7.14	190.65	7.92
H) TRACTOR-CUM-LABOUR THRESHING	Hrs	1.78	--	171.36	7.12
a) OWNED	Hrs	0.57	90.89	52.09	2.16
b) HIRED	Hrs	1.20	99.10	119.27	4.96
I) LAND.REVENUE	Rs.	-	-	29.60	1.23
J) RENT	Rs.	-	-	698.39	29.02
TOTAL COST (TC)	Rs.	-	-	2406.43	*100
GROSS INCOME	Kgs	1008.37	2.44	2459.13	-
VARIABLE COST(VC)	Rs.	-	-	1176.79	-
GROSS MARGIN	Rs.	-	-	1282.34	-
NET INCOME	Rs./Acre	-	-	52.69	-
COST PER UNIT OF OUTPUT	Rs./40Kg	-	-	95.41	-

*=(A+B+C+D+E+F+G+H+I+J)

VC =(COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF OWNED TRACTOR AND 50% OF OWNED TUBE WELL COST).

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Table-19

ENTERPRISE BUDGET OF WHEAT ON ALL FARMS IN DISTRICTS TOBA TEK SINGH AND JHANG.

(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	32.35	16.30	527.34	21.78
B) TRACTOR TIME	Hrs	1.68	--	112.03	4.63
a) OWNED	Hrs	1.09	65.00	70.85	2.93
b) HIRED	Hrs	0.59	70.00	41.18	1.70
C) SEED	Kgs	11.07	2.06	84.72	3.50
D) FERTILIZER	Kgs	51.94	--	337.55	13.94
a) NITROGEN	Kgs	34.79	5.74	199.72	8.25
b) PHOSPHOROUS	Kgs	17.14	8.04	137.83	5.69
E) IRRIGATION TIME	Hrs	14.16	--	214.29	8.85
i) CANAL (C)	Hrs	9.65	--	59.14	2.44
a) OWNED	Hrs	7.68	0.00	0.00	0.00
b) PURCHASED	Hrs	1.97	30.00	59.14	2.44
i) TUBE WELL(T.W) TIME	Hrs	1.28	--	29.05	1.20
a) OWNED	Hrs	1.00	22.00	21.92	0.91
b) HIRED	Hrs	0.29	25.00	7.14	0.29
ii) C+T.W TIME	Hrs	3.22	--	126.10	5.21
a) OWNED	Hrs	1.55	22.00	34.03	1.41
b) HIRED	Hrs	1.67	55.00	92.07	3.80
) LABOUR USE BEFORE HARVESTING	Hrs	23.39	--	91.70	3.79
a) PERMANENT	Hrs	20.86	3.79	79.06	3.27
b) CASUAL	Hrs	2.53	5.00	12.63	0.52
) HARVESTING TIME	Hrs	32.81	--	220.74	9.12
a) PERMANENT	Hrs	19.15	6.43	123.15	5.09
b) CASUAL	Hrs	13.67	7.14	97.58	4.03
) TRACTOR-CUM-LABOUR THRESHING	Hrs	1.73	--	165.21	6.82
a) OWNED	Hrs	0.78	90.89	71.24	2.94
b) HIRED	Hrs	0.95	99.10	93.97	3.88
). LAND.REVENUE	Rs.	-	-	29.60	1.22
) RENT	Rs.	-	-	638.33	26.36
TOTAL COST (TC)	Rs.	-	-	2421.50	*100
GROSS INCOME	Kgs	929.45	2.44	2265.72	-
VARIABLE COST(VC)	Rs.	-	-	892.95	-
GROSS MARGIN	Rs.	-	-	1372.77	-
NET INCOME	Rs./Acre	-	-	-155.77	-
COST PER UNIT OF OUTPUT	Rs./40Kg	-	-	104.21	-

=(A+B+C+D+E+F+G+H+I+J)

TC =(COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF OWNED TRACTOR AND 50% OF OWNED TUBE WELL COST).

Table-20

ENTERPRISE BUDGET OF WHEAT ON OWNER FARMS IN DISTRICTS TOBA TEK SINGH AND JHANG. (Figures on per acre basis)

	PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A)	BULLOCK PAIR TIME	Hrs	31.47	17.16	540.10	22.09
B)	TRACTOR TIME	Hrs	1.42	--	95.94	3.92
	a) OWNED	Hrs	0.73	65.00	47.65	1.95
	b) HIRED	Hrs	0.69	70.00	48.29	1.97
C)	SEED	Kgs	41.19	2.06	84.96	3.47
D)	FERTILIZER	Kgs	51.87	--	337.45	13.80
	a) NITROGEN	Kgs	34.59	5.74	198.55	8.12
	b) PHOSPHOROUS	Kgs	17.28	8.04	138.90	5.68
E)	IRRIGATION TIME	Hrs	14.25	--	218.00	8.91
	i) CANAL (C)	Hrs	9.64	--	58.08	2.38
	a) OWNED	Hrs	7.71	0.00	0.00	0.00
	b) PURCHASED	Hrs	1.94	30.00	58.08	2.38
	ii) TUBE WELL(T.W) TIME	Hrs	1.30	--	29.46	1.20
	a) OWNED	Hrs	1.03	22.00	22.68	0.93
	b) HIRED	Hrs	0.27	25.00	6.78	0.28
	iii) C+T.W TIME	Hrs	3.30	--	130.45	5.33
	a) OWNED	Hrs	1.55	22.00	34.14	1.40
	b) HIRED	Hrs	1.75	55.00	96.31	3.94
F)	LABOUR USE BEFORE HARVESTING	Hrs	23.30	--	91.49	3.74
	a) PERMANENT	Hrs	20.69	3.79	78.42	3.21
	b) CASUAL	Hrs	2.61	5.00	13.07	0.53
G)	HARVESTING TIME	Hrs	32.65	--	220.23	9.01
	a) PERMANENT	Hrs	18.18	6.43	116.87	4.78
	b) CASUAL	Hrs	14.48	7.14	103.36	4.23
H)	TRACTOR-CUM-LABOUR THRESHING	Hrs	1.73	--	164.58	6.73
	a) OWNED	Hrs	0.79	90.89	71.62	2.93
	b) HIRED	Hrs	0.94	99.10	92.96	3.80
I)	LAND.REVENUE	Rs.	-	-	29.60	1.21
J)	RENT	Rs.	-	-	663.18	27.12
	TOTAL COST (TC)	Rs.	-	-	2445.53	*100
	GROSS INCOME	Kgs	950.66	2.44	2316.67	-
	VARIABLE COST(VC)	Rs.	-	-	875.80	-
	GROSS MARGIN	Rs.	-	-	1440.87	-
	NET INCOME	Rs./Acre	-	-	-128.86	-
	COST PER UNIT OF OUTPUT	Rs./40Kg	-	-	102.90	-

*=(A+B+C+D+E+F+G+H+I+J)

VC =(COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF OWNED TRACTOR AND 50% OF OWNED TUBE WELL COST).

Table-21

ENTERPRISE BUDGET OF WHEAT ON OWNER-CUM-TENANT FARMS
IN DISTRICTS TOBA TEK SINGH AND JHANG. (Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	36.39	14.40	524.01	22.22
B) TRACTOR TIME	Hrs	0.68	--	46.14	1.96
a) OWNED	Hrs	0.26	65.00	17.13	0.73
b) HIRED	Hrs	0.41	70.00	29.01	1.23
C) SEED	Kgs	41.09	2.06	84.74	3.59
D) FERTILIZER	Kgs	53.32	--	346.85	14.71
a) NITROGEN	Kgs	35.57	5.74	204.14	8.66
b) PHOSPHOROUS	Kgs	17.75	8.04	142.71	6.05
E) IRRIGATION TIME	Hrs	14.19	--	228.99	9.71
i) CANAL (C)	Hrs	10.05	--	76.96	3.26
a) OWNED	Hrs	7.48	0.00	0.00	0.00
b) PURCHASED	Hrs	2.57	30.00	76.96	3.26
ii) TUBE WELL(T.W) TIME	Hrs	1.19	--	27.06	1.15
a) OWNED	Hrs	0.88	22.00	19.25	0.82
b) HIRED	Hrs	0.31	25.00	7.81	0.33
iii) C+T.W TIME	Hrs	2.95	--	124.98	5.30
a) OWNED	Hrs	1.13	22.00	24.84	1.05
b) HIRED	Hrs	1.82	55.00	100.14	4.25
F) LABOUR USE BEFORE HARVESTING	Hrs	21.47	--	83.13	3.53
a) PERMANENT	Hrs	20.01	3.79	75.84	3.22
b) CASUAL	Hrs	1.46	5.00	7.29	0.31
G) HARVESTING TIME	Hrs	33.04	--	221.24	9.38
a) PERMANENT	Hrs	20.70	6.43	133.07	5.64
b) CASUAL	Hrs	12.35	7.14	88.16	3.74
H) TRACTOR-CUM-LABOUR THRESHING	Hrs	1.72	--	164.75	6.99
a) OWNED	Hrs	0.75	90.89	68.35	2.90
b) HIRED	Hrs	0.97	99.10	96.40	4.09
I) LAND.REVENUE	Rs.	-	-	29.60	1.26
J) RENT	Rs.	-	-	628.55	26.66
TOTAL COST (TC)	Rs.	-	-	2358.00	*100
GROSS INCOME	Kgs	940.70	2.43	2283.06	-
VARIABLE COST(VC)	Rs.	-	-	843.68	-
GROSS MARGIN	Rs.	-	-	1439.39	-
NET INCOME	Rs./Acre	-	-	-74.94	-
COST PER UNIT OF OUTPUT	Rs./40Kg	-	-	100.27	-

*=(A+B+C+D+E+F+G+H+I+J)

VC =(COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF OWNED TRACTOR AND 50% OF OWNED TUBE WELL COST).

Table-22

ENTERPRISE BUDGET OF WHEAT ON TENANT FARMS IN DISTRICTS TOBA TEK SINGH AND JHANG.

(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	34.67	14.00	485.42	21.94
B) TRACTOR TIME	Hrs	1.03	--	69.81	3.16
a) OWNED	Hrs	0.45	65.00	29.50	1.33
b) HIRED	Hrs	0.58	70.00	40.31	1.82
C) SEED	Kgs	40.42	2.06	83.36	3.77
D) FERTILIZER	Kgs	51.87	--	337.01	15.24
a) NITROGEN	Kgs	34.79	5.74	199.70	9.03
b) PHOSPHOROUS	Kgs	17.08	8.04	137.31	6.21
E) IRRIGATION TIME	Hrs	13.54	--	184.73	8.35
i) CANAL (C)	Hrs	9.15	--	44.02	1.99
a) OWNED	Hrs	7.68	0.00	0.00	0.00
b) PURCHASED	Hrs	1.47	30.00	44.02	1.99
ii) TUBE WELL(T.W) TIME	Hrs	1.37	--	31.55	1.43
a) OWNED	Hrs	0.89	22.00	19.64	0.89
b) HIRED	Hrs	0.48	25.00	11.90	0.54
iii) C+T.W TIME	Hrs	3.02	--	109.17	4.94
a) OWNED	Hrs	1.73	22.00	38.04	1.72
b) HIRED	Hrs	1.29	55.00	71.12	3.22
F) LABOUR USE BEFORE HARVESTING	Hrs	25.01	--	98.00	4.43
a) PERMANENT	Hrs	22.34	3.79	84.67	3.83
b) CASUAL	Hrs	2.67	5.00	13.33	0.60
G) HARVESTING TIME	Hrs	32.98	--	218.68	9.89
a) PERMANENT	Hrs	24.57	6.43	157.99	7.14
b) CASUAL	Hrs	8.50	7.14	60.69	2.74
H) TRACTOR-CUM-LABOUR THRESHING	Hrs	1.78	--	169.98	7.68
a) OWNED	Hrs	0.79	90.89	71.64	3.24
b) HIRED	Hrs	0.99	99.10	98.34	4.45
I) LAND.REVENUE	Rs.	-	-	29.60	1.34
J) RENT	Rs.	-	-	535.45	24.21
TOTAL COST (TC)	Rs.	-	-	2212.05	*100
GROSS INCOME	Kgs	831.56	2.44	2032.87	-
VARIABLE COST(VC)	Rs.	-	-	773.85	-
GROSS MARGIN	Rs.	-	-	1259.02	-
NET INCOME	Rs./Acre	-	-	-179.18	-
COST PER UNIT OF OUTPUT	Rs./40Kg	-	-	106.40	-

*=(A+B+C+D+E+F+G+H+I+J)

VC =(COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF OWNED TRACTOR AND 50% OF OWNED TUBE WELL COST).

Table-23

ENTERPRISE BUDGET OF COTTON ON SMALL FARMS IN DISTRICT TOBA TEK SINGH.
(Figures on per acre basis)

	PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A)	BULLOCK PAIR TIME	Hrs	18.94	20.71	392.16	13.40
B)	TRACTOR TIME	Hrs	1.94	-	127.77	4.37
	a) OWNED	Hrs	1.57	65.00	102.05	3.49
	b) HIRED	Hrs	0.37	70.00	25.72	0.88
C)	SEED	Kgs	6.39	9.71	62.09	2.12
D)	FERTILIZER	Kgs	40.37	-	267.23	9.13
	a) NITROGEN	Kgs	24.94	5.74	143.13	4.89
	b) PHOSPHOROUS	Kgs	15.44	8.04	124.10	4.24
E)	IRRIGATION TIME	Hrs	12.82	-	93.05	3.18
	I) CANAL (C)	Hrs	11.91	-	62.73	2.14
	a) OWNED	Hrs	9.82	0.00	0.00	0.00
	b) PURCHASED	Hrs	2.09	30.00	62.73	2.14
	II) TUBE WELL(T.W) TIME	Hrs	0.58	-	13.94	0.48
	a) OWNED	Hrs	0.15	22.00	3.33	0.11
	b) HIRED	Hrs	0.42	25.00	10.61	0.36
	III)C+T.W TIME	Hrs	0.33	-	16.38	0.56
	a) OWNED	Hrs	0.06	22.00	1.33	0.05
	b) HIRED	Hrs	0.27	55.17	15.05	0.51
F)	LAB USE BEF HARVEST	Hrs	146.53	-	642.22	21.94
	a) PERMANENT	Hrs	81.48	3.89	316.95	10.83
	b) CASUAL	Hrs	65.05	5.00	325.27	11.11
G)	PICKING COST	Rs.	0.00	-	161.91	5.53
H)	SPRAY COST	No.	2.03	136.05	276.22	9.44
I)	LAND.REVENUE	Rs.	-	-	36.50	1.25
J)	RENT	Rs.	-	-	867.36	29.64
	TOTAL COST (TC)	Rs.	-	-	2926.51	* 100
	GROSS INCOME	Kgs	360.80	7.18	2590.56	-
	VARIABLE COST(VC)	Rs.	-	-	1259.51	-
	GROSS MARGIN	Rs.	-	-	1331.05	-
	NETINCOME	Rs.	-	-	-335.95	-
	COST PER UNIT OF OUT PUT.	Rs/40Kg	-	-	324.45	-

*=(A+B+C+D+E+F+G+H+I+J)
(C=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED,PICKING, WATER PURCHASED,50% OF OWNED TRACTOR,AND 50% OF OWNED TUBE WELL COST).

Table-24

ENTERPRISE BUDGET OF COTTON ON MEDIUM FARMS IN DISTRICT TOBA TEK SINGH.

(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
) BULLOCK PAIR TIME	Hrs	11.53	14.74	169.91	5.19
) TRACTOR TIME	Hrs	2.42	-	157.78	4.82
a) OWNED	Hrs	2.34	65.00	152.10	4.65
b) HIRED	Hrs	0.08	70.00	5.68	0.17
) SEED	Kgs	6.32	9.71	61.41	1.88
) FERTILIZER	Kgs	50.68	-	333.78	10.20
a) NITROGEN	Kgs	32.05	5.74	183.95	5.62
b) PHOSPHOROUS	Kgs	18.64	8.04	149.83	4.58
) IRRIGATION TIME	Hrs	13.73	-	95.34	2.91
I) CANAL (C)	Hrs	11.19	-	29.19	0.89
a) OWNED	Hrs	10.22	0.00	0.00	0.00
b) PURCHASED	Hrs	0.97	30.00	29.19	0.89
II) TUBE WELL(T.W) TIME	Hrs	1.03	-	23.89	0.73
a) OWNED	Hrs	0.59	22.00	13.08	0.40
b) HIRED	Hrs	0.43	25.00	10.81	0.33
III) C+T.W TIME	Hrs	1.51	-	42.26	1.29
a) OWNED	Hrs	1.24	22.00	27.35	0.84
b) HIRED	Hrs	0.27	55.17	14.91	0.46
) LAB USE BEF HARVEST	Hrs	192.77	-	878.92	26.85
a) PERMANENT	Hrs	76.53	3.89	297.69	9.09
b) CASUAL	Hrs	116.25	5.00	581.23	17.76
) PICKING COST	Rs.	0.00	-	182.87	5.59
) SPRAY COST	No.	3.03	138.90	420.45	12.85
) LAND.REVENUE	Rs.	-	-	36.50	1.12
RENT	Rs.	-	-	936.25	28.60
TOTAL COST (TC)	Rs.	-	-	3273.21	* 100
GROSS INCOME	Kgs	407.50	7.18	2925.87	-
VARIABLE COST(VC)	Rs.	-	-	1722.92	-
GROSS MARGIN	Rs.	-	-	1202.95	-
NETINCOME	Rs.	-	-	-347.34	-
COST PER UNIT OF OUT PUT.	Rs/40Kg	-	-	321.29	-

:(A+B+C+D+E+F+G+H+I+J)

:=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED,PICKING, WATER PURCHASED,50% OF OWNED TRACTOR,AND 50% OF OWNED TUBE WELL COST).

Table-25

ENTERPRISE BUDGET OF COTTON ON LARGE FARMS IN DISTRICT TOBA TEK SINGH.

(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	6.90	10.22	70.52	2.05
B) TRACTOR TIME	Hrs	3.83	-	249.95	7.25
a) OWNED	Hrs	3.63	65.00	235.95	6.85
b) HIRED	Hrs	0.20	70.00	14.00	0.41
C) SEED	Kgs	6.60	9.71	64.09	1.86
D) FERTILIZER	Kgs	49.15	-	327.43	9.50
a) NITROGEN	Kgs	29.45	5.74	169.04	4.91
b) PHOSPHOROUS	Kgs	19.70	8.04	158.39	4.60
E) IRRIGATION TIME	Hrs	14.40	-	115.62	3.36
I) CANAL (C)	Hrs	11.40	-	24.00	0.70
a) OWNED	Hrs	10.60	0.00	0.00	0.00
b) PURCHASED	Hrs	0.80	30.00	24.00	0.70
II) TUBE WELL(T.W) TIME	Hrs	1.70	-	39.80	1.16
a) OWNED	Hrs	0.90	22.00	19.80	0.57
b) HIRED	Hrs	0.80	25.00	20.00	0.58
III)C+T.W TIME	Hrs	1.30	-	51.82	1.50
a) OWNED	Hrs	0.60	22.00	13.20	0.38
b) HIRED	Hrs	0.70	55.17	38.62	1.12
') LAB USE BEF HARVEST	Hrs	194.26	-	906.15	26.30
a) PERMANENT	Hrs	58.68	3.89	228.28	6.63
b) CASUAL	Hrs	135.57	5.00	677.87	19.67
) PICKING COST	Rs.	0.00	-	197.01	5.72
) SPRAY COST	No.	3.40	139.80	475.32	13.80
) LAND.REVENUE	Rs.	-	-	36.50	1.06
) RENT	Rs.	-	-	1002.90	29.11
TOTAL COST (TC)	Rs.	-	-	3445.48	* 100
GROSS INCOME	Kgs	439.02	7.18	3152.15	-
VARIABLE COST(VC)	Rs.	-	-	1966.21	-
GROSS MARGIN	Rs.	-	-	1185.94	-
NETINCOME	Rs.	-	-	-293.33	-
COST PER UNIT OF OUT PUT.	Rs/40Kg	-	-	313.93	-

=(A+B+C+D+E+F+G+H+I+J)

C=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED,PICKING, WATER PURCHASED,50% OF OWNED TRACTOR,AND 50% OF OWNED TUBE WELL COST).

Table-26

ENTERPRISE BUDGET OF COTTON ON ALL FARMS IN DISTRICT TOBA TEK SINGH.
(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	15.44	16.46	254.22	8.29
B) TRACTOR TIME	Hrs	2.52	-	165.02	5.38
a) OWNED	Hrs	2.26	65.00	146.90	4.79
b) HIRED	Hrs	0.26	70.00	18.12	0.59
C) SEED	Kgs	6.39	9.71	62.04	2.02
D) FERTILIZER	Kgs	44.52	-	294.35	9.60
a) NITROGEN	Kgs	27.66	5.74	158.79	5.18
b) PHOSPHOROUS	Kgs	16.86	8.04	135.56	4.42
E) IRRIGATION TIME	Hrs	13.26	-	95.79	3.12
I) CANAL (C)	Hrs	11.63	-	48.32	1.58
a) OWNED	Hrs	10.02	0.00	0.00	0.00
b) PURCHASED	Hrs	1.61	30.00	48.32	1.58
II) TUBE WELL(T.W) TIME	Hrs	0.82	-	19.49	0.64
a) OWNED	Hrs	0.36	22.00	7.98	0.26
b) HIRED	Hrs	0.46	25.00	11.50	0.38
III)C+T.W TIME	Hrs	0.81	-	27.99	0.91
a) OWNED	Hrs	0.50	22.00	10.90	0.36
b) HIRED	Hrs	0.31	55.17	17.09	0.56
F) LAB USE BEF HARVEST	Hrs	165.90	-	743.08	24.24
a) PERMANENT	Hrs	77.84	3.89	302.80	9.88
b) CASUAL	Hrs	88.06	5.00	440.29	14.36
G) PICKING COST	Rs.	0.00	-	171.88	5.61
H) SPRAY COST	No.	2.48	137.65	341.07	11.12
I) LAND.REVENUE	Rs.	-	-	36.50	1.19
J) RENT	Rs.	-	-	901.91	29.42
TOTAL COST (TC)	Rs.	-	-	3065.87	* 100
GROSS INCOME	Kgs	383.02	7.18	2750.05	-
VARIABLE COST(VC)	Rs.	-	-	1482.09	-
GROSS MARGIN	Rs.	-	-	1267.96	-
NETINCOME	Rs.	-	-	-315.82	-
COST PER UNIT OF OUT PUT.	Rs/40Kg	-	-	320.18	-

*=(A+B+C+D+E+F+G+H+I+J)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED,PICKING, WATER PURCHASED,50% OF OWNED TRACTOR,AND 50% OF OWNED TUBE WELL COST).

Table-27

ENTERPRISE BUDGET OF COTTON ON OWNERS FARMS IN DISTRICT TOBA TEK SINGH.
(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	17.04	16.86	287.29	8.90
B) TRACTOR TIME	Hrs	2.85	-	186.96	5.79
a) OWNED	Hrs	2.57	65.00	167.05	5.17
b) HIRED	Hrs	0.28	70.00	19.91	0.62
C) SEED	Kgs	6.36	9.71	61.78	1.91
D) FERTILIZER	Kgs	46.49	-	309.49	9.59
a) NITROGEN	Kgs	27.95	5.74	160.45	4.97
b) PHOSPHOROUS	Kgs	18.54	8.04	149.04	4.62
E) IRRIGATION TIME	Hrs	13.20	-	95.81	2.97
I) CANAL (C)	Hrs	11.65	-	49.50	1.53
a) OWNED	Hrs	10.00	0.00	0.00	0.00
b) PURCHASED	Hrs	1.65	30.00	49.50	1.53
II) TUBE WELL(T.W) TIME	Hrs	0.58	-	13.25	0.41
a) OWNED	Hrs	0.38	22.00	8.25	0.26
b) HIRED	Hrs	0.20	25.00	5.00	0.15
III) C+T.W TIME	Hrs	0.98	-	33.06	1.02
a) OWNED	Hrs	0.63	22.00	13.75	0.43
b) HIRED	Hrs	0.35	55.17	19.31	0.60
F) LAB USE BEF HARVEST	Hrs	169.95	-	762.77	23.63
a) PERMANENT	Hrs	78.35	3.89	304.79	9.44
b) CASUAL	Hrs	91.60	5.00	457.98	14.19
G) PICKING COST	Rs.	0.00	-	179.52	5.56
H) SPRAY COST	No.	2.68	137.68	368.28	11.41
I) LAND.REVENUE	Rs.	-	-	36.50	1.13
J) RENT	Rs.	-	-	939.76	29.11
TOTAL COST (TC)	Rs.	-	-	3228.17	* 100
GROSS INCOME	Kgs	400.05	7.18	2872.39	-
VARIABLE COST(VC)	Rs.	-	-	1558.43	-
GROSS MARGIN	Rs.	-	-	1313.96	-
NETINCOME	Rs.	-	-	-355.78	-
COST PER UNIT OF OUT PUT.	Rs/40Kg	-	-	322.77	-

*=(A+B+C+D+E+F+G+H+I+J)
VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED,PICKING, WATER PURCHASED,50% OF OWNED TRACTOR,AND 50% OF OWNED TUBE WELL COST).

Table-28

ENTERPRISE BUDGET OF COTTON ON OWNER-CUM-TENANT FARMS
IN DISTRIC TOBA TEK SINGH. (Figures on per acre basis)

	PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A)	BULLOCK PAIR TIME	Hrs	17.65	17.22	303.99	10.26
B)	TRACTOR TIME	Hrs	1.97	-	129.93	4.39
	a) OWNED	Hrs	1.61	65.00	104.65	3.53
	b) HIRED	Hrs	0.36	70.00	25.28	0.85
C)	SEED	Kgs	6.50	9.71	63.12	2.13
D)	FERTILIZER	Kgs	38.22	-	245.11	8.27
	a) NITROGEN	Kgs	27.04	5.74	155.22	5.24
	b) PHOSPHOROUS	Kgs	11.18	8.04	89.89	3.03
E)	IRRIGATION TIME	Hrs	13.72	-	105.90	3.57
	I) CANAL (C)	Hrs	11.39	-	50.00	1.69
	a) OWNED	Hrs	10.22	0.00	0.00	0.00
	b) PURCHASED	Hrs	1.67	30.00	50.00	1.69
	II) TUBE WELL(T.W) TIME	Hrs	1.22	-	29.56	1.00
	a) OWNED	Hrs	0.33	22.00	7.33	0.25
	b) HIRED	Hrs	0.89	25.00	22.22	0.75
	III)C+T.W TIME	Hrs	0.61	-	26.34	0.89
	a) OWNED	Hrs	0.22	22.00	4.89	0.17
	b) HIRED	Hrs	0.39	55.17	21.45	0.72
F)	LAB USE BEF HARVEST	Hrs	161.71	-	722.45	24.39
	a) PERMANENT	Hrs	77.57	3.89	301.73	10.19
	b) CASUAL	Hrs	84.14	5.00	420.72	14.20
G)	PICKING COST	Rs.	0.00	-	164.22	5.54
H)	SPRAY COST	No.	2.33	137.48	320.78	10.83
I)	LAND.REVENUE	Rs.	-	-	36.50	1.23
J)	RENT	Rs.	-	-	870.33	29.38
	TOTAL COST (TC)	Rs.	-	-	2962.31	* 100
	GROSS INCOME	Kgs	365.95	7.18	2627.49	-
	VARIABLE COST(VC)	Rs.	-	-	1388.88	-
	GROSS MARGIN	Rs.	-	-	1238.61	-
	NETINCOME	Rs.	-	-	-334.82	-
	COST PER UNIT OF OUT PUT.	Rs/40Kg	-	-	323.80	-

*=(A+B+C+D+E+F+G+H+I+J)
VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED,PICKING, WATER PURCHASED,50% OF OWNED TRACTOR,AND 50% OF OWNED TUBE WELL COST).

Table-29

ENTERPRISE BUDGET OF COTTON ON TENANT FARMS IN DISTRICT TOBA TEK SINGH.
(Figures on per acre basis)

	PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A)	BULLOCK PAIR TIME	Hrs	18.60	14.59	271.37	10.54
B)	TRACTOR TIME	Hrs	1.34	-	87.10	3.38
a)	OWNED	Hrs	1.34	65.00	87.10	3.38
b)	HIRED	Hrs	0.00	70.00	0.00	0.00
C)	SEED	Kgs	6.40	9.71	62.14	2.41
D)	FERTILIZER	Kgs	41.60	-	272.67	10.59
a)	NITROGEN	Kgs	26.87	5.74	154.21	5.99
b)	PHOSPHOROUS	Kgs	14.73	8.04	118.46	4.60
E)	IRRIGATION TIME	Hrs	13.00	-	83.60	3.25
I)	CANAL (C)	Hrs	11.20	-	40.00	1.55
a)	OWNED	Hrs	9.87	0.00	0.00	0.00
b)	PURCHASED	Hrs	1.33	30.00	40.00	1.55
II)	TUBE WELL(T.W) TIME	Hrs	1.67	-	40.67	1.58
a)	OWNED	Hrs	0.33	22.00	7.33	0.28
b)	HIRED	Hrs	1.33	25.00	33.33	1.29
III)	C+T.W TIME	Hrs	0.13	-	2.93	0.11
a)	OWNED	Hrs	0.13	22.00	2.93	0.11
b)	HIRED	Hrs	0.00	55.17	0.00	0.00
F)	LAB USE BEF HARVEST	Hrs	149.31	-	662.83	25.74
a)	PERMANENT	Hrs	75.44	3.89	293.44	11.40
b)	CASUAL	Hrs	73.88	5.00	369.39	14.35
G)	PICKING COST	Rs.	0.00	-	140.29	5.45
H)	SPRAY COST	No.	1.60	137.67	220.27	8.56
I)	LAND.REVENUE	Rs.	-	-	36.50	1.42
J)	RENT	Rs.	-	-	737.96	28.66
	TOTAL COST (TC)	Rs.	-	-	2574.74	* 100
	GROSS INCOME	Kgs	312.62	7.18	2244.63	-
	VARIABLE COST(VC)	Rs.	-	-	1185.31	-
	GROSS MARGIN	Rs.	-	-	1059.31	-
	NETINCOME	Rs.	-	-	-330.12	-
	COST PER UNIT OF OUT PUT.	Rs/40Kg	-	-	329.44	-

*=(A+B+C+D+E+F+G+H+I+J)
VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED,PICKING, WATER PURCHASED,50% OF OWNED TRACTOR,AND 50% OF OWNED TUBE WELL COST).

Table-30

ENTERPRISE BUDGET OF COTTON ON SMALL FARMS IN DISTRICT JHANG.
(Figures on per acre basis)

	PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A)	BULLOCK PAIR TIME	Hrs	29.68	19.96	592.33	18.42
B)	TRACTOR TIME	Hrs	1.08	-	72.32	2.25
	a) OWNED	Hrs	0.65	65.00	42.25	1.31
	b) HIRED	Hrs	0.43	70.00	30.07	0.94
C)	SEED	Kgs	6.26	9.71	60.79	1.89
D)	FERTILIZER	Kgs	31.20	-	197.31	6.14
	a) NITROGEN	Kgs	23.28	5.74	133.62	4.16
	b) PHOSPHOROUS	Kgs	7.92	8.04	63.70	1.98
E)	IRRIGATION TIME	Hrs	19.99	-	148.70	4.62
	I) CANAL (C)	Hrs	14.26	-	4.23	0.13
	a) OWNED	Hrs	10.04	0.00	0.00	0.00
	b) PURCHASED	Hrs	0.14	30.00	4.23	0.13
	II) TUBE WELL(T.W) TIME	Hrs	4.37	-	99.86	3.11
	a) OWNED	Hrs	3.10	22.00	68.17	2.12
	b) HIRED	Hrs	1.27	25.00	31.69	0.99
	III)C+T.W TIME	Hrs	1.36	-	44.62	1.39
	a) OWNED	Hrs	0.92	22.00	20.14	0.63
	b) HIRED	Hrs	0.44	55.17	24.48	0.76
G)	LAB USE BEF HARVEST	Hrs	146.73	-	617.53	19.21
	a) PERMANENT	Hrs	87.96	3.68	323.68	10.07
	b) CASUAL	Hrs	58.77	5.00	293.85	9.14
H)	PICKING COST	Rs.	0.00	-	178.89	5.56
I)	SPRAY COST	No.	1.73	134.11	232.34	7.23
J)	LAND.REVENUE	Rs.	-	-	36.50	1.14
J)	RENT	Rs.	-	-	1078.51	33.54
	TOTAL COST (TC)	Rs.	-	-	3215.23	* 100
	GROSS INCOME	Kgs	407.15	7.03	2862.28	-
	VARIABLE COST(VC)	Rs.	-	-	1108.85	-
	GROSS MARGIN	Rs.	-	-	1753.43	-
	NETINCOME	Rs.	-	-	-352.96	-
	COST PER UNIT OF OUT PUT.	Rs/40Kg	-	-	315.88	-

*=(A+B+C+D+E+F+G+H+I+J)
C=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED,PICKING, WATER PURCHASED,50% OF OWNED TRACTOR,AND 50% OF OWNED TUBE WELL COST).

Table-31

ENTERPRISE BUDGET OF COTTON ON MEDIUM FARMS IN DISTRICT JHANG.
(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	26.42	12.16	321.27	10.00
B) TRACTOR TIME	Hrs	1.80	-	118.30	3.68
a) OWNED	Hrs	1.54	65.00	100.10	3.12
b) HIRED	Hrs	0.26	70.00	18.20	0.57
C) SEED	Kgs	6.32	9.71	61.37	1.91
D) FERTILIZER	Kgs	32.32	-	218.52	6.80
a) NITROGEN	Kgs	26.15	5.74	150.10	4.67
b) PHOSPHOROUS	Kgs	3.51	3.04	38.42	2.13
E) IRRIGATION TIME	Hrs	21.90	-	200.02	6.23
I) CANAL (C)	Hrs	14.30	-	6.00	0.19
a) OWNED	Hrs	8.30	0.00	0.00	0.00
b) PURCHASED	Hrs	0.20	30.00	6.00	0.19
II) TUBE WELL(T.W) TIME	Hrs	3.40	-	78.40	2.44
a) OWNED	Hrs	2.20	22.00	48.40	1.51
b) HIRED	Hrs	1.20	25.00	30.00	0.93
III)C+T.W TIME	Hrs	4.20	-	115.62	3.60
a) OWNED	Hrs	3.50	22.00	77.00	2.40
b) HIRED	Hrs	0.70	55.17	38.62	1.20
G) LAB USE BEF HARVEST	Hrs	154.95	-	683.82	21.29
a) PERMANENT	Hrs	68.89	3.68	253.50	7.89
b) CASUAL	Hrs	86.07	5.00	430.33	13.40
H) PICKING COST	Rs.	0.00	-	187.70	5.85
I) SPRAY COST	No.	2.00	133.32	267.85	8.34
J) LAND.REVENUE	Rs.	-	-	36.50	1.14
K) RENT	Rs.	-	-	1115.92	34.75
TOTAL COST (TC)	Rs.	-	-	3211.27	* 100
GROSS INCOME	Kgs	427.21	7.03	3003.28	-
VARIABLE COST(VC)	Rs.	-	-	1332.83	-
GROSS MARGIN	Rs.	-	-	1670.45	-
NETINCOME	Rs.	-	-	-207.99	-
COST PER UNIT OF OUT PUT.	Rs/40Kg	-	-	300.67	-

*(A+B+C+D+E+F+G+H+I+J)
(C-COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED,PICKING, WATER PURCHASED,50% OF OWNED TRACTOR,AND 50% OF OWNED TUBE WELL COST).

Table-32

ENTERPRISE BUDGET OF COTTON ON LARGE FARMS IN DISTRICT JHANG.
(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	20.33	9.96	202.52	5.71
B) TRACTOR TIME	Hrs	3.02	-	201.93	5.69
a) OWNED	Hrs	1.94	65.00	126.10	3.55
b) HIRED	Hrs	1.08	70.00	75.83	2.14
C) SEED	Kgs	6.67	9.71	64.73	1.82
D) FERTILIZER	Kgs	45.42	-	282.73	7.96
a) NITROGEN	Kgs	35.83	5.74	205.68	5.79
b) PHOSPHOROUS	Kgs	9.58	8.04	77.05	2.17
E) IRRIGATION TIME	Hrs	67.33	-	299.14	8.43
I) CANAL (C)	Hrs	59.58	-	50.00	1.41
a) OWNED	Hrs	9.58	0.00	0.00	0.00
b) PURCHASED	Hrs	1.67	30.00	50.00	1.41
II) TUBE WELL(T.W) TIME	Hrs	2.92	-	65.42	1.84
a) OWNED	Hrs	2.50	22.00	55.00	1.55
b) HIRED	Hrs	0.42	25.00	10.42	0.29
III)C+T.W TIME	Hrs	4.83	-	183.72	5.18
a) OWNED	Hrs	2.50	22.00	55.00	1.55
b) HIRED	Hrs	2.33	55.17	128.72	3.63
F) LAB USE BEF HARVEST	Hrs	149.24	-	674.69	19.01
a) PERMANENT	Hrs	54.18	3.68	199.36	5.62
b) CASUAL	Hrs	95.07	5.00	475.33	13.39
G) PICKING COST	Rs.	0.00	-	211.90	5.97
H) SPRAY COST	No.	2.83	134.42	380.84	10.73
I) LAND.REVENUE	Rs.	-	-	36.50	1.03
J) RENT	Rs.	-	-	1194.86	33.66
TOTAL COST (TC)	Rs.	-	-	3549.84	* 100
GROSS INCOME	Kgs	482.27	7.03	3390.33	-
VARIABLE COST(VC)	Rs.	-	-	1771.05	-
GROSS MARGIN	Rs.	-	-	1619.28	-
NETINCOME	Rs.	-	-	-159.51	-
COST PER UNIT OF OUT PUT.	Rs/40Kg	-	-	294.43	-

*=(A+B+C+D+E+F+G+H+I+J)
VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED,PICKING, WATER PURCHASED,50% OF OWNED TRACTOR,AND 50% OF OWNED TUBE WELL COST).

Table-33

ENTERPRISE BUDGET OF COTTON ON ALL FARMS IN DISTRICT JHANG.
(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	28.33	16.16	457.79	14.35
B) TRACTOR TIME	Hrs	1.38	-	91.60	2.87
a) OWNED	Hrs	0.95	65.00	61.75	1.94
b) HIRED	Hrs	0.43	70.00	29.85	0.94
C) SEED	Kgs	6.30	9.71	61.16	1.92
D) FERTILIZER	Kgs	32.43	-	207.54	6.51
a) NITROGEN	Kgs	24.72	5.74	141.90	4.45
b) PHOSPHOROUS	Kgs	8.16	8.04	65.64	2.06
E) IRRIGATION TIME	Hrs	23.24	-	170.13	5.33
I) CANAL (C)	Hrs	16.94	-	7.35	0.23
a) OWNED	Hrs	9.58	0.00	0.00	0.00
b) PURCHASED	Hrs	0.25	30.00	7.35	0.23
II) TUBE WELL(T.W) TIME	Hrs	4.04	-	92.57	2.90
a) OWNED	Hrs	2.84	22.00	62.55	1.96
b) HIRED	Hrs	1.20	25.00	30.02	0.94
III)C+T.W TIME	Hrs	2.26	-	70.20	2.20
a) OWNED	Hrs	1.64	22.00	36.13	1.13
b) HIRED	Hrs	0.62	55.17	34.07	1.07
F) LAB USE BEF HARVEST	Hrs	148.89	-	637.14	19.98
a) PERMANENT	Hrs	81.30	3.68	299.17	9.38
b) CASUAL	Hrs	67.59	5.00	337.97	10.60
G) PICKING COST	Rs.	0.00	-	182.99	5.74
H) SPRAY COST	No.	1.86	134.09	249.78	7.83
I) LAND.REVENUE	Rs.	-	-	36.50	1.14
J) RENT	Rs.	-	-	1094.53	34.32
TOTAL COST (TC)	Rs.	-	-	3189.16	* 100
GROSS INCOME	Kgs	416.49	7.03	2927.90	-
VARIABLE COST(VC)	Rs.	-	-	1202.90	-
GROSS MARGIN	Rs.	-	-	1725.00	-
NETINCOME	Rs.	-	-	-261.26	-
COST PER UNIT OF OUT PUT.	Rs/40Kg	-	-	306.29	-

*=(A+B+C+D+E+F+G+H+I+J)
VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED,PICKING, WATER PURCHASED,50% OF OWNED TRACTOR,AND 50% OF OWNED TUBE WELL COST).

Table-34

ENTERPRISE BUDGET OF COTTON ON OWNERS FARMS IN DISTRICT JHANG.
(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	28.99	17.40	504.49	15.34
B) TRACTOR TIME	Hrs	1.28	-	85.18	2.59
a) OWNED	Hrs	0.85	65.00	55.25	1.68
b) HIRED	Hrs	0.43	70.00	29.93	0.91
C) SEED	Kgs	6.31	9.71	61.26	1.86
D) FERTILIZER	Kgs	30.89	-	197.80	6.01
a) NITROGEN	Kgs	24.09	5.74	138.29	4.20
b) PHOSPHOROUS	Kgs	7.40	8.04	59.51	1.81
E) IRRIGATION TIME	Hrs	19.11	-	156.37	4.75
I) CANAL (C)	Hrs	13.06	-	2.96	0.09
a) OWNED	Hrs	10.10	0.00	0.00	0.00
b) PURCHASED	Hrs	0.10	30.00	2.96	0.09
II) TUBE WELL(T.W) TIME	Hrs	3.95	-	90.00	2.74
a) OWNED	Hrs	2.89	22.00	63.68	1.94
b) HIRED	Hrs	1.05	25.00	26.32	0.80
III)C+T.W TIME	Hrs	2.10	-	63.41	1.93
a) OWNED	Hrs	1.58	22.00	34.74	1.06
b) HIRED	Hrs	0.52	55.17	28.67	0.87
F) LAB USE BEF HARVEST	Hrs	146.20	-	623.32	18.95
a) PERMANENT	Hrs	81.58	3.68	300.21	9.13
b) CASUAL	Hrs	64.62	5.00	323.11	9.82
G) PICKING COST	Rs.	0.00	-	193.82	5.89
H) SPRAY COST	No.	1.83	132.46	242.26	7.37
I) LAND.REVENUE	Rs.	-	-	36.50	1.11
J) RENT	Rs.	-	-	1188.36	36.13
TOTAL COST (TC)	Rs.	-	-	3289.36	* 100
GROSS INCOME	Kgs	441.13	7.03	3101.13	-
VARIABLE COST(VC)	Rs.	-	-	1165.60	-
GROSS MARGIN	Rs.	-	-	1935.53	-
NETINCOME	Rs.	-	-	-188.23	-
COST PER UNIT OF OUT PUT.	Rs/40Kg	-	-	298.27	-

*=(A+B+C+D+E+F+G+H+I+J)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED,PICKING, WATER PURCHASED,50% OF OWNED TRACTOR,AND 50% OF OWNED TUBE WELL COST).

Table-35

ENTERPRISE BUDGET OF COTTON ON OWNER-CUM-TENANT FARMS IN DISTRICT JHANG.

(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	31.29	12.02	376.05	13.35
B) TRACTOR TIME	Hrs	2.75	-	185.10	6.57
a) OWNED	Hrs	1.54	65.00	100.10	3.55
b) HIRED	Hrs	1.21	70.00	85.00	3.02
C) SEED	Kgs	7.43	9.71	72.13	2.56
D) FERTILIZER	Kgs	36.00	-	244.43	8.68
a) NITROGEN	Kgs	19.57	5.74	112.34	3.99
b) PHOSPHOROUS	Kgs	16.43	8.04	132.09	4.69
E) IRRIGATION TIME	Hrs	66.79	-	195.83	6.95
I) CANAL (C)	Hrs	61.79	-	53.57	1.90
a) OWNED	Hrs	8.21	0.00	0.00	0.00
b) PURCHASED	Hrs	1.79	30.00	53.57	1.90
II) TUBE WELL(T.W) TIME	Hrs	3.21	-	79.29	2.81
a) OWNED	Hrs	0.36	22.00	7.86	0.28
b) HIRED	Hrs	2.86	25.00	71.43	2.54
III)C+T.W TIME	Hrs	1.79	-	62.98	2.24
a) OWNED	Hrs	1.07	22.00	23.57	0.84
b) HIRED	Hrs	0.71	55.17	39.40	1.40
F) LAB USE BEF HARVEST	Hrs	126.35	-	548.72	19.48
a) PERMANENT	Hrs	62.90	3.68	231.46	8.22
b) CASUAL	Hrs	63.45	5.00	317.26	11.26
G) PICKING COST	Rs.	0.00	-	159.00	5.64
H) SPRAY COST	No.	0.43	129.38	55.45	1.97
I) LAND.REVENUE	Rs.	--	-	36.50	1.30
J) RENT	Rs.	-	-	944.02	33.51
TOTAL COST (TC)	Rs.	-	-	2817.24	* 100
GROSS INCOME	Kgs	361.89	7.03	2544.06	-
VARIABLE COST(VC)	Rs.	-	-	1151.66	-
GROSS MARGIN	Rs.	-	-	1392.40	-
NETINCOME	Rs.	-	-	-273.18	-
COST PER UNIT OF OUT PUT.	Rs/40Kg	-	-	311.40	-

*=(A+B+C+D+E+F+G+H+I+J)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED,PICKING, WATER PURCHASED,50% OF OWNED TRACTOR,AND 50% OF OWNED TUBE WELL COST).

Table-36

ENTERPRISE BUDGET OF COTTON ON TENANT FARMS IN DISTRICT JHANG.
(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	24.58	14.21	349.27	11.72
B) TRACTOR TIME	Hrs	1.38	-	90.46	3.03
a) OWNED	Hrs	1.25	65.00	81.25	2.73
b) HIRED	Hrs	0.13	70.00	9.21	0.31
C) SEED	Kgs	5.84	9.71	56.73	1.90
D) FERTILIZER	Kgs	37.30	-	232.91	7.81
a) NITROGEN	Kgs	29.13	5.74	167.22	5.61
b) PHOSPHOROUS	Kgs	8.17	8.04	65.70	2.20
E) IRRIGATION TIME	Hrs	23.74	-	215.69	7.24
I) CANAL (C)	Hrs	15.92	-	7.89	0.26
a) OWNED	Hrs	8.03	0.00	0.00	0.00
b) PURCHASED	Hrs	0.26	30.00	7.89	0.26
II) TUBE WELL(T.W) TIME	Hrs	4.74	-	107.76	3.61
a) OWNED	Hrs	3.55	22.00	78.16	2.62
b) HIRED	Hrs	1.18	25.00	29.61	0.99
III)C+T.W TIME	Hrs	3.08	-	100.03	3.36
a) OWNED	Hrs	2.11	22.00	46.32	1.55
b) HIRED	Hrs	0.97	55.17	53.71	1.80
F) LAB USE BEF HARVEST	Hrs	167.95	-	725.00	24.32
a) PERMANENT	Hrs	86.95	3.68	319.97	10.73
b) CASUAL	Hrs	81.01	5.00	405.03	13.59
G) PICKING COST	Rs.	0.00	-	148.52	4.98
H) SPRAY COST	No.	2.53	139.11	351.44	11.79
I) LAND.REVENUE	Rs.	-	-	36.50	1.22
J) RENT	Rs.	-	-	774.64	25.98
TOTAL COST (TC)	Rs.	-	-	2981.16	* 100
GROSS INCOME	Kgs	338.04	7.03	2376.39	-
VARIABLE COST(VC)	Rs.	-	-	1374.76	-
GROSS MARGIN	Rs.	-	-	1001.63	-
NETINCOME	Rs.	-	-	-604.77	-
COST PER UNIT OF OUT PUT.	Rs/40Kg	-	-	352.76	-

*=(A+B+C+D+E+F+G+H+I+J)
VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED,PICKING, WATER PURCHASED,50% OF OWNED TRACTOR,AND 50% OF OWNED TUBE WELL COST).

Table-37

ENTERPRISE BUDGET OF COTTON ON SMALL FARMS IN DISTRICTS TOBA TEK SINGH AND JHANG. (Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	24.31	20.27	492.68	16.03
B) TRACTOR TIME	Hrs	1.52	-	100.70	3.28
a) OWNED	Hrs	1.12	65.00	72.80	2.37
b) HIRED	Hrs	0.40	70.00	27.90	0.91
C) SEED	Kgs	6.33	9.71	61.44	2.00
D) FERTILIZER	Kgs	35.79	-	232.27	7.56
a) NITROGEN	Kgs	24.11	5.74	138.37	4.50
b) PHOSPHOROUS	Kgs	11.68	8.04	93.90	3.06
E) IRRIGATION TIME	Hrs	16.40	-	120.87	3.93
I) CANAL (C)	Hrs	13.08	-	33.48	1.09
a) OWNED	Hrs	9.93	0.00	0.00	0.00
b) PURCHASED	Hrs	1.12	30.00	33.48	1.09
II) TUBE WELL(T.W) TIME	Hrs	2.47	-	56.90	1.85
a) OWNED	Hrs	1.63	22.00	35.75	1.16
b) HIRED	Hrs	0.85	25.00	21.15	0.69
III)C+T.W TIME	Hrs	0.85	-	30.50	0.99
a) OWNED	Hrs	0.49	22.00	10.74	0.35
b) HIRED	Hrs	0.36	55.17	19.76	0.64
F) LAB USE BEF HARVEST	Hrs	146.63	-	630.64	20.52
a) PERMANENT	Hrs	84.72	3.79	321.08	10.45
b) CASUAL	Hrs	61.91	5.00	309.56	10.07
G) PICKING COST	Rs.	0.00	-	170.40	5.55
H) SPRAY COST	No.	1.88	135.16	254.28	8.28
I) LAND.REVENUE	Rs.	-	-	36.50	1.19
J) RENT	Rs.	-	-	972.94	31.66
TOTAL COST (TC)	Rs.	-	-	3072.72	* 100
GROSS INCOME	Kgs	383.73	7.10	2726.42	-
VARIABLE COST(VC)	Rs.	-	-	1184.51	-
GROSS MARGIN	Rs.	-	-	1541.91	-
NETINCOME	Rs.	-	-	-346.30	-
COST PER UNIT OF OUT PUT.	Rs/40Kg	-	-	320.30	-

*=(A+B+C+D+E+F+G+H+I+J)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED,PICKING, WATER PURCHASED,50% OF OWNED TRACTOR,AND 50% OF OWNED TUBE WELL COST).

Table-38

ENTERPRISE BUDGET OF COTTON ON MEDIUM FARMS IN DISTRICTS TOBA TEK SINGH AND JHANG. (Figures on per acre basis)

	PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A)	BULLOCK PAIR TIME	Hrs	18.97	13.50	256.14	7.83
B)	TRACTOR TIME	Hrs	2.42	-	158.19	4.83
	a) OWNED	Hrs	2.25	65.00	146.25	4.47
	b) HIRED	Hrs	0.17	70.00	11.94	0.36
C)	SEED	Kgs	6.32	9.71	61.39	1.88
D)	FERTILIZER	Kgs	41.75	-	276.15	8.44
	a) NITROGEN	Kgs	29.10	5.74	167.03	5.10
	b) PHOSPHOROUS	Kgs	13.57	8.04	109.12	3.33
E)	IRRIGATION TIME	Hrs	17.81	-	147.68	4.51
	I) CANAL (C)	Hrs	12.74	-	17.59	0.54
	a) OWNED	Hrs	9.26	0.00	0.00	0.00
	b) PURCHASED	Hrs	0.59	30.00	17.59	0.54
	II) TUBE WELL(T.W) TIME	Hrs	2.21	-	51.15	1.56
	a) OWNED	Hrs	1.40	22.00	30.74	0.94
	b) HIRED	Hrs	0.82	25.00	20.41	0.62
	III)C+T.W TIME	Hrs	2.86	-	78.94	2.41
	a) OWNED	Hrs	2.37	22.00	52.18	1.59
	b) HIRED	Hrs	0.49	55.17	26.76	0.82
F)	LAB USE BEF HARVEST	Hrs	173.86	-	781.34	23.87
	a) PERMANENT	Hrs	72.71	3.79	275.56	8.42
	b) CASUAL	Hrs	101.16	5.00	505.78	15.45
G)	PICKING COST	Rs.	0.00	-	185.29	5.66
H)	SPRAY COST	No.	2.51	136.92	344.15	10.52
I)	LAND.REVENUE	Rs.	-	-	36.50	1.12
J)	RENT	Rs.	-	-	1026.08	31.35
	TOTAL COST (TC)	Rs.	-	-	3272.91	* 100
	GROSS INCOME	Kgs	417.25	7.10	2964.57	-
	VARIABLE COST(VC)	Rs.	-	-	1537.95	-
	GROSS MARGIN	Rs.	-	-	1426.62	-
	NETINCOME	Rs.	-	-	-308.33	-
	COST PER UNIT OF OUT PUT.	Rs/40Kg	-	-	313.76	-

*=(A+B+C+D+E+F+G+H+I+J)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED,PICKING, WATER PURCHASED,50% OF OWNED TRACTOR,AND 50% OF OWNED TUBE WELL COST).

Table-39

ENTERPRISE BUDGET OF COTTON ON LARGE FARMS IN DISTRICTS TOBA TEK SINGH AND JHANG. (Figures on per acre basis)

	PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A)	BULLOCK PAIR TIME	Hrs	13.62	10.11	137.66	3.95
B)	TRACTOR TIME	Hrs	3.20	-	211.32	6.06
a)	OWNED	Hrs	2.56	65.00	166.40	4.78
b)	HIRED	Hrs	0.64	70.00	44.92	1.29
C)	SEED	Kgs	6.63	9.71	64.41	1.85
D)	FERTILIZER	Kgs	47.28	-	305.08	8.76
a)	NITROGEN	Kgs	32.64	5.74	187.36	5.38
b)	PHOSPHOROUS	Kgs	14.64	8.04	117.72	3.38
E)	IRRIGATION TIME	Hrs	40.87	-	207.38	5.95
I)	CANAL (C)	Hrs	35.49	-	37.00	1.06
a)	OWNED	Hrs	10.09	0.00	0.00	0.00
b)	PURCHASED	Hrs	1.23	30.00	37.00	1.06
II)	TUBE WELL(T.W) TIME	Hrs	2.31	-	52.61	1.51
a)	OWNED	Hrs	1.70	22.00	37.40	1.07
b)	HIRED	Hrs	0.61	25.00	15.21	0.44
III)	C+T.W TIME	Hrs	3.07	-	117.77	3.38
a)	OWNED	Hrs	1.55	22.00	34.10	0.98
b)	HIRED	Hrs	1.52	55.17	83.67	2.40
F)	LAB USE BEF HARVEST	Hrs	171.75	-	790.47	22.69
a)	PERMANENT	Hrs	56.43	3.79	213.87	6.14
b)	CASUAL	Hrs	115.32	5.00	576.60	16.55
G)	PICKING COST	Rs.	0.00	-	204.45	5.87
H)	SPRAY COST	No.	3.12	137.35	428.08	12.29
I)	LAND.REVENUE	Rs	-	-	36.50	1.05
J)	RENT	Rs.	-	-	1098.88	31.54
	TOTAL COST (TC)	Rs.	-	-	3484.23	* 100
	GROSS INCOME	Kgs	460.41	7.10	3271.24	-
	VARIABLE COST(VC)	Rs.	-	-	1861.32	-
	GROSS MARGIN	Rs.	-	-	1409.92	-
	NETINCOME	Rs.	-	-	-212.99	-
	COST PER UNIT OF OUT PUT.	Rs/40Kg	-	-	302.70	-

*=(A+B+C+D+E+F+G+H+I+J)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED,PICKING, WATER PURCHASED,50% OF OWNED TRACTOR,AND 50% OF OWNED TUBE WELL COST).

Table-40

ENTERPRISE BUDGET OF COTTON ON ALL FARMS IN DISTRICTS TOBA TEK SINGH AND JHANG. (Figures on per acre basis)

	PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A)	BULLOCK PAIR TIME	Hrs	21.89	16.30	356.75	11.38
B)	TRACTOR TIME	Hrs	2.04	-	134.49	4.29
	a) OWNED	Hrs	1.70	65.00	110.50	3.52
	b) HIRED	Hrs	0.34	70.00	23.99	0.77
C)	SEED	Kgs	6.34	9.71	61.60	1.96
D)	FERTILIZER	Kgs	38.48	-	250.94	8.00
	a) NITROGEN	Kgs	26.19	5.74	150.34	4.80
	b) PHOSPHOROUS	Kgs	12.51	8.04	100.60	3.21
E)	IRRIGATION TIME	Hrs	18.25	-	132.96	4.24
	I) CANAL (C)	Hrs	14.28	-	27.84	0.89
	a) OWNED	Hrs	9.80	0.00	0.00	0.00
	b) PURCHASED	Hrs	0.93	30.00	27.84	0.89
	II) TUBE WELL(T.W) TIME	Hrs	2.43	-	56.03	1.79
	a) OWNED	Hrs	1.60	22.00	35.27	1.12
	b) HIRED	Hrs	0.83	25.00	20.76	0.66
	III)C+T.W TIME	Hrs	1.53	-	49.10	1.57
	a) OWNED	Hrs	1.07	22.00	23.52	0.75
	b) HIRED	Hrs	0.46	55.17	25.58	0.82
F)	LAB USE BEF HARVEST	Hrs	157.39	-	690.69	22.03
	a) PERMANENT	Hrs	79.57	3.79	301.56	9.62
	b) CASUAL	Hrs	77.83	5.00	389.13	12.41
G)	PICKING COST	Rs.	0.00	-	177.44	5.66
H)	SPRAY COST	No.	2.17	136.12	295.42	9.42
I)	LAND.REVENUE	Rs.	-	-	36.50	1.16
J)	RENT	Rs.	-	-	998.22	31.84
	TOTAL COST (TC)	Rs.	-	-	3135.01	* 100
	GROSS INCOME	Kgs	399.57	7.10	2838.97	-
	VARIABLE COST(VC)	Rs.	-	-	1345.58	-
	GROSS MARGIN	Rs.	-	-	1493.39	-
	NETINCOME	Rs.	-	-	-296.04	-
	COST PER UNIT OF OUT PUT.	Rs/40Kg	-	-	313.84	-

*=(A+B+C+D+E+F+G+H+I+J)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED,PICKING, WATER PURCHASED,50% OF OWNED TRACTOR,AND 50% OF OWNED TUBE WELL COST).

Table-41

ENTERPRISE BUDGET OF COTTON ON OWNERS FARMS IN DISTRICTS TOBA TEK SINGH AND JHANG. (Figures on per acre basis)

	PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A)	BULLOCK PAIR TIME	Hrs	21.67	17.16	371.94	11.47
B)	TRACTOR TIME	Hrs	2.20	-	144.52	4.46
a)	OWNED	Hrs	1.84	65.00	119.60	3.69
b)	HIRED	Hrs	0.36	70.00	24.92	0.77
C)	SEED	Kgs	6.34	9.71	61.52	1.90
D)	FERTILIZER	Kgs	38.69	-	253.64	7.82
a)	NITROGEN	Kgs	26.02	5.74	149.37	4.60
b)	PHOSPHOROUS	Kgs	12.97	8.04	104.27	3.21
E)	IRRIGATION TIME	Hrs	16.15	-	126.09	3.89
I)	CANAL (C)	Hrs	12.35	-	26.23	0.81
a)	OWNED	Hrs	10.05	0.00	0.00	0.00
b)	PURCHASED	Hrs	0.87	30.00	26.23	0.81
II)	TUBE WELL(T.W) TIME	Hrs	2.26	-	51.63	1.59
a)	OWNED	Hrs	1.63	22.00	35.97	1.11
b)	HIRED	Hrs	0.63	25.00	15.66	0.48
III)	C+T.W TIME	Hrs	1.54	-	48.23	1.49
a)	OWNED	Hrs	1.10	22.00	24.24	0.75
b)	HIRED	Hrs	0.43	55.17	23.99	0.74
F)	LAB USE BEF HARVEST	Hrs	158.07	-	693.62	21.38
a)	PERMANENT	Hrs	79.97	3.79	303.07	9.34
b)	CASUAL	Hrs	78.11	5.00	390.55	12.04
G)	PICKING COST	Rs.	0.00	-	186.67	5.75
H)	SPRAY COST	No.	2.25	135.56	305.27	9.41
I)	LAND.REVENUE	Rs.	-	-	36.50	1.13
J)	RENT	Rs.	-	-	1064.06	32.80
	TOTAL COST (TC)	Rs.	-	-	3243.83	* 100
	GROSS INCOME	Kgs	420.37	7.10	2986.76	_
	VARIABLE COST(VC)	Rs.	-	-	1366.24	_
	GROSS MARGIN	Rs.	-	-	1620.52	_
	NETINCOME	Rs.	-	-	-257.07	_
	COST PER UNIT OF OUT PUT.	Rs/40Kg	-	-	308.66	_

*=(A+B+C+D+E+F+G+H+I+J)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED,PICKING, WATER PURCHASED,50% OF OWNED TRACTOR,AND 50% OF OWNED TUBE WELL COST).

Table-42

ENTERPRISE BUDGET OF COTTON ON OWNER-CUM-TENANT FARMS
IN DISTRICTS TOBA TEK SINGH AND JHANG. (Figures on per acre basis)

	PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A)	BULLOCK PAIR TIME	Hrs	24.47	14.40	352.36	12.07
B)	TRACTOR TIME	Hrs	2.65	-	176.04	6.03
a)	OWNED	Hrs	1.86	65.00	120.90	4.14
b)	HIRED	Hrs	0.79	70.00	55.14	1.89
C)	SEED	Kgs	6.96	9.71	67.62	2.32
D)	FERTILIZER	Kgs	37.11	-	244.77	8.38
a)	NITROGEN	Kgs	23.31	5.74	133.78	4.58
b)	PHOSPHOROUS	Kgs	13.80	8.04	110.99	3.80
E)	IRRIGATION TIME	Hrs	40.25	-	150.87	5.17
I)	CANAL (C)	Hrs	36.84	-	51.79	1.77
a)	OWNED	Hrs	9.22	0.00	0.00	0.00
b)	PURCHASED	Hrs	1.73	30.00	51.79	1.77
II)	TUBE WELL(T.W) TIME	Hrs	2.22	-	54.42	1.86
a)	OWNED	Hrs	0.35	22.00	7.60	0.26
b)	HIRED	Hrs	1.87	25.00	46.83	1.60
III)	C+T.W TIME	Hrs	1.20	-	44.66	1.53
a)	OWNED	Hrs	0.65	22.00	14.23	0.49
b)	HIRED	Hrs	0.55	55.17	30.43	1.04
F)	LAB USE BEF HARVEST	Hrs	144.03	-	635.16	21.75
a)	PERMANENT	Hrs	70.23	3.79	266.17	9.11
b)	CASUAL	Hrs	73.80	5.00	368.99	12.64
G)	PICKING COST	Rs.	0.00	-	161.61	5.53
H)	SPRAY COST	No.	1.38	136.22	188.11	6.44
I)	LAND.REVENUE	Rs.	-	-	36.50	1.25
J)	RENT	Rs.	-	-	907.18	31.07
	TOTAL COST (TC)	Rs.	-	-	2920.22	* 100
	GROSS INCOME	Kgs	363.94	7.11	2585.77	_
	VARIABLE COST(VC)	Rs.	-	-	1279.53	_
	GROSS MARGIN	Rs.	-	-	1306.24	_
	NETINCOME	Rs.	-	-	-334.45	_
	COST PER UNIT OF OUT PUT.	Rs/40Kg	-	-	320.96	_

*=(A+B+C+D+E+F+G+H+I+J)
VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED,PICKING, WATER PURCHASED,50% OF OWNED TRACTOR,AND 50% OF OWNED TUBE WELL COST).

Table-43

ENTERPRISE BUDGET OF COTTON ON TENANT FARMS IN DISTRICTS TOBA TEK SINGH AND JHANG.

(Figures on per acre basis)

	PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A)	BULLOCK PAIR TIME	Hrs	21.59	14.00	302.25	10.90
B)	TRACTOR TIME	Hrs	1.39	-	90.41	3.26
a)	OWNED	Hrs	1.32	65.00	85.80	3.09
b)	HIRED	Hrs	0.07	70.00	4.61	0.17
C)	SEED	Kgs	6.12	9.71	59.44	2.14
D)	FERTILIZER	Kgs	39.45	-	252.79	9.12
a)	NITROGEN	Kgs	28.00	5.74	160.71	5.80
b)	PHOSPHOROUS	Kgs	11.45	8.04	92.08	3.32
E)	IRRIGATION TIME	Hrs	18.37	-	149.64	5.40
I)	CANAL (C)	Hrs	13.56	-	23.95	0.86
a)	OWNED	Hrs	3.95	0.00	0.00	0.00
b)	PURCHASED	Hrs	0.80	30.00	23.95	0.86
II)	TUBE WELL(T.W) TIME	Hrs	3.20	-	74.21	2.68
a)	OWNED	Hrs	1.94	22.00	42.75	1.54
b)	HIRED	Hrs	1.26	25.00	31.47	1.14
III)	C+T.W TIME	Hrs	1.61	-	51.48	1.86
a)	OWNED	Hrs	1.12	22.00	24.62	0.89
b)	HIRED	Hrs	0.49	55.17	26.86	0.97
F)	LAB USE BEF HARVEST	Hrs	158.63	-	694.93	25.06
a)	PERMANENT	Hrs	81.19	3.79	307.72	11.10
b)	CASUAL	Hrs	77.44	5.00	387.21	13.97
G)	PICKING COST	Rs.	0.00	-	144.41	5.21
H)	SPRAY COST	No.	2.06	138.55	285.85	10.31
I)	LAND.REVENUE	Rs.	-	-	36.50	1.32
J)	RENT	Rs.	-	-	756.30	27.28
	TOTAL COST (TC)	Rs.	-	-	2772.52	*100
	GROSS INCOME	Kgs	325.19	7.10	2310.51	-
	VARIABLE COST(VC)	Rs.	-	-	1280.85	-
	GROSS MARGIN	Rs.	-	-	1029.66	-
	NETINCOME	Rs.	-	-	-462.01	-
	COST PER UNIT OF OUT PUT.	Rs/40Kg	-	-	341.03	-

*=(A+B+C+D+E+F+G+H+I+J)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED,PICKING, WATER PURCHASED,50% OF OWNED TRACTOR,AND 50% OF OWNED TUBE WELL COST).

Table-44

ENTERPRISE BUDGET OF FRESH SUGARCANE ON SMALL FARMS IN DISTRICT TOBA-
-TEK SINGH. (Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	42.41	20.71	878.31	20.64
B) TRACTOR TIME	Hrs	1.07	--	73.26	1.72
a) OWNED	Hrs	0.32	65.00	20.76	0.49
b) HIRED	Hrs	0.75	70.00	52.50	1.23
C) SEED	Kgs	2813.31	0.33	928.39	21.82
D) FERTILIZER	Kgs	49.18	--	315.03	7.40
a) NITROGEN	Kgs	37.04	5.87	217.43	5.11
b) PHOSPHOROUS	Kgs	12.14	8.04	97.60	2.29
E) IRRIGATION TIME	Hrs	34.14	--	18.75	0.44
i) CANAL (C)	Hrs	33.60	--	2.92	0.07
a) OWNED	Hrs	33.50	0.00	0.00	0.00
b) PURCHASED	Hrs	0.10	30.00	2.92	0.07
ii) TUBE WELL(T.W) TIME	Hrs	0.36	--	8.19	0.19
a) OWNED	Hrs	0.28	22.00	6.11	0.14
b) HIRED	Hrs	0.08	25.00	2.08	0.05
iii) C+T.W TIME	Hrs	0.18	--	7.64	0.18
a) OWNED	Hrs	0.07	22.00	1.53	0.04
b) HIRED	Hrs	0.11	55.00	6.11	0.14
F) LAB USE BEF HARVEST	Hrs	89.20	--	386.68	9.09
a) PERMANENT	Hrs	53.42	3.89	207.79	4.88
b) CASUAL	Hrs	35.78	5.00	178.89	4.20
G) HARVEST TIME	Hrs	95.62	--	430.33	10.11
a) PERMANENT	Hrs	43.03	3.89	167.38	3.93
b) CASUAL	Hrs	52.59	5.00	262.95	6.18
H) LAND.REVENUE	Rs.	-	-	82.00	1.93
I) RENT	Rs.	-	-	1142.80	26.85
TOTAL COST (TC)	Rs.	-	-	4255.55	*100
GROSS INCOME	Kgs	11710.00	0.33	3864.30	-
VARIABLE COST(VC)	Rs.	-	-	1709.81	-
GROSS MARGIN	Rs.	-	-	2154.49	-
NET INCOME	Rs.	-	-	-391.25	-
COST/UNIT OF OUT PUT	Rs/40Kg	-	-	14.54	-

*=(A+B+C+D+E+F+G+H+I)
VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED,
WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST)

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Table-45

ENTERPRISE BUDGET OF FRESH SUGARCANE ON MEDIUM FARMS IN DISTRICT TOBA--TEK SINGH. (Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	38.33	14.74	565.03	13.14
B) TRACTOR TIME	Hrs	1.54	--	101.67	2.36
a) OWNED	Hrs	1.25	65.00	81.25	1.89
b) HIRED	Hrs	0.29	70.00	20.42	0.47
C) SEED	Kgs	2805.33	0.33	925.76	21.53
D) FERTILIZER	Kgs	56.86	--	370.76	8.62
a) NITROGEN	Kgs	39.82	5.87	233.74	5.44
b) PHOSPHOROUS	Kgs	17.04	8.04	137.02	3.19
E) IRRIGATION TIME	Hrs	38.51	--	227.04	5.28
i) CANAL (C)	Hrs	33.15	--	62.50	1.45
a) OWNED	Hrs	31.07	0.00	0.00	0.00
b) PURCHASED	Hrs	2.08	30.00	62.50	1.45
ii) TUBE WELL(T.W) TIME	Hrs	0.46	--	10.08	0.23
a) OWNED	Hrs	0.46	22.00	10.08	0.23
b) HIRED	Hrs	0.00	25.00	0.00	0.00
iii) C+T.W TIME	Hrs	4.90	--	154.16	3.59
a) OWNED	Hrs	3.48	22.00	76.54	1.78
b) HIRED	Hrs	1.42	55.00	77.92	1.81
F) LAB USE BEF HARVEST	Hrs	87.73	--	388.01	9.02
a) PERMANENT	Hrs	45.62	3.89	177.46	4.13
b) CASUAL	Hrs	42.11	5.00	210.55	4.90
G) HARVEST TIME	Hrs	111.29	--	499.00	11.61
a) PERMANENT	Hrs	51.75	3.89	201.30	4.68
b) CASUAL	Hrs	59.54	5.00	297.70	6.92
H) LAND.REVENUE	Rs.	-	-	82.00	1.91
I) RENT	Rs.	-	-	1140.19	26.52
TOTAL COST (TC)	Rs.	-	-	4299.45	*100
GROSS INCOME	Rs.	12407.80	0.33	4094.57	-
VARIABLE COST	Rs.	-	-	1990.84	-
GROSS MARGIN	Rs.	-	-	2103.73	-
NET INCOME	Rs.	-	-	-204.88	-
COST/UNIT OF OUT PUT	Rs/40Kg	-	-	13.86	-

*=(A+B+C+D+E+F+G+H+I)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST)

Table-46

ENTERPRISE BUDGET OF FRESH SUGARCANE ON LARGE FARMS IN DISTRICT TOBA--TEK SINGH.

(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	33.64	10.22	343.76	7.70
B) TRACTOR TIME	Hrs	2.86	--	190.39	4.26
a) OWNED	Hrs	1.95	65.00	126.75	2.84
b) HIRED	Hrs	0.91	70.00	63.64	1.43
C) SEED	Kgs	2710.55	0.33	894.48	20.04
D) FERTILIZER	Kgs	63.59	--	418.65	9.38
a) NITROGEN	Kgs	42.68	5.87	250.54	5.61
b) PHOSPHOROUS	Kgs	20.91	8.04	168.11	3.77
E) IRRIGATION TIME	Hrs	43.86	--	416.73	9.33
i) CANAL (C)	Hrs	39.50	--	212.73	4.77
a) OWNED	Hrs	32.41	0.00	0.00	0.00
b) PURCHASED	Hrs	7.09	30.00	212.73	4.77
ii) TUBE WELL(T.W) TIME	Hrs	0.18	--	4.00	0.09
a) OWNED	Hrs	0.18	22.00	4.00	0.09
b) HIRED	Hrs	0.00	25.00	0.00	0.00
iii) C+T.W TIME	Hrs	4.18	--	200.00	4.48
a) OWNED	Hrs	0.91	22.00	20.00	0.45
b) HIRED	Hrs	3.27	55.00	180.00	4.03
F) LAB USE BEF HARVEST	Hrs	86.45	--	391.85	8.78
a) PERMANENT	Hrs	36.41	3.89	141.65	3.17
b) CASUAL	Hrs	50.04	5.00	250.20	5.60
G) HARVEST TIME	Hrs	119.13	--	548.06	12.28
a) PERMANENT	Hrs	42.89	3.89	166.83	3.74
b) CASUAL	Hrs	76.25	5.00	381.23	8.54
H) LAND.REVENUE	Rs.	-	-	82.00	1.84
I) RENT	Rs.	-	-	1178.44	26.40
TOTAL COST (TC)	Rs.	-	-	4464.36	*100
GROSS INCOME	Rs.	13535.16	0.33	4466.60	-
VARIABLE COST	Rs.	-	-	2402.66	-
GROSS MARGIN	Rs.	-	-	2063.95	-
NET INCOME	Rs.	-	-	2.24	-
COST/UNIT OF OUT PUT	Rs/40Kg	-	-	13.19	-

*=(A+B+C+D+E+F+G+H+I)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST).

Table-47

ENTERPRISE BUDGET OF FRESH SUGARCANE ON ALL FARMS IN DISTRICT TOBA--TEK SINGH.

(Figures on per acre basis)

	PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A)	BULLOCK PAIR TIME	Hrs	40.37	16.46	664.42	15.73
B)	TRACTOR TIME	Hrs	1.46	--	97.50	2.31
a)	OWNED	Hrs	0.94	65.00	61.10	1.45
b)	HIRED	Hrs	0.52	70.00	36.40	0.86
C)	SEED	Kgs	2801.39	0.33	924.46	21.89
D)	FERTILIZER	Kgs	52.84	--	341.47	8.09
a)	NITROGEN	Kgs	38.40	5.87	225.43	5.34
b)	PHOSPHOROUS	Kgs	14.43	8.04	116.04	2.75
E)	IRRIGATION TIME	Hrs	36.36	--	118.55	2.81
i)	CANAL (C)	Hrs	34.01	--	40.34	0.96
a)	OWNED	Hrs	32.66	0.00	0.00	0.00
b)	PURCHASED	Hrs	1.34	30.00	40.34	0.96
ii)	TUBE WELL(T.W) TIME	Hrs	0.37	--	8.38	0.20
a)	OWNED	Hrs	0.32	22.00	7.12	0.17
b)	HIRED	Hrs	0.05	25.00	1.26	0.03
iii)	C+T.W TIME	Hrs	1.98	--	69.84	1.65
a)	OWNED	Hrs	1.18	22.00	25.93	0.61
b)	HIRED	Hrs	0.80	55.00	43.91	1.04
F)	LAB USE DEF HARVEST	Hrs	88.50	--	387.56	9.18
a)	PERMANENT	Hrs	49.49	3.89	192.50	4.56
b)	CASUAL	Hrs	39.01	5.00	195.06	4.62
G)	HARVEST TIME	Hrs	102.53	--	461.98	10.94
a)	PERMANENT	Hrs	45.65	3.89	177.59	4.21
b)	CASUAL	Hrs	56.88	5.00	284.39	6.73
H)	LAND.REVENUE	Rs.	-	-	82.00	1.94
I)	RENT	Rs.	-	-	1145.30	27.12
	TOTAL COST (TC)	Rs.	-	-	4223.25	*100
	GROSS INCOME	Rs.	12089.76	0.33	3989.62	-
	VARIABLE COST	Rs.	-	-	1864.99	-
	GROSS MARGIN	Rs.	-	-	2124.63	-
	NET INCOME	Rs.	-	-	-233.63	-
	COST/UNIT OF OUT PUT	Rs/40Kg	-	-	13.97	-

*=(A+B+C+D+E+F+G+H+I)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST).

Table-48

ENTERPRISE BUDGET OF FRESH SUGARCANE ON OWNERS FARMS IN DISTRICT TOBA--TEK SINGH. (Figures on per acre basis)

	PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A)	BULLOCK PAIR TIME	Hrs	39.47	17.04	672.60	15.35
B)	TRACTOR TIME	Hrs	1.80	--	119.75	2.73
	a) OWNED	Hrs	1.25	65.00	81.25	1.85
	b) HIRED	Hrs	0.55	70.00	38.50	0.88
C)	SEED	Kgs	2794.22	0.33	922.09	21.04
D)	FERTILIZER	Kgs	53.92	--	350.36	8.00
	a) NITROGEN	Kgs	38.33	5.87	224.97	5.13
	b) PHOSPHOROUS	Kgs	15.60	8.04	125.39	2.86
E)	IRRIGATION TIME	Hrs	36.09	--	150.62	3.44
	i) CANAL (C)	Hrs	33.06	--	51.69	1.18
	a) OWNED	Hrs	31.33	0.00	0.00	0.00
	b) PURCHASED	Hrs	1.72	30.00	51.69	1.18
	ii) TUBE WELL(T.W) TIME	Hrs	0.37	--	8.08	0.18
	a) OWNED	Hrs	0.37	22.00	8.08	0.18
	b) HIRED	Hrs	0.00	25.00	0.00	0.00
	iii) C+T.W TIME	Hrs	2.67	--	90.85	2.07
	a) OWNED	Hrs	1.69	22.00	37.17	0.85
	b) HIRED	Hrs	0.98	55.00	53.67	1.22
F)	LAB USE BEF HARVEST	Hrs	88.16	--	386.38	8.82
	a) PERMANENT	Hrs	49.02	3.89	190.69	4.35
	b) CASUAL	Hrs	39.14	5.00	195.69	4.47
G)	HARVEST TIME	Hrs	103.46	--	466.49	10.65
	a) PERMANENT	Hrs	45.76	3.89	178.00	4.06
	b) CASUAL	Hrs	57.70	5.00	288.48	6.58
H)	LAND.REVENUE	Rs.	-	-	82.00	1.87
I)	RENT	Rs.	-	-	1231.86	28.11
	TOTAL COST (TC)	Rs.	-	-	4382.15	*100
	GROSS INCOME	Rs.	12703.78	0.33	4192.25	-
	VARIABLE COST(VC)	Rs.	-	-	1906.66	-
	GROSS MARGIN	Rs.	-	-	2285.59	-
	NET INCOME	Rs.	-	-	-189.90	-
	COST/UNIT OF OUT PUT	Rs/40Kg	-	-	13.80	-

*=(A+B+C+D+E+F+G+H+I)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST).

Table-49

ENTERPRISE BUDGET OF FRESH SUGARCANE ON OWNER-CUM-TENANT FARMS IN DISTRICT TOBA TEK SINGH. (Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	41.67	17.22	717.55	18.29
B) TRACTOR TIME	Hrs	1.17	--	80.30	2.05
a) OWNED	Hrs	0.32	65.00	20.80	0.53
b) HIRED	Hrs	0.85	70.00	59.50	1.52
C) SEED	Kgs	2770.12	0.33	914.14	23.30
D) FERTILIZER	Kgs	47.41	--	300.01	7.65
a) NITROGEN	Kgs	37.41	5.87	219.61	5.60
b) PHOSPHOROUS	Kgs	10.00	8.04	80.40	2.05
E) IRRIGATION TIME	Hrs	36.97	--	24.35	0.62
i) CANAL (C)	Hrs	36.26	--	0.00	0.00
a) OWNED	Hrs	36.26	0.00	0.00	0.00
b) PURCHASED	Hrs	0.00	30.00	0.00	0.00
ii) TUBE WELL(T.W) TIME	Hrs	0.47	--	11.41	0.29
a) OWNED	Hrs	0.12	22.00	2.59	0.07
b) HIRED	Hrs	0.35	25.00	8.82	0.22
iii) C+T.W TIME	Hrs	0.24	--	12.94	0.33
a) OWNED	Hrs	0.00	22.00	0.00	0.00
b) HIRED	Hrs	0.24	55.00	12.94	0.33
F) LAB USE BEF HARVEST	Hrs	87.95	--	385.43	9.82
a) PERMANENT	Hrs	48.94	3.89	190.37	4.85
b) CASUAL	Hrs	39.01	5.00	195.06	4.97
G) HARVEST TIME	Hrs	94.61	--	424.95	10.83
a) PERMANENT	Hrs	43.34	3.89	168.61	4.30
b) CASUAL	Hrs	51.27	5.00	256.34	6.53
H) LAND.REVENUE	Rs.	-	-	82.00	2.09
I) RENT	Rs.	-	-	995.08	25.36
TOTAL COST (TC)	Rs.	-	-	3923.81	*100
GROSS INCOME	Rs.	10747.91	0.33	3546.81	--
VARIABLE COST(VC)	Rs.	-	-	1699.01	-
GROSS MARGIN	Rs.	-	-	1847.80	-
NET INCOME	Rs.	-	-	-377.00	-
COST/UNIT OF OUT PUT	Rs/40Kg	-	-	14.60	-

*=(A+B+C+D+E+F+G+H+I)
VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST).

Table-50

ENTERPRISE BUDGET OF FRESH SUGARCANE ON TENANT FARMS IN DISTRICT TOBA--TEK SINGH. (Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	43.11	14.59	628.91	15.99
B) TRACTOR TIME	Hrs	1.50	--	103.75	2.64
a) OWNED	Hrs	0.25	65.00	16.25	0.41
b) HIRED	Hrs	1.25	70.00	87.50	2.22
C) SEED	Kgs	2860.74	0.33	944.04	24.00
D) FERTILIZER	Kgs	52.95	--	339.70	8.64
a) NITROGEN	Kgs	39.63	5.87	232.64	5.92
b) PHOSPHOROUS	Kgs	13.32	8.04	107.06	2.72
E) IRRIGATION TIME	Hrs	36.99	--	62.74	1.60
i) CANAL (C)	Hrs	36.14	--	26.84	0.68
a) OWNED	Hrs	35.25	0.00	0.00	0.00
b) PURCHASED	Hrs	0.89	30.00	26.84	0.68
ii) TUBE WELL(T.W) TIME	Hrs	0.32	--	6.95	0.18
a) OWNED	Hrs	0.32	22.00	6.95	0.18
b) HIRED	Hrs	0.00	25.00	0.00	0.00
iii) C+T.W TIME	Hrs	0.53	--	28.95	0.74
a) OWNED	Hrs	0.00	22.00	0.00	0.00
b) HIRED	Hrs	0.53	55.00	28.95	0.74
F) LAB USE BEF HARVEST	Hrs	90.47	--	394.61	10.03
a) PERMANENT	Hrs	52.01	3.89	202.32	5.14
b) CASUAL	Hrs	38.46	5.00	192.29	4.89
G) HARVEST TIME	Hrs	105.58	--	475.45	12.09
a) PERMANENT	Hrs	47.25	3.89	183.82	4.67
b) CASUAL	Hrs	58.33	5.00	291.63	7.42
H) LAND.REVENUE	Rs.	-	-	82.00	2.09
I) RENT	Rs.	-	-	901.60	22.93
TOTAL COST (TC)	Rs.	-	-	3932.79	*100
GROSS INCOME	Rs.	10608.03	0.33	3500.65	-
VARIABLE COST(VC)	Rs.	-	-	1835.05	-
GROSS MARGIN	Rs.	-	-	1665.60	-
NET INCOME	Rs.	-	-	-432.14	-
COST/UNIT OF OUT PUT	Rs/40Kg	-	-	14.83	-

*=(A+B+C+D+E+F+G+H+I)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST).

Table-51

ENTERPRISE BUDGET OF FRESH SUGARCANE ON SMALL FARMS IN DISTRICT JHANG.
(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	45.84	19.96	915.02	20.38
B) TRACTOR TIME	Hrs	1.22	--	84.06	1.87
a) OWNED	Hrs	0.27	65.00	17.56	0.39
b) HIRED	Hrs	0.95	70.00	66.50	1.48
C) SEED	Kgs	2587.74	0.33	853.95	19.02
D) FERTILIZER	Kgs	38.90	--	245.67	5.47
a) NITROGEN	Kgs	30.93	5.87	181.54	4.04
b) PHOSPHOROUS	Kgs	7.98	8.04	64.13	1.43
E) IRRIGATION TIME	Hrs	36.52	--	326.59	7.28
i) CANAL (C)	Hrs	24.67	--	8.95	0.20
a) OWNED	Hrs	24.37	0.00	0.00	0.00
b) PURCHASED	Hrs	0.30	30.00	8.95	0.20
ii) TUBE WELL(T.W) TIME	Hrs	7.50	--	170.47	3.80
a) OWNED	Hrs	5.68	22.00	124.90	2.78
b) HIRED	Hrs	1.82	25.00	45.56	1.02
iii) C+T.W TIME	Hrs	4.35	--	147.17	3.28
a) OWNED	Hrs	2.80	22.00	61.56	1.37
b) HIRED	Hrs	1.56	55.00	85.60	1.91
F) LAB USE BEF HARVEST	Hrs	89.00	--	383.91	8.55
a) PERMANENT	Hrs	46.28	3.68	170.31	3.79
b) CASUAL	Hrs	42.72	5.00	213.60	4.76
G) HARVEST TIME	Hrs	141.32	--	575.60	12.82
a) PERMANENT	Hrs	99.25	3.68	365.25	8.14
b) CASUAL	Hrs	42.07	5.00	210.35	4.69
H) LAND.REVENUE	Rs.	-	-	82.00	1.83
I) RENT	Rs.	-	-	1022.25	22.77
TOTAL COST (TC)	Rs.	-	-	4489.05	*100
GROSS INCOME	Rs.	11305.53	0.33	3730.83	-
VARIABLE COST(VC)	Rs.	-	-	1734.92	-
GROSS MARG N	Rs.	-	-	1995.90	-
NET INCOME	Rs.	-	-	-758.23	-
COST/UNIT OF OUT PUT	Rs/40Kg	-	-	15.88	-

*=(A+B+C+D+E+F+G+H+I)
VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST)

Table-52

ENTERPRISE BUDGET OF FRESH SUGARCANE ON MEDIUM FARMS IN DISTRICT JHANG.
(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	41.27	12.16	501.81	11.58
B) TRACTOR TIME	Hrs	1.41	--	94.40	2.18
a) OWNED	Hrs	0.86	65.00	55.90	1.29
b) HIRED	Hrs	0.55	70.00	38.50	0.89
C) SEED	Kgs	2640.00	0.33	871.20	20.10
D) FERTILIZER	Kgs	43.52	--	280.40	6.47
a) NITROGEN	Kgs	32.02	5.87	187.94	4.34
b) PHOSPHOROUS	Kgs	11.50	8.04	92.46	2.13
E) IRRIGATION TIME	Hrs	40.69	--	547.45	12.63
i) CANAL (C)	Hrs	22.77	--	18.21	0.42
a) OWNED	Hrs	22.16	0.00	0.00	0.00
b) PURCHASED	Hrs	0.61	30.00	18.21	0.42
ii) TUBE WELL(T.W) TIME	Hrs	4.94	--	111.62	2.58
a) OWNED	Hrs	3.94	22.00	86.62	2.00
b) HIRED	Hrs	1.00	25.00	25.00	0.58
iii) C+T.W TIME	Hrs	12.98	--	417.61	9.63
a) OWNED	Hrs	8.98	22.00	197.61	4.56
b) HIRED	Hrs	4.00	55.00	220.00	5.08
F) LAB USE BEF HARVEST	Hrs	81.17	--	346.93	8.00
a) PERMANENT	Hrs	44.64	3.68	164.29	3.79
b) CASUAL	Hrs	36.53	5.00	182.64	4.21
G) HARVEST TIME	Hrs	139.22	--	585.84	13.51
a) PERMANENT	Hrs	83.53	3.68	307.40	7.09
b) CASUAL	Hrs	55.69	5.00	278.44	6.42
H) LAND.REVENUE	Rs.	-	-	82.00	1.89
I) RENT	Rs.	-	-	1024.78	23.64
TOTAL COST (TC)	Rs.	-	-	4334.81	*100
GROSS INCOME	Rs.	11831.28	0.33	3904.32	-
VARIABLE COST(VC)	Rs.	-	-	1947.16	-
GROSS MARGIN	Rs.	-	-	1957.16	-
NET INCOME	Rs.	-	-	-430.49	-
COST/UNIT OF OUT PUT	Rs/40Kg	-	-	14.66	-

*=(A+B+C+D+E+F+G+H+I)
VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST).

Table-53

ENTERPRISE BUDGET OF FRESH SUGARCANE ON LARGE FARMS IN DISTRICT JHANG.
(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	33.75	9.96	336.15	7.59
B) TRACTOR TIME	Hrs	2.25	--	146.25	3.30
a) OWNED	Hrs	2.25	65.00	146.25	3.30
b) HIRED	Hrs	0.00	70.00	0.00	0.00
C) SEED	Kgs	2800.00	0.33	924.00	20.87
D) FERTILIZER	Kgs	56.88	--	371.29	8.39
a) NITROGEN	Kgs	39.63	5.87	232.60	5.25
b) PHOSPHOROUS	Kgs	17.25	8.04	138.69	3.13
E) IRRIGATION TIME	Hrs	51.50	--	532.00	12.02
i) CANAL (C)	Hrs	36.25	--	135.00	3.05
a) OWNED	Hrs	31.75	0.00	0.00	0.00
b) PURCHASED	Hrs	4.50	30.00	135.00	3.05
ii) TUBE WELL(T.W) TIME	Hrs	11.50	--	265.00	5.99
a) OWNED	Hrs	7.50	22.00	165.00	3.73
b) HIRED	Hrs	4.00	25.00	100.00	2.26
iii) C+T.W TIME	Hrs	3.75	--	132.00	2.98
a) OWNED	Hrs	2.25	22.00	49.50	1.12
b) HIRED	Hrs	1.50	55.00	82.50	1.86
F) LAB USE BEF HARVEST	Hrs	101.56	--	445.60	10.06
a) PERMANENT	Hrs	47.13	3.68	173.43	3.92
b) CASUAL	Hrs	54.43	5.00	272.17	6.15
G) HARVEST TIME	Hrs	126.22	--	544.45	12.30
a) PERMANENT	Hrs	65.63	3.68	241.53	5.46
b) CASUAL	Hrs	60.58	5.00	302.92	6.84
H) LAND.REVENUE	Rs.	-	-	82.00	1.85
I) RENT	Rs.	-	-	1045.92	23.62
TOTAL COST (TC)	Rs.	-	-	4427.67	*100
GROSS INCOME	Rs.	12434.80	0.33	4103.48	-
VARIABLE COST(VC)	Rs.	-	-	2343.51	-
GROSS MARGIN	Rs.	-	-	1759.98	-
NET INCOME	Rs.	-	-	-324.19	-
COST/UNIT OF OUT PUT	Rs/40Kg	-	-	14.24	-

*=(A+B+C+D+E+F+G+H+I)
VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST).

Table-54

ENTERPRISE BUDGET OF FRESH SUGARCANE ON ALL FARMS IN DISTRICT JHANG.
(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	43.97	16.16	710.48	16.25
B) TRACTOR TIME	Hrs	1.18	--	78.35	1.79
a) OWNED	Hrs	0.85	65.00	55.25	1.26
b) HIRED	Hrs	0.33	70.00	23.10	0.53
C) SEED	Kgs	2612.34	0.33	862.07	19.72
D) FERTILIZER	Kgs	41.04	--	261.36	5.98
a) NITROGEN	Kgs	31.02	5.87	185.62	4.25
b) PHOSPHOROUS	Kgs	9.42	8.04	75.74	1.73
E) IRRIGATION TIME	Hrs	38.40	--	401.12	9.17
i) CANAL (C)	Hrs	24.60	--	17.07	0.39
a) OWNED	Hrs	24.03	0.00	0.00	0.00
b) PURCHASED	Hrs	0.57	30.00	17.07	0.39
ii) TUBE WELL(T.W) TIME	Hrs	6.91	--	156.96	3.59
a) OWNED	Hrs	5.24	22.00	115.21	2.63
b) HIRED	Hrs	1.67	25.00	41.76	0.96
iii) C+T.W TIME	Hrs	6.90	--	227.08	5.19
a) OWNED	Hrs	4.62	22.00	101.57	2.32
b) HIRED	Hrs	2.28	55.00	125.51	2.87
F) LAB USE BEF HARVEST	Hrs	87.20	--	375.52	8.59
a) PERMANENT	Hrs	45.83	3.68	168.65	3.86
b) CASUAL	Hrs	41.37	5.00	206.87	4.73
G) HARVEST TIME	Hrs	140.05	--	577.32	13.20
a) PERMANENT	Hrs	93.14	3.68	342.75	7.84
b) CASUAL	Hrs	46.91	5.00	234.57	5.37
H) LAND.REVENUE	Rs.	-	-	82.00	1.88
I) RENT	Rs.	-	-	1024.01	23.42
TOTAL COST (TC)	Rs.	-	-	4372.23	*100
GROSS INCOME	Rs.	11510.19	0.33	3798.36	-
VARIABLE COST(VC)	Rs.	-	-	1834.44	-
GROSS MARGIN	Rs.	-	-	1963.93	-
NET INCOME	Rs.	-	-	-573.87	-
COST/UNIT OF OUT PUT	Rs/40Kg	-	-	15.19	-

*=(A+B+C+D+E+F+G+H+I)
VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST).

Table-55

ENTERPRISE BUDGET OF FRESH SUGARCANE ON OWNERS FARMS IN DISTRICT JHANG.
(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	43.57	17.40	758.10	16.81
B) TRACTOR TIME	Hrs	2.10	--	138.75	3.08
a) OWNED	Hrs	1.65	65.00	107.25	2.38
b) HIRED	Hrs	0.45	70.00	31.50	0.70
C) SEED	Kgs	2628.89	0.33	867.53	19.24
D) FERTILIZER	Kgs	40.44	--	257.51	5.71
a) NITROGEN	Kgs	31.18	5.87	183.03	4.06
b) PHOSPHOROUS	Kgs	9.26	8.04	74.48	1.65
E) IRRIGATION TIME	Hrs	38.42	--	390.83	8.67
i) CANAL (C)	Hrs	24.78	--	13.12	0.29
a) OWNED	Hrs	24.35	0.00	0.00	0.00
b) PURCHASED	Hrs	0.44	30.00	13.12	0.29
ii) TUBE WELL(T.W) TIME	Hrs	7.67	--	174.06	3.86
a) OWNED	Hrs	5.90	22.00	129.78	2.88
b) HIRED	Hrs	1.77	25.00	44.27	0.98
iii) C+T.W TIME	Hrs	5.97	--	203.65	4.52
a) OWNED	Hrs	3.77	22.00	82.96	1.84
b) HIRED	Hrs	2.19	55.00	120.69	2.68
F) LAB USE BEF HARVEST	Hrs	87.01	--	374.83	8.31
a) PERMANENT	Hrs	45.61	3.68	167.85	3.72
b) CASUAL	Hrs	41.40	5.00	206.98	4.59
G) HARVEST TIME	Hrs	140.14	--	576.42	12.79
a) PERMANENT	Hrs	94.14	3.68	346.42	7.68
b) CASUAL	Hrs	46.00	5.00	230.00	5.10
H) LAND.REVENUE	Rs.	-	-	82.00	1.82
I) RENT	Rs.	-	-	1062.53	23.57
TOTAL COST (TC)	Rs.	-	-	4508.51	*100
GROSS INCOME	Rs.	11730.40	0.33	3871.03	-
VARIABLE COST(VC)	Rs.	-	-	1858.63	-
GROSS MARGIN	Rs.	-	-	2012.40	-
NET INCOME	Rs.	-	-	-637.48	-
COST/UNIT OF OUT PUT	Rs/40Kg	-	-	15.37	-

*=(A+B+C+D+E+F+G+H+I)
VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST)

Table-56

ENTERPRISE BUDGET OF FRESH SUGARCANE ON OWNER-CUM-TENANT FARMS IN DISTRICT JHANG.

(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	41.57	12.02	499.70	12.20
B) TRACTOR TIME	Hrs	0.65	--	45.50	1.11
a) OWNED	Hrs	0.00	65.00	0.00	0.00
b) HIRED	Hrs	0.65	70.00	45.50	1.11
C) SEED	Kgs	2800.00	0.33	924.00	22.56
D) FERTILIZER	Kgs	48.58	--	310.14	7.57
a) NITROGEN	Kgs	37.08	5.87	217.68	5.31
b) PHOSPHOROUS	Kgs	11.50	8.04	92.46	2.26
E) IRRIGATION TIME	Hrs	37.83	--	617.50	15.08
i) CANAL (C)	Hrs	22.33	--	75.00	1.83
a) OWNED	Hrs	19.83	0.00	0.00	0.00
b) PURCHASED	Hrs	2.50	30.00	75.00	1.83
ii) TUBE WELL(T.W) TIME	Hrs	4.17	--	100.67	2.46
a) OWNED	Hrs	1.17	22.00	25.67	0.63
b) HIRED	Hrs	3.00	25.00	75.00	1.83
iii) C+T.W TIME	Hrs	11.33	--	441.83	10.79
a) OWNED	Hrs	5.50	22.00	121.00	2.95
b) HIRED	Hrs	5.83	55.00	320.83	7.83
F) LAB USE BEF HARVEST	Hrs	80.08	--	344.12	8.40
a) PERMANENT	Hrs	42.65	3.68	156.96	3.83
b) CASUAL	Hrs	37.43	5.00	187.15	4.57
G) HARVEST TIME	Hrs	114.77	--	481.03	11.74
a) PERMANENT	Hrs	70.31	3.68	258.72	6.32
b) CASUAL	Hrs	44.46	5.00	222.31	5.43
H) LAND.REVENUE	Rs.	-	-	82.00	2.00
I) RENT	Rs.	-	-	792.18	19.34
TOTAL COST (TC)	Rs.	-	-	4096.17	*100
GROSS INCOME	Rs.	11066.67	0.33	3652.00	-
VARIABLE COST(VC)	Rs.	-	-	2127.27	-
GROSS MARGIN	Rs.	-	-	1524.73	-
NET INCOME	Rs.	-	-	-444.17	-
COST/UNIT OF OUT PUT	Rs/40Kg	-	-	14.81	-

*=(A+B+C+D+E+F+G+H+I)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST).

Table-57

ENTERPRISE BUDCET OF FRESH SUGARCANE ON TENANT FARMS IN DISTRICT JHANG.
(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	46.65	14.21	662.84	15.82
B) TRACTOR TIME	Hrs	0.87	--	59.58	1.42
a) OWNED	Hrs	0.28	65.00	18.28	0.44
b) HIRED	Hrs	0.59	70.00	41.30	0.99
C) SEED	Kgs	2467.50	0.33	814.28	19.43
D) FERTILIZER	Kgs	40.91	--	260.40	6.21
a) NITROGEN	Kgs	31.56	5.87	185.27	4.42
b) PHOSPHOROUS	Kgs	9.34	8.04	75.12	1.79
E) IRRIGATION TIME	Hrs	38.53	--	366.25	8.74
i) CANAL (C)	Hrs	24.59	--	13.12	0.31
a) OWNED	Hrs	24.16	0.00	0.00	0.00
b) PURCHASED	Hrs	0.44	30.00	13.12	0.31
ii) TUBE WELL(T.W) TIME	Hrs	4.50	--	101.16	2.41
a) OWNED	Hrs	3.78	22.00	83.19	1.98
b) HIRED	Hrs	0.72	25.00	17.97	0.43
iii) C+T.W TIME	Hrs	9.44	--	251.97	6.01
a) OWNED	Hrs	8.09	22.00	178.06	4.25
b) HIRED	Hrs	1.34	55.00	73.91	1.76
F) LAB USE BEF HARVEST	Hrs	90.75	--	390.39	9.32
a) PERMANENT	Hrs	48.00	3.68	176.64	4.21
b) CASUAL	Hrs	42.75	5.00	213.75	5.10
G) HARVEST TIME	Hrs	149.16	--	617.49	14.73
a) PERMANENT	Hrs	97.22	3.68	357.75	8.54
b) CASUAL	Hrs	51.95	5.00	259.74	6.20
H) LAND.REVENUE	Rs.	-	-	82.00	1.96
I) RENT	Rs.	-	-	937.61	22.37
TOTAL COST (TC)	Rs.	-	-	4190.83	*100
GROSS INCOME	Rs.	10685.57	0.33	3526.24	-
VARIABLE COST(VC)	Rs.	-	-	1703.89	-
GROSS MARGIN	Rs.	-	-	1822.35	-
NET INCOME	Rs.	-	-	-664.59	-
COST PER UNIT OF OUT PUT.	Rs/40Kg	-	-	15.69	-

*=(A+B+C+D+E+F+G+H+I)
VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST).

Table-58

ENTERPRISE BUDGET OF FRESH SUGARCANE ON SMALL FARMS IN DISTRICTS TOBA--TEK SINGH AND JHANG. (Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	44.13	20.27	894.44	20.45
B) TRACTOR TIME	Hrs	1.14	--	78.66	1.80
a) OWNED	Hrs	0.29	65.00	19.16	0.44
b) HIRED	Hrs	0.85	70.00	59.50	1.36
C) SEED	Kgs	2700.52	0.33	891.17	20.38
D) FERTILIZER	Kgs	44.04	--	280.35	6.41
a) NITROGEN	Kgs	33.98	5.87	199.49	4.56
b) PHOSPHOROUS	Kgs	10.06	8.04	80.86	1.85
E) IRRIGATION TIME	Hrs	35.33	--	172.67	3.95
i) CANAL (C)	Hrs	29.13	--	5.93	0.14
a) OWNED	Hrs	28.94	0.00	0.00	0.00
b) PURCHASED	Hrs	0.20	30.00	5.93	0.14
ii) TUBE WELL(T.W) TIME	Hrs	3.93	--	89.33	2.04
a) OWNED	Hrs	2.98	22.00	65.51	1.50
b) HIRED	Hrs	0.95	25.00	23.82	0.54
iii) C+T.W TIME	Hrs	2.27	--	77.40	1.77
a) OWNED	Hrs	1.43	22.00	31.55	0.72
b) HIRED	Hrs	0.83	55.00	45.86	1.05
F) LAB USE BEF HARVEST	Hrs	89.10	--	385.17	8.81
a) PERMANENT	Hrs	49.85	3.79	188.93	4.32
b) CASUAL	Hrs	39.25	5.00	196.24	4.49
G) HARVEST TIME	Hrs	118.47	--	506.27	11.58
a) PERMANENT	Hrs	71.14	3.79	269.62	6.17
b) CASUAL	Hrs	47.33	5.00	236.65	5.41
H) LAND.REVENUE	Rs.	-	-	82.00	1.88
I) RENT	Rs.	-	-	1082.52	24.75
TOTAL COST (TC)	Rs.	-	-	4373.26	*100
GROSS INCOME	Rs.	11507.72	0.33	3797.55	-
VARIABLE COST(VC)	Rs.	-	-	1722.37	-
GROSS MARGIN	Rs.	-	-	2075.18	-
NET INCOME	Rs.	-	-	-575.71	-
COST/UNIT OF OUT PUT	Rs/40Kg	-	-	15.20	-

*=(A+B+C+D+E+F+G+H+I)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST)

Table-59

ENTERPRISE BUDGET OF FRESH SUGARCANE ON MEDIUM FARMS IN DISTRICTS TOBA--TEK SINGH AND JHANG. (Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	39.80	13.50	537.30	12.43
B) TRACTOR TIME	Hrs	1.48	--	98.03	2.27
a) OWNED	Hrs	1.06	65.00	68.58	1.59
b) HIRED	Hrs	0.42	70.00	29.46	0.68
C) SEED	Kgs	2722.67	0.33	898.48	20.78
D) FERTILIZER	Kgs	50.19	--	325.58	7.53
a) NITROGEN	Kgs	35.92	5.87	210.84	4.88
b) PHOSPHOROUS	Kgs	14.27	8.04	114.74	2.65
E) IRRIGATION TIME	Hrs	39.60	--	387.24	8.96
i) CANAL (C)	Hrs	27.96	--	40.36	0.93
a) OWNED	Hrs	26.62	0.00	0.00	0.00
b) PURCHASED	Hrs	1.35	30.00	40.36	0.93
ii) TUBE WELL(T.W) TIME	Hrs	2.70	--	60.85	1.41
a) OWNED	Hrs	2.20	22.00	48.35	1.12
b) HIRED	Hrs	0.50	25.00	12.50	0.29
iii) C+T.W TIME	Hrs	8.94	--	286.03	6.62
a) OWNED	Hrs	6.23	22.00	137.07	3.17
b) HIRED	Hrs	2.71	55.00	148.96	3.45
F) LAB USE BEF HARVEST	Hrs	84.45	--	367.64	8.50
a) PERMANENT	Hrs	45.13	3.79	171.05	3.96
b) CASUAL	Hrs	39.32	5.00	196.59	4.55
G) HARVEST TIME	Hrs	125.25	--	544.43	12.59
a) PERMANENT	Hrs	67.64	3.79	256.36	5.93
b) CASUAL	Hrs	57.61	5.00	288.07	6.66
H) LAND.REVENUE	Rs.	-	-	82.00	1.90
I) RENT	Rs.	-	-	1082.49	25.04
TOTAL COST (TC)	Rs.	-	-	4323.20	*100
GROSS INCOME	Rs.	12119.54	0.33	3999.45	-
VARIABLE COST(VC)	Rs.	-	-	1969.00	-
GROSS MARGIN	Rs.	-	-	2030.45	-
NET INCOME	Rs.	-	-	-323.75	-
COST/UNIT OF OUT PUT	Rs/40Kg	-	-	14.27	-

*=(A+B+C+D+E+F+G+H+I)
VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST)

Table-60

ENTERPRISE BUDGET OF FRESH SUGARCANE ON LARGE FARMS IN DISTRICTS TOBA--TEK SINGH AND JHANG. (Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	33.69	10.11	340.64	7.66
B) TRACTOR TIME	Hrs	2.55	--	168.32	3.78
a) OWNED	Hrs	2.10	65.00	136.50	3.07
b) HIRED	Hrs	0.45	70.00	31.82	0.72
C) SEED	Kgs	2755.27	0.33	909.24	20.44
D) FERTILIZER	Kgs	60.23	--	394.97	8.88
a) NITROGEN	Kgs	41.15	5.87	241.57	5.43
b) PHOSPHOROUS	Kgs	19.08	8.04	153.40	3.45
E) IRRIGATION TIME	Hrs	47.68	--	474.36	10.66
i) CANAL (C)	Hrs	37.88	--	173.86	3.91
a) OWNED	Hrs	32.08	0.00	0.00	0.00
b) PURCHASED	Hrs	5.80	30.00	173.86	3.91
ii) TUBE WELL(T.W) TIME	Hrs	5.84	--	134.50	3.02
a) OWNED	Hrs	3.84	22.00	84.50	1.90
b) HIRED	Hrs	2.00	25.00	50.00	1.12
iii) C+T.W TIME	Hrs	3.97	--	166.00	3.73
a) OWNED	Hrs	1.58	22.00	34.75	0.78
b) HIRED	Hrs	2.39	55.00	131.25	2.95
F) LAB USE BEF HARVEST	Hrs	94.01	--	419.50	9.43
a) PERMANENT	Hrs	41.77	3.79	158.31	3.56
b) CASUAL	Hrs	52.24	5.00	261.19	5.87
G) HARVEST TIME	Hrs	122.68	--	547.72	12.31
a) PERMANENT	Hrs	54.26	3.79	205.65	4.62
b) CASUAL	Hrs	68.41	5.00	342.07	7.69
H) LAND.REVENUE	Rs.	-	-	82.00	1.84
I) RENT	Rs.	-	-	1112.18	25.00
TOTAL COST (TC)	Rs.	-	-	4448.93	*100
GROSS INCOME	Rs.	12984.98	0.33	4285.04	-
VARIABLE COST(VC)	Rs.	-	-	2373.08	-
GROSS MARGIN	Rs.	-	-	1911.96	-
NET INCOME	Rs.	-	-	-163.89	-
COST/UNIT OF OUT PUT	Rs/40Kg	-	-	13.70	-

*=(A+B+C+D+E+F+G+H+I)
VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST)

Table-61

ENTERPRISE BUDGET OF FRESH SUGARCANE ON ALL FARMS IN DISTRICTS TOBA -TEK SINGH AND JHANG.

(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	42.17	16.30	687.30	15.98
B) TRACTOR TIME	Hrs	1.32	--	87.93	2.04
a) OWNED	Hrs	0.90	65.00	58.18	1.35
b) HIRED	Hrs	0.43	70.00	29.75	0.69
C) SEED	Kgs	2706.87	0.33	893.27	20.77
D) FERTILIZER	Kgs	46.94	--	301.41	7.01
a) NITROGEN	Kgs	35.01	5.87	205.53	4.78
b) PHOSPHOROUS	Kgs	11.93	8.04	95.89	2.23
E) IRRIGATION TIME	Hrs	37.38	--	259.83	6.04
i) CANAL (C)	Hrs	29.30	--	28.71	0.67
a) OWNED	Hrs	28.35	0.00	0.00	0.00
b) PURCHASED	Hrs	0.96	30.00	28.71	0.67
ii) TUBE WELL(T.W) TIME	Hrs	3.64	--	82.67	1.92
a) OWNED	Hrs	2.78	22.00	61.16	1.42
b) HIRED	Hrs	0.86	25.00	21.51	0.50
iii) C+T.W TIME	Hrs	4.44	--	148.46	3.45
a) OWNED	Hrs	2.90	22.00	63.75	1.48
b) HIRED	Hrs	1.54	55.00	84.71	1.97
F) LAB USE BEF HARVEST	Hrs	87.85	--	381.59	8.87
a) PERMANENT	Hrs	47.66	3.79	180.62	4.20
b) CASUAL	Hrs	40.19	5.00	200.96	4.67
G) HARVEST TIME	Hrs	121.29	--	522.49	12.15
a) PERMANENT	Hrs	69.40	3.79	263.01	6.12
b) CASUAL	Hrs	51.90	5.00	259.48	6.03
H) LAND.REVENUE	Rs.	-	-	82.00	1.91
I) RENT	Rs.	-	-	1084.66	25.22
TOTAL COST (TC)	Rs.	-	-	4300.48	*100
GROSS INCOME	Rs.	11799.98	0.33	3893.99	-
VARIABLE COST(VC)	Rs.	-	-	1849.72	-
GROSS MARGIN	Rs.	-	-	2044.28	-
NET INCOME	Rs.	-	-	-406.48	-
COST/UNIT OF OUT PUT	Rs/40Kg	-	-	14.58	-

*=(A+B+C+D+E+F+G+H+I)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST).

Table-62

ENTERPRISE BUDGET OF FRESH SUGARCANE ON OWNERS FARMS IN DISTRICTS TOBA TEK -SINGH AND JHANG. (Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	41.52	17.16	712.49	16.03
B) TRACTOR TIME	Hrs	1.95	--	129.25	2.91
a) OWNED	Hrs	1.45	65.00	94.25	2.12
b) HIRED	Hrs	0.50	70.00	35.00	0.79
C) SEED	Kgs	2711.55	0.33	894.81	20.13
D) FERTILIZER	Kgs	47.18	--	303.94	6.84
a) NITROGEN	Kgs	34.75	5.87	204.00	4.59
b) PHOSPHOROUS	Kgs	12.43	8.04	99.94	2.25
E) IRRIGATION TIME	Hrs	37.26	--	270.73	6.09
i) CANAL (C)	Hrs	28.92	--	32.41	0.73
a) OWNED	Hrs	27.84	0.00	0.00	0.00
b) PURCHASED	Hrs	1.08	30.00	32.41	0.73
ii) TUBE WELL(T.W) TIME	Hrs	4.02	--	91.07	2.05
a) OWNED	Hrs	3.13	22.00	68.93	1.55
b) HIRED	Hrs	0.89	25.00	22.14	0.50
iii) C+T.W TIME	Hrs	4.32	--	147.25	3.31
a) OWNED	Hrs	2.73	22.00	60.07	1.35
b) HIRED	Hrs	1.59	55.00	87.18	1.96
F) LAB USE BEF HARVEST	Hrs	87.58	--	380.67	8.56
a) PERMANENT	Hrs	47.32	3.79	179.33	4.03
b) CASUAL	Hrs	40.27	5.00	201.34	4.53
G) HARVEST TIME	Hrs	121.80	--	524.34	11.80
a) PERMANENT	Hrs	69.95	3.79	265.10	5.96
b) CASUAL	Hrs	51.85	5.00	259.24	5.83
H) LAND.REVENUE	Rs.	-	-	82.00	1.84
I) RENT	Rs.	-	-	1147.20	25.81
TOTAL COST (TC)	Rs.	-	-	4445.42	*100
GROSS INCOME	Rs.	12217.09	0.33	4031.64	-
VARIABLE COST(VC)	Rs.	-	-	1882.65	-
GROSS MARGIN	Rs.	-	-	2148.99	-
NET INCOME	Rs.	-	-	-413.78	-
COST/UNIT OF OUT PUT	Rs/40Kg	-	-	14.55	

*=(A+B+C+D+E+F+G+H+I)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST).

Table-63

ENTERPRISE BUDGET OF FRESH SUGARCANE ON OWNER-CUM-TENANT FARMS IN DISTRICTS TOBA TEK SINGH AND JHANG. (Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	41.62	14.40	599.34	14.97
B) TRACTOR TIME	Hrs	0.91	--	62.90	1.57
a) OWNED	Hrs	0.16	65.00	10.40	0.26
b) HIRED	Hrs	0.75	70.00	52.50	1.31
C) SEED	Kgs	2785.06	0.33	919.07	22.96
D) FERTILIZER	Kgs	48.00	--	305.07	7.62
a) NITROGEN	Kgs	37.25	5.87	218.64	5.46
b) PHOSPHOROUS	Kgs	10.75	8.04	86.43	2.16
E) IRRIGATION TIME	Hrs	37.40	--	320.93	8.02
i) CANAL (C)	Hrs	29.30	--	37.50	0.94
a) OWNED	Hrs	28.05	0.00	0.00	0.00
b) PURCHASED	Hrs	1.25	30.00	37.50	0.94
ii) TUBE WELL(T.W) TIME	Hrs	2.32	--	56.04	1.40
a) OWNED	Hrs	0.64	22.00	14.13	0.35
b) HIRED	Hrs	1.68	25.00	41.91	1.05
iii) C+T.W TIME	Hrs	5.78	--	227.39	5.68
a) OWNED	Hrs	2.75	22.00	60.50	1.51
b) HIRED	Hrs	3.03	55.00	166.89	4.17
F) LAB USE BEF HARVEST	Hrs	84.02	--	364.67	9.11
a) PERMANENT	Hrs	45.80	3.79	173.57	4.34
b) CASUAL	Hrs	38.22	5.00	191.11	4.77
G) HARVEST TIME	Hrs	104.69	--	454.69	11.36
a) PERMANENT	Hrs	56.83	3.79	215.37	5.38
b) CASUAL	Hrs	47.86	5.00	239.32	5.98
H) LAND.REVENUE	Rs.	-	-	82.00	2.05
I) RENT	Rs.	-	-	893.63	22.33
TOTAL COST (TC)	Rs.	-	-	4002.31	*100
GROSS INCOME	Rs.	10907.29	0.33	3599.41	-
VARIABLE COST(VC)	Rs.	-	-	1913.14	-
GROSS MARGIN	Rs.	-	-	1686.27	-
NET INCOME	Rs.	-	-	-402.90	-
COST/UNIT OF OUT PUT	Rs/10Kg	-	-	14.68	-

*=(A+B+C+D+E+F+G+H+I)
VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST).

Table-64

ENTERPRISE BUDGET OF FRESH SUGARCANE ON TENANT FARMS IN DISTRICTS TOBA TEK SINGH AND JHANG. (Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) PULLOCK (MAN) TIME	Hrs	44.38	14.00	628.26	15.52
B) TRACTOR TIME	Hrs	1.19	--	81.57	2.02
a) OWNED	Hrs	0.27	65.00	17.27	0.43
b) HIRED	Hrs	0.92	70.00	64.49	1.59
C) SEED	Kgs	2634.17	0.33	879.16	21.72
D) FERTILIZER	Kgs	16.23	--	300.05	7.41
a) NITROGEN	Kgs	35.50	5.95	208.95	5.16
b) PHOSPHOROUS	Kgs	11.33	8.68	91.09	2.25
E) IRRIGATION TIME	Hrs	37.70	--	214.10	5.30
F) CANAL (C.I)	Hrs	26.37	--	19.98	0.49
a) OWNED	Hrs	29.70	0.00	0.00	0.00
b) PURCHASED	Hrs	0.67	30.00	19.98	0.49
G) TUBE WELL (T.W) TIME	Hrs	2.41	--	54.05	1.34
a) OWNED	Hrs	2.05	22.00	45.07	1.11
b) HIRED	Hrs	0.36	25.00	8.98	0.22
H) C.H.L TIME	Hrs	4.98	--	140.46	3.47
a) OWNED	Hrs	4.05	22.00	89.03	2.20
b) HIRED	Hrs	0.94	55.00	51.43	1.27
I) LAB USE FOR HARVEST	Hrs	90.61	--	392.54	9.70
a) PERMANENT	Hrs	50.02	3.79	189.52	4.68
b) CASUAL	Hrs	40.60	5.00	203.02	5.02
J) HARVEST TIME	Hrs	127.97	--	549.45	13.58
a) PERMANENT	Hrs	72.23	3.79	273.77	6.76
b) CASUAL	Hrs	55.14	5.00	275.68	6.81
K) LAND REVENUE	Rs.	-	-	82.00	2.03
L) RENT	Rs.	-	-	919.60	22.72
TOTAL COST (TC)	Rs.	-	-	4047.28	100
GROSS INCOME	Rs.	10646.80	0.33	3513.14	-
VARIABLE COST(VC)	Rs.	-	-	1769.47	-
GROSS MARGIN	Rs.	-	-	1743.98	-
NET INCOME	Rs.	-	-	-533.77	-
COST/UNIT OF OUT PUT	Rs/40Kg	-	-	15.21	-

-(A+B+C+D+E+F+G+H+I)

**-COST OF SEED, FERTILIZER, PLANT PROTECTION, C.H.L, TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST).

TABLE-65

ENTERPRISE BUDGET OF SUGARCANE RATOON CROP ON SMALL FARMS IN DISTRICT TOBA TEK SINGH. (Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	23.89	20.71	194.70	17.94
B) TRACTOR TIME	Hrs	0.00	--	0.00	0.00
a) OWNED	Hrs	0.00	0.00	0.00	0.00
b) HIRED	Hrs	0.00	0.00	0.00	0.00
C) SEED	Kgs	0.00	0.00	0.00	0.00
D) FERTILIZER	Kgs	33.93	--	199.14	7.22
a) NITROGEN	Kgs	33.93	5.87	199.14	7.22
b) PHOSPHOROUS	Kgs	0.00	0.00	0.00	0.00
E) IRRIGATION TIME	Hrs	37.28	--	437.95	15.88
i) CANAL (C)	Hrs	33.13	--	229.50	8.32
a) OWNED	Hrs	25.48	0.00	0.00	0.00
b) PURCHASED	Hrs	7.65	30.00	229.50	8.32
ii) TUBE WELL(T.W) TIME	Hrs	0.50	--	11.00	0.40
a) OWNED	Hrs	0.50	22.00	11.00	0.40
b) HIRED	Hrs	0.00	0.00	0.00	0.00
iii) C+T.W TIME	Hrs	3.65	--	197.45	7.16
a) OWNED	Hrs	0.10	22.00	2.20	0.08
b) HIRED	Hrs	3.55	55.00	195.25	7.08
F) LAB USE BEF HARVEST	Hrs	63.26	--	261.54	9.48
a) PERMANENT	Hrs	49.32	3.89	191.86	6.96
b) CASUAL	Hrs	13.93	5.00	69.67	2.53
G) HARVEST TIME	Hrs	61.39	--	269.97	9.79
a) PERMANENT	Hrs	33.32	3.89	129.61	4.70
b) CASUAL	Hrs	28.07	5.00	140.36	5.09
H) LAND.REVENUE	Rs.	-	-	82.00	2.97
I) RENT	Rs.	-	-	1012.78	36.72
TOTAL COST (TC)	Rs.	-	-	2758.08	*100
GROSS INCOME	Kgs	7987.00	0.33	2635.71	-
VARIABLE COST(VC)	Rs.	-	-	839.43	-
GROSS MARGIN	Rs.	-	-	1796.28	-
NET INCOME	Rs.	-	-	-122.37	-
COST/UNIT OF OUT PUT	Rs/40Kg	-	-	13.81	-

*=(A+B+C+D+E+F+G+H+I)

VC=COST OF SEED.FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST)

Table-66

ENTERPRISE BUDGET OF SUGARC NE CROP RATOON ON MEDIUM FARMS IN DISTRICT TOBA TEK SINGH. (Figures on per acre basis)

	PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A)	BULLOCK PAIR TIME	Hrs	22.13	14.74	326.25	12.57
B)	TRACTOR TIME	Hrs	0.00	--	0.00	0.00
	a) OWNED	Hrs	0.00	0.00	0.00	0.00
	b) HIRED	Hrs	0.00	0.00	0.00	0.00
C)	SEED	Kgs	0.00	0.00	0.00	0.00
D)	FERTILIZER	Kgs	36.90	-	216.60	8.34
	a) NITROGEN	Kgs	36.90	5.87	216.60	8.34
	b) PHOSPHOROUS	Kgs	0.00	0.00	0.00	0.00
E)	IRRIGATION TIME	Hrs	39.10	--	441.17	16.99
	i) CANAL (C)	Hrs	31.47	--	168.00	6.47
	a) OWNED	Hrs	25.87	0.00	0.00	0.00
	b) PURCHASED	Hrs	5.60	30.00	168.00	6.47
	ii) TUBE WELL(T.W) TIME	Hrs	2.00	--	11.73	0.45
	a) OWNED	Hrs	0.53	22.00	11.73	0.45
	b) HIRED	Hrs	1.47	0.00	0.00	0.00
	iii) C+T.W TIME	Hrs	5.63	--	261.43	10.07
	a) OWNED	Hrs	1.47	22.00	32.27	1.24
	b) HIRED	Hrs	4.17	55.00	229.17	8.83
F)	LAB USE BEF HARVEST	Hrs	58.49	--	243.56	9.38
	a) PERMANENT	Hrs	44.06	3.89	171.40	6.60
	b) CASUAL	Hrs	14.43	5.00	72.15	2.78
G)	HARVEST TIME	Hrs	66.77	--	298.29	11.49
	a) PERMANENT	Hrs	32.05	3.89	124.68	4.80
	b) CASUAL	Hrs	34.72	5.00	173.61	6.69
H)	LAND.REVENUE	Rs.	-	-	82.00	3.16
I)	RENT	Rs.	-	-	988.24	38.07
	TOTAL COST (TC)	Rs.	-	-	2596.10	*100
	GROSS INCOME	Kgs	8048.00	0.33	2655.84	-
	VARIABLE COST(VC)	Rs.	-	-	865.40	-
	GROSS MARGIN	Rs.	-	-	1790.44	-
	NET INCOME	Rs.	-	-	59.74	-
	COST/UNIT OF OUT PUT	Rs/40Kg	-	-	12.90	-

*=(A+B+C+D+E+F+G+H+I)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST)

Table-67

ENTERPRISE BUDGET OF SUGARCANE RATOON CROP ON LARGE FARMS IN DISTRICT TOBA TEK SINGH.

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	16.33	10.22	166.93	6.19
B) TRACTOR TIME	Hrs	0.00	--	0.00	0.00
a) OWNED	Hrs	0.00	0.00	0.00	0.00
b) HIRED	Hrs	0.00	0.00	0.00	0.00
C) SEED	Kgs	0.00	0.00	0.00	0.00
D) FERTILIZER	Kgs	38.33	--	225.02	8.34
a) NITROGEN	Kgs	38.33	5.87	225.02	8.34
b) PHOSPHOROUS	Kgs	0.00	0.00	0.00	0.00
E) IRRIGATION TIME	Hrs	45.67	--	697.67	25.85
i) CANAL (C)	Hrs	32.00	--	210.00	7.78
a) OWNED	Hrs	25.00	0.00	0.00	0.00
b) PURCHASED	Hrs	7.00	30.00	210.00	7.78
ii) TUBE WELL(T.W) TIME	Hrs	4.00	--	88.00	3.26
a) OWNED	Hrs	4.00	22.00	88.00	3.26
b) HIRED	Hrs	0.00	0.00	0.00	0.00
iii) C+T.W TIME	Hrs	9.67	--	399.67	14.81
a) OWNED	Hrs	4.00	22.00	88.00	3.26
b) HIRED	Hrs	5.67	55.00	311.67	11.55
F) LAB USE BEF HARVEST	Hrs	55.44	--	233.88	8.67
a) PERMANENT	Hrs	39.02	3.89	151.77	5.62
b) CASUAL	Hrs	16.42	5.00	82.11	3.04
G) HARVEST TIME	Hrs	67.80	--	305.13	11.31
a) PERMANENT	Hrs	30.51	3.89	118.68	4.40
b) CASUAL	Hrs	37.29	5.00	186.45	6.91
H) LAND.REVENUE	Rs.	-	-	82.00	3.04
I) RENT	Rs.	-	-	988.24	36.62
TOTAL COST (TC)	Rs.	-	-	2698.87	*100
GROSS INCOME	Kgs	8333.33	0.33	2750.00	-
VARIABLE COST(VC)	Rs.	-	-	1059.24	-
GROSS MARGIN	Rs.	-	-	1690.76	-
NET INCOME	Rs.	-	-	51.13	-
COST PER UNIT OF OUT PUT.	Rs/40Kg	-	-	12.95	-

*=(A+B+C+D+E+F+G+H+I)
VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOE, AND 50% OF OWNED TUBEWELL COST).

Table-68

ENTERPRISE BUDGET OF SUGARCANE RATOON CROP ON ALL FARMS IN DISTRICT TOBA--TEK SINGH. (Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	22.60	16.46	371.97	13.99
B) TRACTOR TIME	Hrs	0.00	--	0.00	0.00
a) OWNED	Hrs	0.00	0.00	0.00	0.00
b) HIRED	Hrs	0.00	0.00	0.00	0.00
C) SEED	Kgs	0.00	0.00	0.00	0.00
D) FERTILIZER	Kgs	35.45	--	208.08	7.82
a) NITROGEN	Kgs	35.45	5.87	208.08	7.82
b) PHOSPHOROUS	Kgs	0.00	0.00	0.00	0.00
E) IRRIGATION TIME	Hrs	38.66	--	459.72	17.29
i) CANAL (C)	Hrs	32.38	--	203.68	7.66
a) OWNED	Hrs	25.59	0.00	0.00	0.00
b) PURCHASED	Hrs	6.79	30.00	203.68	7.66
ii) TUBE WELL(T.W) TIME	Hrs	1.37	--	17.37	0.65
a) OWNED	Hrs	0.79	22.00	17.37	0.65
b) HIRED	Hrs	0.58	0.00	0.00	0.00
iii) C+T.W TIME	Hrs	4.91	--	238.67	8.98
a) OWNED	Hrs	0.95	22.00	20.84	0.78
b) HIRED	Hrs	3.96	55.00	217.83	8.19
F) LAB USE BEF HARVEST	Hrs	60.76	--	252.26	9.49
a) PERMANENT	Hrs	46.43	3.89	180.62	6.79
b) CASUAL	Hrs	14.33	5.00	71.63	2.69
G) HARVEST TIME	Hrs	64.02	--	283.93	10.68
a) PERMANENT	Hrs	32.60	3.89	126.80	4.77
b) CASUAL	Hrs	31.43	5.00	157.13	5.91
H) LAND.REVENUE	Rs.	-	-	82.00	3.08
I) RENT	Rs.	-	-	1001.19	37.65
TOTAL COST (TC)	Rs.	-	-	2659.14	*100
GROSS INCOME	Kgs	8038.42	0.33	2652.68	-
VARIABLE COST(VC)	Rs.	-	-	867.03	-
GROSS MARGIN	Rs.	-	-	1785.65	-
NET INCOME	Rs.	-	-	-6.46	-
COST PER UNIT OF OUT PUT.	Rs/40Kg	-	-	13.23	-

*=(A+B+C+D+E+F+G+H+I)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST).

Table-69

ENTERPRISE BUDGET OF SUGARCANE RATOON CROP ON OWNERS FARMS IN DISTRICT TOBA--TEK SINGH.

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	22.71	17.04	387.03	14.00
B) TRACTOR TIME	Hrs	0.00	--	0.00	0.00
a) OWNED	Hrs	0.00	0.00	0.00	0.00
b) HIRED	Hrs	0.00	0.00	0.00	0.00
C) SEED	Kgs	0.00	0.00	0.00	0.00
D) FERTILIZER	Kgs	33.06	--	194.05	7.02
a) NITROGEN	Kgs	33.06	5.87	194.05	7.02
b) PHOSPHOROUS	Kgs	0.00	0.00	0.00	0.00
E) IRRIGATION TIME	Hrs	37.75	--	469.83	17.00
i) CANAL (C)	Hrs	31.12	--	190.38	6.89
a) OWNED	Hrs	24.77	0.00	0.00	0.00
b) PURCHASED	Hrs	6.35	30.00	190.38	6.89
ii) TUBE WELL(T.W) TIME	Hrs	1.08	--	16.92	0.61
a) OWNED	Hrs	0.77	22.00	16.92	0.61
b) HIRED	Hrs	0.31	0.00	0.00	0.00
iii) C+T.W TIME	Hrs	5.56	--	262.52	9.50
a) OWNED	Hrs	1.31	22.00	28.77	1.04
b) HIRED	Hrs	4.25	55.00	233.75	8.46
F) LAB USE BEF HARVEST	Hrs	59.11	--	245.14	8.87
a) PERMANENT	Hrs	15.43	3.89	176.71	6.39
b) CASUAL	Hrs	13.08	5.00	68.43	2.48
G) HARVEST TIME	Hrs	63.27	--	280.64	10.15
a) PERMANENT	Hrs	32.18	3.89	125.18	4.53
b) CASUAL	Hrs	31.09	5.00	155.45	5.62
H) LAND.REVENUE	Rs.	-	-	82.00	2.97
I) RENT	Rs.	-	-	1105.32	39.99
TOTAL COST (TC)	Rs.	-	-	2764.00	*100
GROSS INCOME	Kgs	8665.38	0.33	2859.58	-
VARIABLE COST(VC)	Rs.	-	-	850.52	-
GROSS MARGIN	Rs.	-	-	2009.05	-
NET INCOME	Rs.	-	-	95.58	-
COST PER UNIT OF OUT PUT.	Rs/40kg	-	-	12.76	-

*=(A+B+C+D+E+F+G+H+I)
VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST).

Table-70

ENTERPRISE BUDGET OF SUGARCANE RATOON CROP ON OWNER-CUM-TENANT IN DISTRICT TOBA TEK SINGH. (Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	20.37	17.22	350.33	14.10
B) TRACTOR TIME	Hrs	0.00	--	0.00	0.00
a) OWNED	Hrs	0.00	0.00	0.00	0.00
b) HIRED	Hrs	0.00	0.00	0.00	0.00
C) SEED	Kgs	0.00	0.00	0.00	0.00
D) FERTILIZER	Kgs	39.08	--	229.42	9.22
a) NITROGEN	Kgs	39.08	5.87	229.42	9.22
b) PHOSPHOROUS	Kgs	0.00	0.00	0.00	0.00
E) IRRIGATION TIME	Hrs	40.75	--	446.50	17.94
i) CANAL (C)	Hrs	35.25	--	210.00	8.44
a) OWNED	Hrs	28.25	0.00	0.00	0.00
b) PURCHASED	Hrs	7.00	30.00	210.00	8.44
ii) TUBE WELL(T.W) TIME	Hrs	1.67	--	36.67	1.47
a) OWNED	Hrs	1.67	22.00	36.67	1.47
b) HIRED	Hrs	0.00	0.00	0.00	0.00
iii) C+T.W TIME	Hrs	3.83	--	199.83	8.03
a) OWNED	Hrs	0.33	22.00	7.33	0.29
b) HIRED	Hrs	3.50	55.00	192.50	7.74
F) LAB USE BEF HARVEST	Hrs	66.82	--	278.49	11.19
a) PERMANENT	Hrs	50.10	3.89	194.89	7.83
b) CASUAL	Hrs	16.72	5.00	83.60	3.36
G) HARVEST TIME	Hrs	69.03	--	306.23	12.31
a) PERMANENT	Hrs	35.05	3.89	136.34	5.48
b) CASUAL	Hrs	33.98	5.00	169.89	6.83
H) LAND.REVENUE	Rs.	-	-	82.00	3.30
I) RENT	Rs.	-	-	794.91	31.95
TOTAL COST (TC)	Rs.	-	-	2488.41	*100
GROSS INCOME	Kgs	6826.67	0.33	2252.80	-
VARIABLE COST(VC)	Rs.	-	-	903.74	-
GROSS MARGIN	Rs.	-	-	1349.06	-
NET INCOME	Rs.	-	-	-235.61	-
COST PER UNIT OF OUT PUT.	Rs/40Kg	-	-	14.58	-

*=(A+B+C+D+E+F+G+H+I)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST).

Table-71

ENTERPRISE BUDGET OF SUGARCANE RATOON CROP ON TENANT FARMS IN DISTRICT TOBA-
-TEK SINGH.
(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	24.33	14.59	354.93	14.77
B) TRACTOR TIME	Hrs	0.00	--	0.00	0.00
a) OWNED	Hrs	0.00	0.00	0.00	0.00
b) HIRED	Hrs	0.00	0.00	0.00	0.00
C) SEED	Kgs	0.00	0.00	0.00	0.00
D) FERTILIZER	Kgs	42.17	--	247.52	10.30
a) NITROGEN	Kgs	42.17	5.87	247.52	10.30
b) PHOSPHOROUS	Kgs	0.00	0.00	0.00	0.00
E) IRRIGATION TIME	Hrs	40.50	--	429.17	17.86
i) CANAL (C)	Hrs	35.00	--	255.00	10.61
a) OWNED	Hrs	26.50	0.00	0.00	0.00
b) PURCHASED	Hrs	8.50	30.00	255.00	10.61
ii) TUBE WELL(T.W) TIME	Hrs	2.33	--	0.00	0.00
a) OWNED	Hrs	0.00	22.00	0.00	0.00
b) HIRED	Hrs	2.33	0.00	0.00	0.00
iii) C+T.W TIME	Hrs	3.17	--	174.17	7.25
a) OWNED	Hrs	0.00	22.00	0.00	0.00
b) HIRED	Hrs	3.17	55.00	174.17	7.25
F) LAB USE BEF HARVEST	Hrs	61.83	--	256.87	10.69
a) PERMANENT	Hrs	47.12	3.89	183.29	7.63
b) CASUAL	Hrs	14.72	5.00	73.58	3.06
G) HARVEST TIME	Hrs	62.27	--	275.87	11.48
a) PERMANENT	Hrs	31.95	3.89	124.27	5.17
b) CASUAL	Hrs	30.32	5.00	151.60	6.31
H) LAND.REVENUE	Rs.	-	-	82.00	3.41
I) RENT	Rs.	-	-	756.20	31.47
TOTAL COST (TC)	Rs.	-	-	2402.55	4100
GROSS INCOME	Kgs	6533.33	0.33	2156.00	-
VARIABLE COST(VC)	Rs.	-	-	901.87	-
GROSS MARGIN	Rs.	-	-	1254.13	-
NET INCOME	Rs.	-	-	-246.55	-
COST PER UNIT OF OUT PUT.	Rs/40Kg	-	-	14.71	-

*=(A+B+C+D+E+F+G+H+I)
VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED,
WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST).

Table-72

ENTERPRISE BUDGET OF SUGARCANE RATOON CROP ON SMALL FARMS IN DISTRICT JHANG.

(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	24.93	19.96	497.67	18.32
B) TRACTOR TIME	Hrs	0.00	--	0.00	0.00
a) OWNED	Hrs	0.00	0.00	0.00	0.00
b) HIRED	Hrs	0.00	0.00	0.00	0.00
C) SEED	Kgs	0.00	0.00	0.00	0.00
D) FERTILIZER	Kgs	29.13	--	171.01	6.30
a) NITROGEN	Kgs	29.13	5.87	171.01	6.30
b) PHOSPHOROUS	Kgs	0.00	0.00	0.00	0.00
E) IRRIGATION TIME	Hrs	33.18	--	382.38	14.08
i) CANAL (C)	Hrs	21.37	--	6.00	0.22
a) OWNED	Hrs	21.17	0.00	0.00	0.00
b) PURCHASED	Hrs	0.20	30.00	6.00	0.22
ii) TUBE WELL(T.W) TIME	Hrs	5.53	--	88.00	3.24
a) OWNED	Hrs	4.00	22.00	88.00	3.24
b) HIRED	Hrs	1.53	0.00	0.00	0.00
iii) C+T.W TIME	Hrs	6.28	--	288.38	10.62
a) OWNED	Hrs	1.73	22.00	38.13	1.40
b) HIRED	Hrs	4.55	55.00	250.25	9.21
F) LAB USE EFF HARVEST	Hrs	64.57	--	275.96	10.16
a) PERMANENT	Hrs	35.51	3.68	130.68	4.81
b) CASUAL	Hrs	29.06	5.00	145.28	5.35
G) HARVEST TIME	Hrs	85.66	--	361.69	13.32
a) PERMANENT	Hrs	50.46	3.68	185.70	6.84
b) CASUAL	Hrs	35.20	5.00	175.99	6.48
H) LAND.REVENUE	Rs.	-	-	82.00	3.02
I) RENT	Rs.	-	-	945.13	34.80
TOTAL COST (TC)	Rs.	-	-	2715.84	*100
GROSS INCOME	Kgs	7830.11	0.33	2583.94	-
VARIABLE COST(VC)	Rs.	-	-	792.52	-
GROSS MARGIN	Rs.	-	-	1791.41	-
NET INCOME	Rs.	-	-	-131.90	-
COST PER UNIT OF OUT PUT.	Rs/40Kg	-	-	13.87	-

*=(A+B+C+D+E+F+G+H+I)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST).

Table-73

ENTERPRISE BUDGET OF SUGARCANE RATOON CROP ON MEDIUM FARMS IN DISTRICT JHANG. (Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	22.38	12.16	272.20	10.29
B) TRACTOR TIME	Hrs	0.00	--	0.00	0.00
a) OWNED	Hrs	0.00	0.00	0.00	0.00
b) HIRED	Hrs	0.00	0.00	0.00	0.00
C) SEED	Kgs	0.00	0.00	0.00	0.00
D) FERTILIZER	Kgs	31.85	--	186.94	7.07
a) NITROGEN	Kgs	31.85	5.87	186.94	7.07
b) PHOSPHOROUS	Kgs	0.00	0.00	0.00	0.00
E) IRRIGATION TIME	Hrs	36.69	--	455.88	17.23
i) CANAL (C)	Hrs	22.62	--	23.08	0.87
a) OWNED	Hrs	21.85	0.00	0.00	0.00
b) PURCHASED	Hrs	0.77	30.00	23.08	0.87
ii) TUBE WELL(T.W) TIME	Hrs	5.73	--	95.62	3.61
a) OWNED	Hrs	4.35	22.00	95.62	3.61
b) HIRED	Hrs	1.38	0.00	0.00	0.00
iii) C+T.W TIME	Hrs	8.35	--	337.19	12.75
a) OWNED	Hrs	3.69	22.00	81.23	3.07
b) HIRED	Hrs	4.65	55.00	255.96	9.68
F) LAB USE BEF HARVEST	Hrs	61.62	--	269.04	10.17
a) PERMANENT	Hrs	29.58	3.68	108.84	4.11
b) CASUAL	Hrs	32.04	5.00	160.20	6.06
G) HARVEST TIME	Hrs	105.28	--	449.15	16.98
a) PERMANENT	Hrs	58.51	3.68	215.30	8.14
b) CASUAL	Hrs	46.77	5.00	233.84	8.84
H) LAND.REVENUE	Rs.	-	-	82.00	3.10
I) RENT	Rs.	-	-	930.12	35.16
TOTAL COST (TC)	Rs.	-	-	2645.33	*100
GROSS INCOME	Kgs	7993.85	0.33	2637.97	-
VARIABLE COST(VC)	Rs.	-	-	907.83	-
GROSS MARGIN	Rs.	-	-	1730.14	-
NET INCOME	Rs.	-	-	-7.36	-
COST/UNIT OF OUT PUT	Rs/40Kg	-	-	13.24	-

F=(A+B+C+D+E+F+G+H+I)
VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED), 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST).

Table-74

ENTERPRISE BUDGET OF SUGARCANE RATOON CROP ON LARGE FARMS IN DISTRICT JHANG. (Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	16.67	9.96	166.00	5.43
B) TRACTOR TIME	Hrs	0.00	--	0.00	0.00
a) OWNED	Hrs	0.00	0.00	0.00	0.00
b) HIRED	Hrs	0.00	0.00	0.00	0.00
C) SEED	Kgs	0.00	0.00	0.00	0.00
D) FERTILIZER	Kgs	38.33	--	225.02	7.36
a) NITROGEN	Kgs	38.33	5.87	225.02	7.36
b) PHOSPHOROUS	Kgs	0.00	0.00	0.00	0.00
E) IRRIGATION TIME	Hrs	46.67	--	759.00	24.83
i) CANAL (C)	Hrs	23.67	--	110.00	3.60
a) OWNED	Hrs	20.00	0.00	0.00	0.00
b) PURCHASED	Hrs	3.67	30.00	110.00	3.60
ii) TUBE WELL(T.W) TIME	Hrs	14.67	--	322.67	10.56
a) OWNED	Hrs	14.67	22.00	322.67	10.56
b) HIRED	Hrs	0.00	0.00	0.00	0.00
iii) C+T.W TIME	Hrs	8.33	--	326.33	10.68
a) OWNED	Hrs	4.00	22.00	88.00	2.88
b) HIRED	Hrs	4.33	55.00	238.33	7.80
F) LAB USE BEF HARVEST	Hrs	53.00	--	238.42	7.80
a) PERMANENT	Hrs	20.14	3.68	74.12	2.43
b) CASUAL	Hrs	32.86	5.00	164.30	5.38
G) HARVEST TIME	Hrs	128.52	--	574.74	18.81
a) PERMANENT	Hrs	51.41	3.68	189.18	6.19
b) CASUAL	Hrs	77.11	5.00	385.56	12.62
H) LAND.REVENUE	Rs.	-	-	82.00	2.68
I) RENT	Rs.	-	-	1011.03	33.08
TOTAL COST (TC)	Rs.	-	-	3056.20	*100
GROSS INCOME	Kgs	8773.33	0.33	2895.20	-
VARIABLE COST(VC)	Rs.	-	-	1284.54	-
GROSS MARGIN	Rs.	-	-	1610.66	-
NET INCOME	Rs.	-	-	-161.00	-
COST/UNIT OF OUT PUT	Rs/40Kg	-	-	13.93	-

*=(A+B+C+D+E+F+G+H+I)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST)

Table-75

ENTERPRISE BUDGET OF SUGARCANE RATOON CROP ON ALL FARMS IN DISTRICT JHANG.
(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	23.06	16.16	372.72	13.70
B) TRACTOR TIME	Hrs	0.00	--	0.00	0.00
a) OWNED	Hrs	0.00	0.00	0.00	0.00
b) HIRED	Hrs	0.00	0.00	0.00	0.00
C) SEED	Kgs	0.00	0.00	0.00	0.00
D) FERTILIZER	Kgs	31.16	--	182.92	6.72
a) NITROGEN	Kgs	31.16	5.87	182.92	6.72
b) PHOSPHOROUS	Kgs	0.00	0.00	0.00	0.00
E) IRRIGATION TIME	Hrs	35.96	--	449.65	16.53
i) CANAL (C)	Hrs	22.11	--	23.23	0.85
a) OWNED	Hrs	21.34	0.00	0.00	0.00
b) PURCHASED	Hrs	0.77	30.00	23.23	0.85
ii) TUBE WELL(T.W) TIME	Hrs	6.50	--	113.90	4.19
a) OWNED	Hrs	5.18	22.00	113.90	4.19
b) HIRED	Hrs	1.32	0.00	0.00	0.00
iii) C+T.W TIME	Hrs	7.35	--	312.52	11.49
a) OWNED	Hrs	2.77	22.00	61.03	2.24
b) HIRED	Hrs	4.57	55.00	251.49	9.24
F) LAB USE BEF HARVEST	Hrs	62.21	--	269.42	9.90
a) PERMANENT	Hrs	31.53	3.68	116.05	4.27
b) CASUAL	Hrs	30.68	5.00	153.38	5.64
G) HARVEST TIME	Hrs	98.03	--	418.98	15.40
a) PERMANENT	Hrs	53.93	3.68	198.45	7.29
b) CASUAL	Hrs	44.11	5.00	220.53	8.11
H) LAND.REVENUE	Rs.	-	-	82.00	3.01
I) RENT	Rs.	-	-	945.21	34.74
TOTAL COST (TC)	Rs.	-	-	2720.91	*100
GROSS INCOME	Kgs	7990.05	0.33	2636.72	-
VARIABLE COST(VC)	Rs.	-	-	888.49	-
GROSS MARGIN	Rs.	-	-	1748.23	-
NET INCOME	Rs.	-	--	-84.19	-
COST/UNIT OF OUT PUT	Rs/40Kg	-	-	13.62	-

*=(A+B+C+D+E+F+G+H+I)
VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST).

Table-76

ENTERPRISE BUDGET OF SUGARCANE RATOON CROP ON OWNERS FARMS IN DISTRICT JHANG.

	PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A)	BULLOCK PAIR TIME	Hrs	22.62	17.40	393.57	13.99
B)	TRACTOR TIME	Hrs	0.00	--	0.00	0.00
a)	OWNED	Hrs	0.00	0.00	0.00	0.00
b)	HIRED	Hrs	0.00	0.00	0.00	0.00
C)	SEED	Kgs	0.00	0.00	0.00	0.00
D)	FERTILIZER	Kgs	30.67	--	180.01	6.40
a)	NITROGEN	Kgs	30.67	5.87	180.01	6.40
b)	PHOSPHOROUS	Kgs	0.00	0.00	0.00	0.00
E)	IRRIGATION TIME	Hrs	35.19	--	354.26	12.59
i)	CANAL (C)	Hrs	22.64	--	27.14	0.96
a)	OWNED	Hrs	21.74	0.00	0.00	0.00
b)	PURCHASED	Hrs	0.90	30.00	27.14	0.96
ii)	TUBE WELL(T.W) TIME	Hrs	7.02	--	125.19	4.45
a)	OWNED	Hrs	5.69	22.00	125.19	4.45
b)	HIRED	Hrs	1.33	0.00	0.00	0.00
iii)	C+T.W TIME	Hrs	5.43	--	201.93	7.18
a)	OWNED	Hrs	2.93	22.00	64.43	2.29
b)	HIRED	Hrs	2.50	55.00	137.50	4.89
F)	LAB USE BEF HARVEST	Hrs	62.01	--	268.41	9.54
a)	PERMANENT	Hrs	31.55	3.68	116.11	4.13
b)	CASUAL	Hrs	30.46	5.00	152.30	5.41
G)	HARVEST TIME	Hrs	100.35	--	428.40	15.23
a)	PERMANENT	Hrs	55.58	3.68	204.54	7.27
b)	CASUAL	Hrs	44.77	5.00	223.86	7.96
H)	LAND.REVENUE	Rs.	-	-	82.00	2.91
I)	RENT	Rs.	-	-	1106.65	39.34
	TOTAL COST (TC)	Rs.	-	-	2813.31	*100
	GROSS INCOME	Kgs	8636.86	0.33	2850.16	-
	VARIABLE COST(VC)	Rs.	-	-	783.41	-
	GROSS MARGIN	Rs.	-	-	2066.75	-
	NET INCOME	Rs.	-	-	36.86	-
	COST PER UNIT OF OUT PUT.	Rs/40Kg	-	-	13.03	-

*=(A+B+C+D+E+F+G+H+I)
VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST).

Table-77

ENTERPRISE BUDGET OF SUGARCANE RATOON CROP ON OWNER-CUM-TENANT FARMS IN DISTRICT JHANG. (Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	26.00	12.02	312.52	12.89
B) TRACTOR TIME	Hrs	0.00	--	0.00	0.00
a) OWNED	Hrs	0.00	0.00	0.00	0.00
b) HIRED	Hrs	0.00	0.00	0.00	0.00
C) SEED	Kgs	0.00	0.00	0.00	0.00
D) FERTILIZER	Kgs	46.00	--	270.02	11.14
a) NITROGEN	Kgs	46.00	5.87	270.02	11.14
b) PHOSPHOROUS	Kgs	0.00	0.00	0.00	0.00
E) IRRIGATION TIME	Hrs	37.25	--	508.75	20.99
i) CANAL (C)	Hrs	27.25	--	0.00	0.00
a) OWNED	Hrs	27.25	0.00	0.00	0.00
b) PURCHASED	Hrs	0.00	20.00	0.00	0.00
ii) TUBE WELL(T.W) TIME	Hrs	0.00	--	0.00	0.00
a) OWNED	Hrs	0.00	22.00	0.00	0.00
b) HIRED	Hrs	0.00	0.00	0.00	0.00
iii) C+T.W TIME	Hrs	10.00	--	508.75	20.99
a) OWNED	Hrs	1.25	22.00	27.50	1.13
b) HIRED	Hrs	8.75	55.00	481.25	19.85
F) LAB USE BEF HARVEST	Hrs	59.25	--	256.01	10.56
a) PERMANENT	Hrs	30.19	3.68	112.19	4.63
b) CASUAL	Hrs	28.76	5.00	143.81	5.93
G) HARVEST TIME	Hrs	92.34	--	391.20	16.14
a) PERMANENT	Hrs	53.41	3.68	196.55	8.11
b) CASUAL	Hrs	38.93	5.00	194.66	8.03
H) LAND.REVENUE	Rs.	-	-	82.00	3.38
I) RENT	Rs.	-	-	603.57	24.90
TOTAL COST (TC)	Rs.	-	-	2424.07	*100
GROSS INCOME	Kgs	6818.80	0.33	2250.20	-
VARIABLE COST(VC)	Rs.	-	-	1089.75	-
GROSS MARGIN	Rs.	-	-	1160.46	-
NET INCOME	Rs.	-	-	-173.86	-
COST PER UNIT OF OUT PUT.	Rs/10Kg	-	-	14.22	-

*=(A+B+C+D+E+F+G+H+I)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST).

Table-78

ENTERPRISE BUDGET OF SUGARCANE RATOON CROP ON TENANT FARMS IN DISTRICT JHANG. (Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	22.00	14.21	312.62	9.19
B) TRACTOR TIME	Hrs	0.00	--	0.00	0.00
a) OWNED	Hrs	0.00	0.00	0.00	0.00
b) HIRED	Hrs	0.00	0.00	0.00	0.00
C) SEED	Kgs	0.00	0.00	0.00	0.00
D) FERTILIZER	Kgs	23.00	--	135.01	3.97
a) NITROGEN	Kgs	23.00	5.87	135.01	3.97
b) PHOSPHOROUS	Kgs	0.00	0.00	0.00	0.00
E) IRRIGATION TIME	Hrs	33.00	--	1210.00	35.57
i) CANAL (C)	Hrs	11.00	--	0.00	0.00
a) OWNED	Hrs	11.00	0.00	0.00	0.00
b) PURCHASED	Hrs	0.00	30.00	0.00	0.00
ii) TUBE WELL(T.W) TIME	Hrs	0.00	--	0.00	0.00
a) OWNED	Hrs	0.00	22.00	0.00	0.00
b) HIRED	Hrs	0.00	0.00	0.00	0.00
iii) C+T.W TIME	Hrs	22.00	--	1210.00	35.57
a) OWNED	Hrs	0.00	22.00	0.00	0.00
b) HIRED	Hrs	22.00	55.00	1210.00	35.57
F) LAB USE BEF HARVEST	Hrs	67.50	--	288.50	8.48
a) PERMANENT	Hrs	37.13	3.68	136.62	4.02
b) CASUAL	Hrs	30.38	5.00	151.88	4.46
G) HARVEST TIME	Hrs	72.06	--	202.98	8.91
a) PERMANENT	Hrs	45.20	3.68	158.98	4.67
b) CASUAL	Hrs	28.30	5.00	144.00	4.23
H) LAND.REVENUE	Rs.	-	-	82.00	2.41
I) RENT	Rs.	-	-	1070.74	31.48
TOTAL COST (TC)	Rs.	-	-	3401.84	*100
GROSS INCOME	Kgs	5800.00	0.33	1914.00	-
VARIABLE COST(VC)	Rs.	-	-	1640.89	-
GROSS MARGIN	Rs.	-	-	273.12	-
NET INCOME	Rs.	-	-	-1487.84	-
COST PER UNIT OF OUT PUT.	Rs/40Kg	-	-	23.46	-

*=(A+B+C+D+E+F+G+H+I)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST).

Table-79

ENTERPRISE BUDGET OF SUGARCANE RATOON CROP ON SMALL FARMS IN DISTRICTS TOBA TEK SINGH AND JHANG. (Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	21.34	20.27	193.28	18.03
B) TRACTOR TIME	Hrs	0.00	--	0.00	0.00
a) OWNED	Hrs	0.00	0.00	0.00	0.00
b) HIRED	Hrs	0.00	0.00	0.00	0.00
C) SEED	Kgs	0.00	0.00	0.00	0.00
D) FERTILIZER	Kgs	31.87	--	187.09	6.84
a) NITROGEN	Kgs	31.87	5.87	187.09	6.84
b) PHOSPHOROUS	Kgs	0.00	0.00	0.00	0.00
E) IRRIGATION TIME	Hrs	35.52	--	414.14	15.13
i) CANAL (C)	Hrs	28.09	--	133.71	4.89
a) OWNED	Hrs	23.63	0.00	0.00	0.00
b) PURCHASED	Hrs	4.46	30.00	133.71	4.89
ii) TUBE WELL(T.W) TIME	Hrs	2.66	--	44.00	1.61
a) OWNED	Hrs	2.00	22.00	44.00	1.61
b) HIRED	Hrs	0.66	0.00	0.00	0.00
iii) C+T.W TIME	Hrs	4.78	--	236.42	8.64
a) OWNED	Hrs	0.80	22.00	17.60	0.64
b) HIRED	Hrs	3.98	55.00	218.82	8.00
F) LAB USE BEF HARVEST	Hrs	63.82	--	266.57	9.74
a) PERMANENT	Hrs	43.40	3.79	164.50	6.01
b) CASUAL	Hrs	20.41	5.00	102.07	3.73
G) HARVEST TIME	Hrs	71.79	--	309.75	11.32
a) PERMANENT	Hrs	40.67	3.79	154.12	5.63
b) CASUAL	Hrs	31.13	5.00	155.63	5.69
H) LAND REVENUE	Rs.	-	-	82.00	3.00
I) RENT	Rs.	-	-	983.78	35.95
TOTAL COST (TC)	Rs.	-	-	2736.61	*100
GROSS INCOME	Kgs	7919.76	0.33	2613.52	-
VARIABLE COST(VC)	Rs.	-	-	819.33	-
GROSS MARGIN	Rs.	-	-	1794.20	-
NET INCOME	Rs.	-	-	-123.09	-
COST PER UNIT OF OUT PUT.	Rs/40Kg	-	-	13.82	-

*=(A+B+C+D+E+F+G+H+I)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST).

Table-80

ENTERPRISE BUDGET OF SUGARCANE RATOON CROP ON MEDIUM FARMS IN DISTRICTS TOBA TEK SINGH AND JHANG. (Figures on per acre basis)

	PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A)	BULLOCK PAIR TIME	Hrs	22.25	13.50	300.38	11.47
B)	TRACTOR TIME	Hrs	0.00	--	0.00	0.00
	a) OWNED	Hrs	0.00	0.00	0.00	0.00
	b) HIRED	Hrs	0.00	0.00	0.00	0.00
C)	SEED	Kgs	0.00	0.00	0.00	0.00
D)	FERTILIZER	Kgs	34.55	--	202.83	7.75
	a) NITROGEN	Kgs	34.55	5.87	202.83	7.75
	b) PHOSPHOROUS	Kgs	0.00	0.00	0.00	0.00
E)	IRRIGATION TIME	Hrs	37.98	--	448.00	17.11
	i) CANAL (C)	Hrs	27.36	--	100.71	3.85
	a) OWNED	Hrs	24.00	0.00	0.00	0.00
	b) PURCHASED	Hrs	3.36	30.00	100.71	3.85
	ii) TUBE WELL(T.W) TIME	Hrs	3.73	--	50.68	1.94
	a) OWNED	Hrs	2.30	22.00	50.68	1.94
	b) HIRED	Hrs	1.43	0.00	0.00	0.00
	iii) C+T.W TIME	Hrs	6.89	--	296.61	11.33
	a) OWNED	Hrs	2.50	22.00	55.00	2.10
	b) HIRED	Hrs	4.39	55.00	241.61	9.23
F)	LAB USE BEF HARVEST	Hrs	59.94	--	254.51	9.72
	a) PERMANENT	Hrs	37.34	3.79	141.50	5.40
	b) CASUAL	Hrs	22.61	5.00	113.03	4.32
G)	HARVEST TIME	Hrs	84.65	--	369.60	14.11
	a) PERMANENT	Hrs	14.33	3.79	168.03	6.42
	b) CASUAL	Hrs	40.32	5.00	201.58	7.70
H)	LAND.REVENUE	Rs.	-	-	82.00	3.13
I)	RENT	Rs.	-	-	961.30	36.71
	TOTAL COST (TC)	Rs.	-	-	2618.64	100
	GROSS INCOME	Kgs	8022.86	0.33	2647.54	-
	VARIABLE COST(VC)	Rs.	-	-	885.19	-
	GROSS MARGIN	Rs.	-	-	1762.34	-
	NET INCOME	Rs.	-	-	28.90	-
	COST PER UNIT OF OUT PUT.	Rs/40Kg	-	-	13.06	-

TC=(A+B+C+D+E+F+G+H+I)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST).

Table-81

ENTERPRISE BUDGET OF SUGARCANE RATOON CROP ON LARGE FARMS IN DISTRICTS TOBA TEK SINGH AND JHANG. (Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	16.50	10.11	166.82	5.80
B) TRACTOR TIME	Hrs	0.00	--	0.00	0.00
a) OWNED	Hrs	0.00	0.00	0.00	0.00
b) HIRED	Hrs	0.00	0.00	0.00	0.00
C) SEED	Kgs	0.00	0.00	0.00	0.00
D) FERTILIZER	Kgs	38.33	--	225.02	7.82
a) NITROGEN	Kgs	38.33	5.87	225.02	7.82
b) PHOSPHOROUS	Kgs	0.00	0.00	0.00	0.00
E) IRRIGATION TIME	Hrs	46.17	--	728.33	25.30
i) CANAL (C)	Hrs	27.83	--	160.00	5.56
a) OWNED	Hrs	22.50	0.00	0.00	0.00
b) PURCHASED	Hrs	5.33	30.00	160.00	5.56
ii) TUBE WELL(T.W) TIME	Hrs	9.33	--	205.33	7.13
a) OWNED	Hrs	9.33	22.00	205.33	7.13
b) HIRED	Hrs	0.00	0.00	0.00	0.00
iii) C+T.W TIME	Hrs	9.00	--	363.00	12.61
a) OWNED	Hrs	4.00	22.00	88.00	3.06
b) HIRED	Hrs	5.00	55.00	275.00	9.55
F) LAB CSE BEF HARVEST	Hrs	54.22	--	235.31	8.18
a) PERMANENT	Hrs	29.58	3.79	112.10	3.89
b) CASUAL	Hrs	24.64	5.00	123.21	4.28
G) HARVEST TIME	Hrs	98.16	--	441.24	15.33
a) PERMANENT	Hrs	40.96	3.79	155.23	5.39
b) CASUAL	Hrs	57.20	5.00	286.01	9.94
H) LAND.REVENUE	Rs.	-	-	82.00	2.85
I) RENT	Rs.	-	-	999.63	34.73
TOTAL COST (TC)	Rs.	-	-	2878.35	*100
GROSS INCOME	Kgs	8553.33	0.33	2822.60	-
VARIABLE COST(VC)	Rs.	-	-	1171.89	-
GROSS MARGIN	Rs.	-	-	1650.71	-
NET INCOME	Rs.	-	-	-55.75	-
COST PER UNIT OF OUT PUT.	Rs/40Kg	-	-	13.46	-

*=(A+B+C+D+E+F+G+H+I)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST).

Table-82

ENTERPRISE BUDGET OF SUGARCANE RATOON CROP ON ALL FARMS IN DISTRICTS TOBA TEK SINGH AND JHANG. (Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	22.81	16.30	371.77	13.84
B) TRACTOR TIME	Hrs	0.00	--	0.00	0.00
a) OWNED	Hrs	0.00	0.00	0.00	0.00
b) HIRED	Hrs	0.00	0.00	0.00	0.00
C) SEED	Kgs	0.00	0.00	0.00	0.00
D) FERTILIZER	Kgs	33.52	--	196.77	7.33
a) NITROGEN	Kgs	33.52	5.87	196.77	7.33
b) PHOSPHOROUS	Kgs	0.00	0.00	0.00	0.00
E) IRRIGATION TIME	Hrs	37.15	--	455.20	16.95
i) CANAL (C)	Hrs	27.77	--	122.61	4.56
a) OWNED	Hrs	23.68	0.00	0.00	0.00
b) PURCHASED	Hrs	4.09	30.00	122.61	4.56
ii) TUBE WELL(T.W) TIME	Hrs	3.67	--	60.74	2.26
a) OWNED	Hrs	2.76	22.00	60.74	2.26
b) HIRED	Hrs	0.91	0.00	0.00	0.00
iii) C+T.W TIME	Hrs	6.00	--	271.85	10.12
a) OWNED	Hrs	1.77	22.00	38.90	1.45
b) HIRED	Hrs	4.24	55.00	232.95	8.67
F) LAB USE BEF HARVEST	Hrs	61.41	--	258.97	9.64
a) PERMANENT	Hrs	39.74	3.79	150.61	5.61
b) CASUAL	Hrs	21.67	5.00	108.36	4.03
G) HARVEST TIME	Hrs	79.30	--	345.47	12.86
a) PERMANENT	Hrs	42.18	3.79	159.86	5.95
b) CASUAL	Hrs	37.12	5.00	185.61	6.91
H) LAND.REVENUE	Rs.	-	-	82.00	3.05
I) RENT	Rs.	-	-	976.04	36.34
TOTAL COST (TC)	Rs.	-	-	2686.22	*100
GROSS INCOME	Kgs	8016.69	0.33	2645.51	-
VARIABLE COST(VC)	Rs.	-	-	876.67	-
GROSS MARGIN	Rs.	-	-	1768.83	-
NET INCOME	Rs.	-	-	-40.71	-
COST PER UNIT OF OUT PUT.	Rs/40Kg	-	-	13.40	-

*=(A+B+C+D+E+F+G+H+I)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST).

Table-83

ENTERPRISE BUDGET OF SUGARCANE RATOON CROP ON OWNERS FARMS IN DISTRICTS TOBA TEK SINGH AND JHANG.

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	22.67	17.16	389.04	13.97
B) TRACTOR TIME	Hrs	0.00	--	0.00	0.00
a) OWNED	Hrs	0.00	0.00	0.00	0.00
b) HIRED	Hrs	0.00	0.00	0.00	0.00
C) SEED	Kgs	0.00	0.00	0.00	0.00
D) FERTILIZER	Kgs	31.99	--	187.78	6.74
a) NITROGEN	Kgs	31.99	5.87	187.78	6.74
b) PHOSPHOROUS	Kgs	0.00	0.00	0.00	0.00
E) IRRIGATION TIME	Hrs	36.56	--	418.19	15.02
i) CANAL (C)	Hrs	27.33	--	117.45	4.22
a) OWNED	Hrs	23.41	0.00	0.00	0.00
b) PURCHASED	Hrs	3.91	30.00	117.45	4.22
ii) TUBE WELL(T.W) TIME	Hrs	3.73	--	65.30	2.34
a) OWNED	Hrs	2.97	22.00	65.30	2.34
b) HIRED	Hrs	0.77	0.00	0.00	0.00
iii) C+T.W TIME	Hrs	5.50	--	235.45	8.45
a) OWNED	Hrs	2.03	22.00	44.70	1.61
b) HIRED	Hrs	3.47	55.00	190.74	6.85
F) LAB USE BEF HARVEST	Hrs	60.41	--	254.57	9.14
a) PERMANENT	Hrs	39.23	3.79	148.67	5.34
b) CASUAL	Hrs	21.18	5.00	105.90	3.80
G) HARVEST TIME	Hrs	79.84	--	347.61	12.48
a) PERMANENT	Hrs	42.64	3.79	161.59	5.80
b) CASUAL	Hrs	37.20	5.00	186.02	6.68
H) LAND REVENUE	Rs.	-	-	82.00	2.94
I) RENT	Rs.	-	-	1105.91	39.71
TOTAL COST (TC)	Rs.	-	-	2785.10	*100
GROSS INCOME	Kgs	8652.64	0.33	2855.37	-
VARIABLE COST(VC)	Rs.	-	-	820.54	-
GROSS MARGIN	Rs.	-	-	2034.83	-
NET INCOME	Rs.	-	-	70.27	-
COST PER UNIT OF OUT PUT.	Rs/40Kg	-	-	12.88	-

*=(A+B+C+D+E+F+G+H+I)

(V=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST).

Table-84

ENTERPRISE BUDGET OF SUGARCANE RATOON CROP ON OWNER-CUM-TENANT FARMS IN DISTRICTS TOBA TEK SINGH AND JHANG. (Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	21.78	14.40	313.63	12.85
B) TRACTOR TIME	Hrs	0.00	--	0.00	0.00
a) OWNED	Hrs	0.00	0.00	0.00	0.00
b) HIRED	Hrs	0.00	0.00	0.00	0.00
C) SEED	Kgs	0.00	0.00	0.00	0.00
D) FERTILIZER	Kgs	40.81	--	239.57	9.82
a) NITROGEN	Kgs	40.81	5.87	239.57	9.82
b) PHOSPHOROUS	Kgs	0.00	0.00	0.00	0.00
E) IRRIGATION TIME	Hrs	39.88	--	462.06	18.93
i) CANAL (C)	Hrs	33.25	--	157.50	6.45
a) OWNED	Hrs	28.00	0.00	0.00	0.00
b) PURCHASED	Hrs	5.25	30.00	157.50	6.45
ii) TUBE WELL(T.W) TIME	Hrs	1.25	--	27.50	1.13
a) OWNED	Hrs	1.25	22.00	27.50	1.13
b) HIRED	Hrs	0.00	0.00	0.00	0.00
iii) C+T.W TIME	Hrs	5.38	--	277.06	11.35
a) OWNED	Hrs	0.56	22.00	12.38	0.51
b) HIRED	Hrs	4.81	55.00	264.69	10.85
F) LAB USE REF HARVEST	Hrs	64.93	--	269.95	11.06
a) PERMANENT	Hrs	45.20	3.79	171.30	7.02
b) CASUAL	Hrs	19.73	5.00	98.65	4.04
G) HARVEST TIME	Hrs	74.85	--	326.31	13.37
a) PERMANENT	Hrs	39.64	3.79	150.23	6.16
b) CASUAL	Hrs	35.22	5.00	176.09	7.21
H) LAND.REVENUE	Rs.	-	-	82.00	3.36
I. RENT	Rs.	-	-	747.10	30.61
TOTAL COST (TC)	Rs.	-	-	2440.62	*100
GROSS INCOME	Kgs	6824.70	0.33	2252.15	-
VARIABLE COST(VC)	Rs.	-	-	950.24	-
GROSS MARGIN	Rs.	-	-	1301.91	-
NET INCOME	Rs.	-	-	-188.47	-
COST PER UNIT OF OUT PUT.	Rs/40Kg	-	-	14.30	-

*=(A+B+C+D+E+F+G+H+I)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L.TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST).

Table-85

ENTERPRISE BUDGET OF SUGARCANE RATOON CROP ON TENANT FARMS IN DISTRICTS TOBA TEK SINGH AND JHANG. (Figures on per acre basis)

	PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A)	BULLOCK PAIR TIME	Hrs	23.85	14.00	333.96	13.46
B)	TRACTOR TIME	Hrs	0.00	--	0.00	0.00
a)	OWNED	Hrs	0.00	0.00	0.00	0.00
b)	HIRED	Hrs	0.00	0.00	0.00	0.00
C)	SEED	Kgs	0.00	0.00	0.00	0.00
D)	FERTILIZER	Kgs	34.50	--	202.52	8.16
a)	NITROGEN	Kgs	34.50	5.87	202.52	8.16
b)	PHOSPHOROUS	Kgs	0.00	0.00	0.00	0.00
E)	IRRIGATION TIME	Hrs	39.02	--	575.52	23.19
i)	CANAL (C)	Hrs	26.11	--	120.00	4.84
a)	OWNED	Hrs	22.11	0.00	0.00	0.00
b)	PURCHASED	Hrs	4.00	30.00	120.00	4.84
ii)	TUBE WELL(T.W) TIME	Hrs	4.85	--	64.43	2.60
a)	OWNED	Hrs	2.93	22.00	64.43	2.60
b)	HIRED	Hrs	1.93	0.00	0.00	0.00
iii)	C+T.W TIME	Hrs	8.05	--	391.09	15.76
a)	OWNED	Hrs	1.57	22.00	34.57	1.39
b)	HIRED	Hrs	6.48	55.00	356.52	14.37
F)	LAB USE BEF HARVEST	Hrs	62.77	--	267.45	10.78
a)	PERMANENT	Hrs	38.34	3.79	145.29	5.85
b)	CASUAL	Hrs	24.43	5.00	122.16	4.92
G)	HARVEST TIME	Hrs	80.04	--	349.24	14.07
a)	PERMANENT	Hrs	42.10	3.79	159.56	6.43
b)	CASUAL	Hrs	37.94	5.00	189.69	7.64
H)	LAND.REVENUE	Rs.	-	-	82.00	3.30
I)	RENT	Rs.	-	-	670.86	27.03
	TOTAL COST (TC)	Rs.	-	-	2481.55	*100
	GROSS INCOME	Kgs	6562.86	0.33	2165.74	-
	VARIABLE COST(VC)	Rs.	-	-	1023.09	-
	GROSS MARGIN	Rs.	-	-	1142.65	-
	NET INCOME	Rs.	-	-	-315.81	-
	COST PER UNIT OF OUT PUT.	Rs/40Kg	-	-	15.12	-

*=(A+B+C+D+E+F+G+H+I)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED, 50% OF OWNED TRACTOR, AND 50% OF OWNED TUBEWELL COST).

TABLE-86

ENTERPRISE BUDGET OF MAIZE ON SMALL FARMS IN DIST TOBA TEK SINGH.
(Figures on per acre basis)

	PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A)	BULLOCK PAIR TIME	Hrs	20.40	20.71	122.40	23.45
B)	TRACTOR TIME	Hrs	1.27	--	86.30	4.79
i)	OWNED	Hrs	0.52	65.00	33.80	1.88
ii)	HIRED	Hrs	0.75	70.00	52.50	2.91
C)	SEED	Kgs	16.58	2.65	43.95	2.44
D)	FERTILIZER	Kgs	33.85	--	217.31	12.06
i)	NITROGEN	Kgs	23.94	5.75	137.65	7.64
ii)	PHOSPHOROUS	Kgs	9.91	8.01	79.67	4.42
E)	IRRIGATION TIME	Hrs	10.47	--	13.30	0.74
i)	CANAL (C)	Hrs	9.87	--	0.00	0.00
i)	OWNED	Hrs	9.87	0.00	0.00	0.00
ii)	PURCHASED	Hrs	0.00	0.00	0.00	0.00
ii)	TUBE WELL (T.W) TIME	Hrs	0.26	--	5.87	0.33
i)	OWNED	Hrs	0.21	22.00	4.57	0.25
ii)	HIRED	Hrs	0.05	25.00	1.30	0.07
iii)	C+T.W TIME	Hrs	0.34	--	7.43	0.41
i)	OWNED	Hrs	0.34	22.00	7.43	0.41
ii)	HIRED	Hrs	0.00	0.00	0.00	0.00
F)	LAB USE BEF HARVEST	Hrs	36.71	--	148.72	8.25
	PERMANENT	Hrs	31.39	3.89	122.12	6.78
	CASUAL	Hrs	5.32	5.00	26.60	1.48
G)	HARVESTING TIME	Hrs	100.75	--	400.35	22.22
	PERMANENT	Hrs	93.15	3.89	362.34	20.11
	CASUAL	Hrs	7.60	5.00	38.01	2.11
H)	LAND.REVENUE	Rs.	-	-	25.20	1.40
I)	RENT	Rs.	-	-	444.08	24.65
	TOTAL COST (TC)	Rs.	-	-	1801.62	*100
	GROSS INCOME	Kgs	596.19	2.50	1492.26	-
	VARIABLE COST(VC)	Rs.	-	-	398.86	-
	GROSS MARGIN	Rs.	-	-	1093.40	-
	NET INCOME	Rs./Acre	-	-	-309.36	-
	COST/UNIT OF OUT PUT	Rs./40kg	-	-	120.88	-

* =(A+B+C+D+E+F+G+H+I)
VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF TRACTOR OWNED AND 50% OF TUBE WELL OWNED COST.

Table-87

ENTERPRISE BUDGET OF MAIZE ON MEDIUM FARMS IN DIST TOBA TEK SINGH.
(Figures on per acre basis)

	PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A)	BULLOCK PAIR TIME	Hrs	21.17	14.74	312.03	17.73
B)	TRACTOR TIME	Hrs	1.53	--	102.34	5.82
i)	OWNED	Hrs	0.94	65.00	61.19	3.48
ii)	HIRED	Hrs	0.59	70.00	41.15	2.34
C)	SEED	Kgs	17.24	2.65	45.69	2.60
D)	FERTILIZER	Kgs	40.91	--	260.19	14.79
i)	NITROGEN	Kgs	30.02	5.75	172.62	9.81
ii)	PHOSPHOROUS	Kgs	10.89	8.04	87.57	4.98
E)	IRRIGATION TIME	Hrs	14.95	--	23.76	1.35
I)	CANAL (C)	Hrs	12.70	--	0.00	0.00
i)	OWNED	Hrs	12.70	0.00	0.00	0.00
ii)	PURCHASED	Hrs	0.00	0.00	0.00	0.00
II)	TUBE WELL (T.W) TIME	Hrs	0.62	--	14.24	0.81
i)	OWNED	Hrs	0.43	22.00	9.51	0.54
ii)	HIRED	Hrs	0.19	25.00	4.73	0.27
III)	C+T.W TIME	Hrs	0.00	--	9.51	0.54
i)	OWNED	Hrs	0.43	22.00	9.51	0.54
ii)	HIRED	Hrs	1.19	0.00	0.00	0.00
F)	LAB USE BEF HARVEST	Hrs	35.00	--	144.29	8.20
	PERMANENT	Hrs	27.69	3.89	107.70	6.12
	CASUAL	Hrs	7.32	5.00	36.59	2.08
G)	HARVESTING TIME	Hrs	100.69	--	406.16	23.08
	PERMANENT	Hrs	87.66	3.89	341.00	19.38
	CASUAL	Hrs	13.03	5.00	65.15	3.70
H)	LAND REVENUE	Rs.	-	-	25.20	1.43
I)	RENT	Rs.	-	-	440.04	25.01
	TOTAL COST (TC)	Rs.	-	-	1759.69	*100
	GROSS INCOME	Kgs	641.36	2.49	1597.79	-
	VARIABLE COST(VC)	Rs.	-	-	488.85	-
	GROSS MARGIN	Rs.	-	-	1108.93	-
	NET INCOME	Rs./Acre	-	-	-161.91	-
	COST/UNIT OF OUT PUT	Rs./40Kg	-	-	108.75	-

* =(A+B+C+D+E+F+G+H+I)
VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF TRACTOR OWNED AND 50% OF TUBE WELL OWNED COST.

Table-88

ENTERPRISE BUDGET OF MAIZE ON LARGE FARMS IN DIST TOBA TEK SINGH.
(Figures on per acre basis)

	PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A)	BULLOCK PAIR TIME	Hrs	17.98	10.22	183.73	10.41
B)	TRACTOR TIME	Hrs	2.32	--	151.25	8.57
i)	OWNED	Hrs	2.18	65.00	141.70	8.03
ii)	HIRED	Hrs	0.14	70.00	9.55	0.54
C)	SEED	Kgs	18.18	2.65	48.18	2.73
D)	FERTILIZER	Kgs	44.86	--	280.87	15.92
i)	NITROGEN	kgs	34.86	5.75	200.47	11.36
ii)	PHOSPHOROUS	Kgs	10.00	8.04	80.40	4.56
E)	IRRIGATION TIME	Hrs	15.18	--	8.27	0.47
i)	CANAL (C)	Hrs	12.53	--	0.00	0.00
i)	OWNED	Hrs	12.18	0.00	0.00	0.00
ii)	PURCHASED	Hrs	0.18	0.00	0.00	0.00
II)	TUBE WELL (T.W) TIME	Hrs	0.36	--	8.27	0.47
i)	OWNED	Hrs	0.27	22.00	6.00	0.34
ii)	HIRED	Hrs	0.09	25.00	2.27	0.13
III)	C+T.W TIME	Hrs	2.45	--	0.00	0.00
i)	OWNED	Hrs	0.00	22.00	0.00	0.00
ii)	HIRED	Hrs	2.45	0.00	0.00	0.00
F)	LAB USE BEF HARVEST	Hrs	30.02	--	132.88	7.53
	PERMANENT	Hrs	15.50	3.89	60.29	3.42
	CASUAL	Hrs	14.52	5.00	72.59	4.11
G)	HARVESTING TIME	Hrs	110.44	--	467.52	26.50
	PERMANENT	Hrs	76.30	3.89	296.81	16.82
	CASUAL	Hrs	34.14	5.00	170.71	9.68
H)	LAND.REVENUE	Rs.	-	-	25.20	1.43
I)	RENT	Rs.	-	-	466.46	26.44
	TOTAL COST (TC)	Rs.	-	-	1764.36	*100
	GROSS INCOME	Kgs	706.12	2.52	1778.19	-
	VARIABLE COST(VC)	Rs.	-	-	658.01	-
	GROSS MARGIN	Rs.	-	-	1120.17	-
	NET INCOME	Rs./Acre	-	-	13.83	-
	COST/UNIT OF OUT PUT	Rs./40Kg	-	-	99.95	-

* =(A+B+C+D+E+F+G+H+I)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF TRACTOR OWNED AND 50% OF TUBE WELL OWNED COST.

Table-89

ENTERPRISE BUDGET OF MAIZE ON ALL FARMS IN DIST TOBA TEK SINGH.
(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	20.41	16.46	335.98	18.94
B) TRACTOR TIME	Hrs	1.77	--	117.65	6.63
i) OWNED	Hrs	1.25	65.00	81.25	4.58
ii) HIRED	Hrs	0.52	70.00	36.40	2.05
C) SEED	Kgs	16.92	2.65	44.84	2.53
D) FERTILIZER	Kgs	36.91	--	235.60	13.28
i) NITROGEN	Kgs	26.70	5.75	153.53	8.65
ii) PHOSPHOROUS	Kgs	10.21	8.04	82.07	4.63
E) IRRIGATION TIME	Hrs	12.21	--	15.95	0.90
I) CANAL (C)	Hrs	10.93	--	0.00	0.00
i) OWNED	Hrs	10.91	0.00	0.00	0.00
ii) PURCHASED	Hrs	0.02	0.00	0.00	0.00
II) TUBE WELL (T.W) TIME	Hrs	0.38	--	8.56	0.48
i) OWNED	Hrs	0.28	22.00	6.16	0.35
ii) HIRED	Hrs	0.10	25.00	2.40	0.14
III)C+T.W TIME	Hrs	0.90	--	7.39	0.42
i) OWNED	Hrs	0.34	22.00	7.39	0.42
ii) HIRED	Hrs	0.57	0.00	0.00	0.00
F) LAB USE REF HARVEST	Hrs	35.62	--	146.02	8.23
PERMANENT	Hrs	28.90	3.89	112.41	6.34
CASUAL	Hrs	6.72	5.00	33.60	1.89
G) HARVESTING TIME	Hrs	101.58	--	407.98	23.00
PERMANENT	Hrs	90.04	3.89	350.26	19.74
CASUAL	Hrs	11.54	5.00	57.72	3.25
H) LAND.REVENUE	Rs.	-	-	25.20	1.42
I) RENT	Rs.	-	-	444.85	25.08
TOTAL COST (TC)	Rs.	-	-	1774.07	*100
GROSS INCOME	Kgs	619.23	2.50	1548.66	-
VARIABLE COST(VC)	Rs.	-	-	454.27	-
GROSS MARGIN	Rs.	-	-	1094.39	-
NET INCOME	Rs./Acre	-	-	-225.41	-
COST/UNIT OF OUT PUT	Rs./40kg	-	-	114.60	-

* =(A+B+C+D+E+F+G+H+I)
VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF TRACTOR OWNED AND 50% OF TUBE WELL OWNED COST.

Table-90

ENTERPRISE BUDGET OF MAIZE ON OWNER FARMS IN DIST TOBA TEK SINGH.
(Figures on per acre basis)

	PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A)	BULLOCK PAIR TIME	Hrs	21.66	17.04	369.10	19.81
B)	TRACTOR TIME	Hrs	1.83	--	123.03	6.60
i)	OWNED	Hrs	1.03	65.00	67.11	3.60
ii)	HIRED	Hrs	0.80	70.00	55.92	3.00
C)	SEED	Kgs	17.06	2.65	45.20	2.43
D)	FERTILIZER	Kgs	37.47	--	240.05	12.88
i)	NITROGEN	Kgs	26.74	5.75	153.76	8.25
ii)	PHOSPHOROUS	Kgs	10.73	8.04	86.27	4.63
E)	IRRIGATION TIME	Hrs	12.47	--	9.39	0.50
I)	CANAL (C)	Hrs	11.36	--	0.00	0.00
i)	OWNED	Hrs	11.33	0.00	0.00	0.00
ii)	PURCHASED	Hrs	0.02	0.00	0.00	0.00
II)	TUBE WELL (T.W) TIME	Hrs	0.26	--	5.85	0.31
i)	OWNED	Hrs	0.25	22.00	5.56	0.30
ii)	HIRED	Hrs	0.01	25.00	0.29	0.02
III)	C+T.W TIME	Hrs	0.85	--	3.54	0.19
i)	OWNED	Hrs	0.16	22.00	3.54	0.19
ii)	HIRED	Hrs	0.69	0.00	0.00	0.00
F)	LAB USE BEF HARVEST	Hrs	34.63	--	141.90	7.61
	PERMANENT	Hrs	28.17	3.89	109.58	5.88
	CASUAL	Hrs	6.46	5.00	32.31	1.73
G)	HARVESTING TIME	Hrs	102.17	--	410.82	22.05
	PERMANENT	Hrs	90.10	3.89	350.49	18.81
	CASUAL	Hrs	12.07	5.00	60.33	3.24
H)	LAND.REVENUE	Rs.	-	-	25.20	1.35
I)	RENT	Rs.	-	-	498.72	26.76
	TOTAL COST (TC)	Rs.	-	-	1863.41	*100
	GROSS INCOME	Kgs	666.70	2.50	1667.92	-
	VARIABLE COST(VC)	Rs.	-	-	470.44	-
	GROSS MARGIN	Rs.	-	-	1197.48	-
	NET INCOME	Rs./Acre	-	-	-195.49	-
	COST/UNIT OF OUT PUT	Rs./40kg	-	-	111.80	-

* =(A+B+C+D+E+F+G+H+I)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF TRACTOR OWNED AND 50% OF TUBE WELL OWNED COST.

Table-91

ENTERPRISE BUDGET OF MAIZE ON OWNER-CUM-TENANT FARMS IN DISTRICT TOBA--TEK SINGH.

(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	16.76	17.22	288.66	17.02
B) TRACTOR TIME	Hrs	1.99	--	134.18	7.91
i) OWNED	Hrs	1.02	65.00	66.03	3.89
ii) HIRED	Hrs	0.97	70.00	68.16	4.02
C) SEED	Kgs	16.42	2.65	43.52	2.57
D) FERTILIZER	Kgs	37.64	--	234.48	13.83
i) NITROGEN	Kgs	29.78	5.75	171.21	10.10
ii) PHOSPHGROUS	Kgs	7.87	8.04	63.26	3.73
E) IRRIGATION TIME	Hrs	12.11	--	40.65	2.40
i) CANAL (C)	Hrs	10.00	--	0.00	0.00
i) OWNED	Hrs	10.00	0.00	0.00	0.00
ii) PURCHASED	Hrs	0.00	0.00	0.00	0.00
ii) TUBE WELL (T.W) TIME	Hrs	0.84	--	19.79	1.17
i) OWNED	Hrs	0.42	22.00	9.26	0.55
ii) HIRED	Hrs	0.42	25.00	10.53	0.62
iii)C+T.W TIME	Hrs	1.26	--	20.84	1.23
i) OWNED	Hrs	0.95	22.00	20.84	1.23
ii) HIRED	Hrs	0.32	0.00	0.00	0.00
F) LAB USE BEF HARVEST	Hrs	41.85	--	172.87	10.19
PERMANENT	Hrs	32.76	3.89	127.45	7.52
CASUAL	Hrs	9.08	5.00	45.42	2.68
G) HARVESTING TIME	Hrs	100.31	--	402.07	23.71
PERMANENT	Hrs	89.61	3.89	348.59	20.56
CASUAL	Hrs	10.70	5.00	53.48	3.15
H) LAND.REVENUE	Rs.	-	-	25.20	1.49
I) RENT	Rs.	-	-	354.28	20.89
TOTAL COST (TC)	Rs.	-	-	1695.89	*100
GROSS INCOME	Kgs	542.61	2.50	1354.68	-
VARIABLE COST(VC)	Rs.	-	-	493.21	-
GROSS MARGIN	Rs.	-	-	861.46	-
NET INCOME	Rs./Acre	-	-	-341.21	-
COST/UNIT OF OUT PUT	Rs./40Kg	-	-	125.02	-

* =(A+B+C+D+E+F+G+H+I)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF TRACTOR OWNED AND 50% OF TUBE WELL OWNED COST.

Table-92

ENTERPRISE BUDGET OF MAIZE ON TENANT FARMS IN DIST TOBA TEK SINGH.
(Figures on per acre basis)

	PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A)	BULLOCK PAIR TIME	Hrs	18.34	14.59	267.61	18.13
B)	TRACTOR TIME	Hrs	1.11	--	73.03	4.95
i)	OWNED	Hrs	0.87	65.00	56.15	3.83
ii)	HIRED	Hrs	0.24	70.00	16.58	1.12
C)	SEED	Kgs	16.79	2.65	44.49	3.02
D)	FERTILIZER	Kgs	33.58	--	216.34	14.66
i)	NITROGEN	Kgs	23.42	5.75	134.67	9.13
ii)	PHOSPHOROUS	Kgs	10.16	8.04	81.67	5.53
E)	IRRIGATION TIME	Hrs	11.11	--	21.32	1.44
I)	CANAL (C)	Hrs	9.89	--	0.00	0.00
i)	OWNED	Hrs	9.89	0.00	0.00	0.00
ii)	PURCHASED	Hrs	0.00	0.00	0.00	0.00
II)	TUBE WELL (T.W) TIME	Hrs	0.42	--	9.71	0.66
i)	OWNED	Hrs	0.26	22.00	5.79	0.39
ii)	HIRED	Hrs	0.16	25.00	3.95	0.27
III)	C+T.W TIME	Hrs	0.79	--	11.58	0.78
i)	OWNED	Hrs	0.53	22.00	11.58	0.78
ii)	HIRED	Hrs	0.26	0.00	0.00	0.00
F)	LAB USE FOR HARVEST	Hrs	35.90	--	138.03	9.35
	PERMANENT	Hrs	28.36	3.89	110.34	7.48
	CASUAL	Hrs	5.54	5.00	27.69	1.88
G)	HARVESTING TIME	Hrs	100.20	--	400.90	27.17
	PERMANENT	Hrs	90.20	3.89	350.88	23.78
	CASUAL	Hrs	10.00	5.00	50.02	3.39
H)	LAND.REVENUE	Rs.	-	-	25.20	1.71
I)	RENT	Rs.	-	-	288.78	19.57
	TOTAL COST (TC)	Rs.	-	-	1475.69	*100
	GROSS INCOME	Kgs	478.51	2.50	1196.53	-
	VARIABLE COST(VC)	Rs.	-	-	390.18	-
	GROSS MARGIN	Rs.	-	-	806.35	-
	NET INCOME	Rs./Acre	-	-	-279.16	-
	COST/UNIT OF OUT PUT	Rs./40Kg	-	-	123.36	-

* =(A+B+C+D+E+F+G+H+I)
VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF TRACTOR OWNED AND 50% OF TUBE WELL OWNED COST.

Table-93

ENTERPRISE BUDGET OF MAIZE ON SMALL FARMS IN DISTRICT JHANG.
(Figures on per acre basis)

	PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A)	BULLOCK PAIR TIME	Hrs	21.38	19.96	426.78	26.38
B)	TRACTOR TIME	Hrs	0.58	--	39.06	2.41
	a) OWNED	Hrs	0.31	65.00	20.00	1.24
	b) HIRED	Hrs	0.27	70.00	19.06	1.18
C)	SEED	Kgs	12.19	2.65	32.31	2.00
D)	FERTILIZER	Kgs	24.41	--	148.17	9.16
	a) NITROGEN	Kgs	21.00	5.75	120.76	7.47
	b) PHOSPHOROUS	Kgs	3.41	8.04	27.42	1.70
E)	IRRIGATION TIME	Hrs	11.02	--	39.11	2.42
	i) CANAL (C)	Hrs	8.98	--	0.00	0.00
	a) OWNED	Hrs	8.98	0.00	0.00	0.00
	b) PURCHASED	Hrs	0.01	0.00	0.00	0.00
	ii) TUBE WELL(T.W) TIME	Hrs	1.57	--	38.92	2.41
	a) OWNED	Hrs	0.14	22.00	3.19	0.20
	b) HIRED	Hrs	1.43	25.00	35.73	2.21
	iii) C+T.W TIME	Hrs	0.47	--	0.20	0.01
	a) OWNED	Hrs	0.01	22.00	0.20	0.01
	b) HIRED	Hrs	0.46	0.00	0.00	0.00
F)	LAB USE BEF HARVEST	Hrs	32.11	--	118.16	7.31
	a) PERMANENT	Hrs	32.11	3.68	118.16	7.31
	b) CASUAL	Hrs	0.00	5.00	0.00	0.00
G)	HARVEST TIME	Hrs	100.80	--	381.21	23.57
	a) PERMANENT	Hrs	93.03	3.68	342.35	21.16
	b) CASUAL	Hrs	7.77	5.00	38.86	2.40
H)	LAND.REVENUE	Rs.	-	-	25.20	1.56
I)	RENT	Rs.	-	-	407.51	25.19
	TOTAL COST (TC)	Rs.	-	-	1617.53	*100
	GROSS INCOME	Kgs	556.76	2.51	1397.96	-
	VARIABLE COST(VC)	Rs.	-	-	285.73	-
	GROSS MARGIN	Rs.	-	-	1112.22	-
	NET INCOME	Rs./Acre	-	-	-219.57	-
	COST/UNIT OF OUT PUT	Rs./40Kg	-	-	116.21	-

* =(A+B+C+D+E+F+G+H+I)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF TRACTOR OWNED AND 50% OF TURE WELL OWNED COST.

Table-94

ENTERPRISE BUDGET OF MAIZE ON MEDIUM FARMS IN DISTRICT JHANG.
(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	11.92	12.16	144.91	9.93
B) TRACTOR TIME	Hrs	2.17	--	144.17	9.88
a) OWNED	Hrs	1.50	65.00	97.50	6.68
b) HIRED	Hrs	0.67	70.00	46.67	3.20
C) SEED	Kgs	10.67	2.65	28.27	1.94
D) FERTILIZER	Kgs	26.00	--	167.06	11.45
a) NITROGEN	Kgs	18.33	5.75	105.42	7.23
b) PHOSPHOROUS	Kgs	7.67	8.04	61.64	4.23
E) IRRIGATION TIME	Hrs	13.67	--	55.33	3.79
I) CANAL (C)	Hrs	8.67	--	0.00	0.00
a) OWNED	Hrs	8.00	0.00	0.00	0.00
b) PURCHASED	Hrs	0.67	0.00	0.00	0.00
II) TUBE WELL(T.W) TIME	Hrs	1.67	--	40.67	2.79
a) OWNED	Hrs	0.33	22.00	7.33	0.50
b) HIRED	Hrs	1.33	25.00	33.33	2.29
III) C+T.W TIME	Hrs	3.33	--	14.67	1.01
a) OWNED	Hrs	0.67	22.00	14.67	1.01
b) HIRED	Hrs	2.67	0.00	0.00	0.00
F) LAB USE BEF HARVEST	Hrs	24.28	--	89.34	6.13
a) PERMANENT	Hrs	24.28	3.68	89.34	6.13
b) CASUAL	Hrs	0.00	5.00	0.00	0.00
G) HARVEST TIME	Hrs	103.32	--	397.88	27.28
a) PERMANENT	Hrs	89.95	3.68	331.02	22.69
b) CASUAL	Hrs	13.37	5.00	66.86	4.58
H) LAND.REVENUE	Rs.	-	-	25.20	1.73
I) RENT	Rs.	-	-	406.51	27.87
TOTAL COST (TC)	Rs.	-	-	1458.66	*100
GROSS INCOME	Kgs	610.88	2.52	1537.43	-
VARIABLE COST(VC)	Rs.	-	-	394.60	-
GROSS MARGIN	Rs.	-	-	1142.84	-
NET INCOME	Rs./Acre	-	-	78.77	-
COST/UNIT OF OUT PUT	Rs./40Kg	-	-	95.51	-

* =(A+B+C+D+E+F+G+H+I)
VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF TRACTOR OWNED AND 50% OF TUBE WELL OWNED COST.

Table-95

ENTERPRISE BUDGET OF MAIZE ON LARGE FARMS IN DISTRICT JHANG.
(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	8.75	9.96	87.15	5.82
B) TRACTOR TIME	Hrs	2.25	--	146.25	9.77
a) OWNED	Hrs	2.25	65.00	146.25	9.77
b) HIRED	Hrs	0.00	70.00	0.00	0.00
C) SEED	Kgs	13.50	2.65	35.78	2.39
D) FERTILIZER	Kgs	44.75	--	283.65	18.94
a) NITROGEN	Kgs	33.25	5.75	191.19	12.77
b) PHOSPHOROUS	Kgs	11.50	8.04	92.46	6.17
E) IRRIGATION TIME	Hrs	10.00	--	50.00	3.34
I) CANAL (C)	Hrs	8.00	--	0.00	0.00
a) OWNED	Hrs	8.00	0.00	0.00	0.00
b) PURCHASED	Hrs	0.00	0.00	0.00	0.00
II) TUBE WELL(T.W) TIME	Hrs	2.00	--	50.00	3.34
a) OWNED	Hrs	0.00	22.00	0.00	0.00
b) HIRED	Hrs	2.00	25.00	50.00	3.34
III) C+T.W TIME	Hrs	0.00	--	0.00	0.00
a) OWNED	Hrs	0.00	22.00	0.00	0.00
b) HIRED	Hrs	0.00	0.00	0.00	0.00
F) LAB USE BEF HARVEST	Hrs	14.93	--	54.94	3.67
a) PERMANENT	Hrs	14.93	3.68	54.94	3.67
b) CASUAL	Hrs	0.00	5.00	0.00	0.00
G) HARVEST TIME	Hrs	118.49	--	484.39	32.35
a) PERMANENT	Hrs	81.86	3.68	301.24	20.12
b) CASUAL	Hrs	36.63	5.00	183.14	12.23
H) LAND REVENUE	Rs.	-	-	25.20	1.68
I) RENT	Rs.	-	-	330.00	22.04
TOTAL COST (TC)	Rs.	-	-	1497.35	*100
GROSS INCOME	Kgs	567.20	2.53	1432.18	-
VARIABLE COST(VC)	Rs.	-	-	625.69	-
GROSS MARGIN	Rs.	-	-	806.49	-
NET INCOME	Rs./Acre	-	-	-65.17	
COST/UNIT OF OUT PUT	Rs./40Kg	-	-	105.60	-

* =(A+B+C+D+E+F+G+H+I)
VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF TRACTOR OWNED AND 50% OF TUBE WELL OWNED COST.

Table-96

ENTERPRISE BUDGET OF MAIZE ON ALL FARMS IN DISTRICT JHANG.
(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	18.70	16.16	302.17	19.10
B) TRACTOR TIME	Hrs	1.73	--	114.15	7.22
a) OWNED	Hrs	1.39	65.00	90.35	5.71
b) HIRED	Hrs	0.34	70.00	23.80	1.50
C) SEED	Kgs	12.09	2.65	32.05	2.03
D) FERTILIZER	Kgs	26.68	--	164.55	10.40
a) NITROGEN	Kgs	21.83	5.75	125.50	7.93
b) PHOSPHOROUS	Kgs	4.86	8.04	39.06	2.47
E) IRRIGATION TIME	Hrs	11.32	--	42.64	2.70
I) CANAL (C)	Hrs	8.84	--	0.00	0.00
a) OWNED	Hrs	8.73	0.00	0.00	0.00
b) PURCHASED	Hrs	0.11	0.00	0.00	0.00
II) TUBE WELL(T.W) TIME	Hrs	1.63	--	40.29	2.55
a) OWNED	Hrs	0.16	22.00	3.49	0.22
b) HIRED	Hrs	1.47	25.00	36.80	2.33
III) C+T.W TIME	Hrs	0.85	--	2.35	0.15
a) OWNED	Hrs	0.11	22.00	2.35	0.15
b) HIRED	Hrs	0.74	0.00	0.00	0.00
F) LAB USE DEF HARVEST	Hrs	29.22	--	107.52	6.80
a) PERMANENT	Hrs	29.22	3.68	107.52	6.80
b) CASUAL	Hrs	0.00	5.00	0.00	0.00
G) HARVEST TIME	Hrs	102.95	--	394.03	24.91
a) PERMANENT	Hrs	91.45	3.68	336.54	21.27
b) CASUAL	Hrs	11.50	5.00	57.49	3.63
H) LAND.REVENUE	Rs.	-	-	25.20	1.59
I) RENT	Rs.	-	-	399.61	25.26
TOTAL COST (TC)	Rs.	-	-	1581.92	*100
GROSS INCOME	Kgs	565.92	2.51	1422.30	-
VARIABLE COST(VC)	Rs.	-	-	361.61	-
GROSS MARGIN	Rs.	-	-	1060.69	-
NET INCOME	Rs./Acre	-	-	-159.62	-
COST/UNIT OF OUT PUT	Rs./40Kg	-	-	111.81	-

* =(A+B+C+D+E+F+G+H+I)
VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF TRACTOR OWNED AND 50% OF TUBE WELL OWNED COST.

Table-97

ENTERPRISE BUDGET OF MAIZE ON OWNERS FARMS IN DISTRICT JHANG.
(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCE PAIR TIME	Hrs	18.93	17.10	329.34	21.13
B) TRACTOR TIME	Hrs	0.92	--	61.59	3.95
a) OWNED	Hrs	0.60	65.90	39.15	2.51
b) HIRED	Hrs	0.32	70.00	22.44	1.44
C) SEED	Kgs	12.05	2.65	31.94	2.05
D) FERTILIZER	Kgs	26.41	--	163.60	10.50
a) NITROGEN	Kgs	21.30	5.75	122.45	7.86
b) PHOSPHOROUS	Kgs	5.12	8.04	41.15	2.64
E) IRRIGATION TIME	Hrs	11.34	--	42.15	2.70
I) CANAL (C)	Hrs	8.87	--	0.00	0.00
a) OWNED	Hrs	8.76	0.00	0.00	0.00
b) PURCHASED	Hrs	0.11	0.00	0.00	0.00
II) TUBE WELL(T.W) TIME	Hrs	1.59	--	39.20	2.52
a) OWNED	Hrs	0.17	22.00	3.68	0.24
b) HIRED	Hrs	1.42	25.00	35.52	2.28
III) C+T.W TIME	Hrs	0.88	--	2.96	0.19
a) OWNED	Hrs	0.13	22.00	2.96	0.19
b) HIRED	Hrs	0.74	0.00	0.00	0.00
F) LAB USE BEF HARVEST	Hrs	30.15	--	110.97	7.12
a) PERMANENT	Hrs	30.15	3.68	110.96	7.12
b) CASUAL	Hrs	0.00	5.00	0.01	0.00
G) HARVEST TIME	Hrs	102.10	--	389.20	24.97
a) PERMANENT	Hrs	91.89	3.68	338.16	21.70
b) CASUAL	Hrs	10.21	5.00	51.04	3.27
H) LAND REVENUE	Rs.	-	-	25.20	1.62
I) RENT	Rs.	-	-	404.47	25.95
TOTAL COST (TC)	Rs.	-	-	1558.47	*100
GROSS INCOME	Kgs	567.90	2.51	1426.82	-
VARIABLE COST(VC)	Rs.	-	-	325.96	-
GROSS MARGIN	Rs.	-	-	1100.86	-
NET INCOME	Rs./Acre	-	-	-131.65	-
COST/UNIT OF OUT PUT	Rs./40Kg	-	-	109.77	-

* =(A+B+C+D+E+F+G+H+I)
VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF TRACTOR OWNED AND 50% OF TUBE WELL OWNED COST.

Table-98

ENTERPRISE BUDGET OF MAIZE ON OWNER-CUM TENANT FARMS IN DISTRICT JHANG.
(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	14.00	12.02	168.28	11.43
B) TRACTOR TIME	Hrs	2.50	--	162.50	11.03
a) OWNED	Hrs	2.50	65.00	162.50	11.03
b) HIRED	Hrs	0.00	70.00	0.00	0.00
C) SEED	Kgs	15.00	2.65	39.75	2.70
D) FERTILIZER	Kgs	34.50	--	198.38	13.47
a) NITROGEN	Kgs	34.50	5.75	198.38	13.47
b) PHOSPHOROUS	Kgs	0.00	8.04	0.00	0.00
E) IRRIGATION TIME	Hrs	12.00	--	50.00	3.39
I) CANAL (C)	Hrs	10.00	--	0.00	0.00
a) OWNED	Hrs	10.00	0.00	0.00	0.00
b) PURCHASED	Hrs	0.00	0.00	0.00	0.00
II) TUBE WELL(T.W) TIME	Hrs	2.00	--	50.00	3.39
a) OWNED	Hrs	0.00	22.00	0.00	0.00
b) HIRED	Hrs	2.00	25.00	50.00	3.39
III) C+T.W TIME	Hrs	0.00	--	0.00	0.00
a) OWNED	Hrs	0.00	22.00	0.00	0.00
b) HIRED	Hrs	0.00	0.00	0.00	0.00
F) LAB USE BEF HARVEST	Hrs	17.50	--	64.40	4.37
a) PERMANENT	Hrs	17.50	3.68	64.40	4.37
b) CASUAL	Hrs	0.00	5.00	0.00	0.00
G) HARVEST TIME	Hrs	118.99	--	486.43	33.03
a) PERMANENT	Hrs	82.21	3.68	302.52	20.54
b) CASUAL	Hrs	36.78	5.00	183.91	12.49
H) LAND.REVENUE	Rs.	-	-	25.20	1.71
I) RENT	Rs.	-	-	277.83	18.86
TOTAL COST (TC)	Rs.	-	-	1472.77	*100
GROSS INCOME	Kgs	494.40	2.53	1248.36	-
VARIABLE COST(VC)	Rs.	-	-	553.29	-
GROSS MARGIN	Rs.	-	-	695.07	-
NET INCOME	Rs./Acre	-	-	-224.41	-
COST/UNIT OF OUT PUT	Rs./40Kg	-	-	119.16	-

* =(A+B+C+D+E+F+G+H+I)
VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF TRACTOR OWNED AND 50% OF TUBE WELL OWNED COST.

Table-99

ENTERPRISE BUDGET OF MAIZE ON SMALL FARMS IN DISTRICTS TOBA TEK SINGH AND JHANG. (Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	20.58	20.27	417.09	23.45
B) TRACTOR TIME	Hrs	1.46	--	98.37	5.56
a) OWNED	Hrs	0.66	65.00	42.71	2.40
b) HIRED	Hrs	0.80	70.00	56.15	3.16
C) SEED	Kgs	15.91	2.65	42.17	2.37
D) FERTILIZER	Kgs	32.38	--	206.52	11.61
a) NITROGEN	Kgs	23.49	5.75	135.05	7.59
b) PHOSPHOROUS	Kgs	8.89	8.04	71.48	4.02
E) IRRIGATION TIME	Hrs	10.55	--	17.23	0.97
i) CANAL (C)	Hrs	9.74	--	0.00	0.00
a) OWNED	Hrs	9.74	0.00	0.00	0.00
b) PURCHASED	Hrs	0.00	0.00	0.00	0.00
ii) TUBE WELL(T.W) TIME	Hrs	0.46	--	10.95	0.62
a) OWNED	Hrs	0.20	22.00	4.35	0.24
b) HIRED	Hrs	0.26	25.00	6.59	0.37
iii) C+T.W TIME	Hrs	0.35	--	6.29	0.35
a) OWNED	Hrs	0.29	22.00	6.29	0.35
b) HIRED	Hrs	0.07	0.00	0.00	0.00
F) LAB USE REF HARVEST	Hrs	36.03	--	142.01	7.98
a) PERMANENT	Hrs	31.53	3.79	119.50	6.72
b) CASUAL	Hrs	4.50	5.00	22.51	1.27
G) HARVEST TIME	Hrs	100.74	--	391.01	21.98
a) PERMANENT	Hrs	93.14	3.79	353.00	19.85
b) CASUAL	Hrs	7.60	5.00	38.01	2.14
H) LAND.REVENUE	Rs.	-	-	25.29	1.42
I) RENT	Rs.	-	-	438.47	24.65
TOTAL COST (TC)	Rs.	-	-	1778.57	*100
GROSS INCOME	Kgs	589.97	2.50	1477.35	-
VARIABLE COST(VC)	Rs.	-	-	395.48	-
GROSS MARGIN	Rs.	-	-	1081.86	-
NET INCOME	Rs./Acre	-	-	-301.23	-
COST/UNIT OF OUT PUT	Rs./40Kg	-	-	120.59	-

* =(A+B+C+D+E+F+G+H+I)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF TRACTOR OWNED AND 50% OF TUBE WELL OWNED COST.

Table-100

ENTERPRISE BUDGET OF MAIZE ON MEDIUM FARMS IN DISTRICTS TOBA TEK SINGH AND JHANG.

(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	20.48	13.50	276.41	16.23
B) TRACTOR TIME	Hrs	1.58	--	105.47	6.19
a) OWNED	Hrs	0.98	65.00	63.91	3.75
b) HIRED	Hrs	0.59	70.00	41.56	2.44
C) SEED	Kgs	16.75	2.65	44.39	2.61
D) FERTILIZER	Kgs	39.79	--	253.20	14.86
a) NITROGEN	Kgs	29.14	5.75	167.58	9.84
b) PHOSPHOROUS	Kgs	10.65	8.04	85.63	5.03
E) IRRIGATION TIME	Hrs	14.85	--	26.13	1.53
I) CANAL (W)	Hrs	12.40	--	0.00	0.00
a) OWNED	Hrs	12.35	0.00	0.00	0.00
b) PURCHASED	Hrs	0.05	0.00	0.00	0.00
II) TUBE WELL(T.W) TIME	Hrs	0.70	--	16.22	0.95
a) OWNED	Hrs	0.43	22.00	9.35	0.55
b) HIRED	Hrs	0.28	25.00	6.88	0.40
III) C+T.W TIME	Hrs	1.75	--	9.90	0.58
a) OWNED	Hrs	0.45	22.00	9.90	0.58
b) HIRED	Hrs	1.30	0.00	0.00	0.00
F) LAB USE PER HARVEST	Hrs	34.20	--	137.81	8.09
a) PERMANENT	Hrs	27.43	3.79	103.96	6.10
b) CASUAL	Hrs	6.77	5.00	33.84	1.99
G) HARVEST TIME	Hrs	100.89	--	398.17	23.37
a) PERMANENT	Hrs	87.83	3.79	332.69	19.54
b) CASUAL	Hrs	13.06	5.00	65.28	3.83
H) LAND REVENUE	Rs.	-	-	25.20	1.48
I) RENT	Rs.	-	-	436.77	25.64
TOTAL COST (TC)	Rs.	-	-	1702.55	*100
GROSS INCOME	Kgs	639.07	2.49	1593.26	-
VARIABLE COST(VC)	Rs.	-	-	481.79	-
GROSS MARGIN	Rs.	-	-	1111.47	-
NET INCOME	Rs./Acre	-	-	-110.29	-
COST/UNIT OF OUT PUT	Rs./40kg	-	-	106.63	-

* =(A+B+C+D+E+F+G+H+I)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF TRACTOR OWNED AND 50% OF TUBE WELL OWNED COST.

Table-101

ENTERPRISE BUDGET OF MAIZE ON LARGE FARMS IN DISTRICTS TOBA TEK SINGH AND JHANG.

(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	16.56	10.11	167.40	10.03
B) TRACTOR TIME	Hrs	1.54	--	103.27	6.19
a) OWNED	Hrs	0.87	65.00	56.85	3.41
b) HIRED	Hrs	0.66	70.00	46.43	2.78
C) SEED	Kgs	17.46	2.65	46.27	2.77
D) FERTILIZER	Kgs	44.85	--	281.29	16.86
a) NITROGEN	Kgs	34.62	5.75	199.04	11.93
b) PHOSPHOROUS	Kgs	10.23	8.04	82.26	4.93
E) IRRIGATION TIME	Hrs	11.38	--	14.69	0.88
I) CANAL (C)	Hrs	11.69	--	0.00	0.00
a) OWNED	Hrs	11.54	0.00	0.00	0.00
b) PURCHASED	Hrs	0.15	0.00	0.00	0.00
II) TUBE WELL(T.W) TIME	Hrs	0.62	--	14.69	0.88
a) OWNED	Hrs	0.23	22.00	5.08	0.30
b) HIRED	Hrs	0.38	25.00	9.62	0.58
III) C+T.W TIME	Hrs	2.08	--	0.00	0.00
a) OWNED	Hrs	0.00	22.00	0.00	0.00
b) HIRED	Hrs	2.08	0.00	0.00	0.00
F) LAB USE BLF HARVEST	Hrs	27.70	--	119.82	7.18
a) PERMANENT	Hrs	15.41	3.79	58.41	3.50
b) CASUAL	Hrs	12.28	5.00	61.42	3.68
G) HARVEST TIME	Hrs	111.68	--	465.05	27.87
a) PERMANENT	Hrs	77.16	3.79	292.45	17.53
b) CASUAL	Hrs	34.52	5.00	172.62	10.35
H) LAND REVENUE	Rs.	-	-	25.20	1.51
I) RENT	Rs.	-	-	445.17	26.70
TOTAL COST (TC)	Rs.	-	-	1668.47	*100
GROSS INCOME	Kgs	684.75	2.52	1724.95	-
VARIABLE COST(VC)	Rs.	-	-	648.61	-
GROSS MARGIN	Rs.	-	-	1076.34	-
NET INCOME	Rs./Acre	-	-	56.48	-
COST/UNIT OF OUT PUT	Rs./40Kg	-	-	97.46	-

* =(A+B+C+D+E+F+G+H+I)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.I,TRACTOR HIRED, WATER PURCHASED,50% OF TRACTOR OWNED AND 50% OF TUBE WELL OWNED COST.

Table-102

ENTERPRISE BUDGET OF MAIZE ON ALL FARMS IN DISTRICTS TOBA TEK SINGH AND JHANG. (Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	20.19	16.30	329.03	18.79
B) TRACTOR TIME	Hrs	1.80	--	119.25	6.81
a) OWNED	Hrs	1.35	65.00	87.75	5.01
b) HIRED	Hrs	0.45	70.00	31.50	1.80
C) SEED	Kgs	16.28	2.65	43.15	2.46
D) FERTILIZER	Kgs	35.56	--	226.24	12.92
a) NITROGEN	Kgs	26.06	5.75	149.86	8.56
b) PHOSPHOROUS	Kgs	9.50	8.04	76.38	4.36
E) IRRIGATION TIME	Hrs	12.09	--	19.47	1.11
I) CANAL (C)	Hrs	10.65	--	0.00	0.00
a) OWNED	Hrs	10.63	0.00	0.00	0.00
b) PURCHASED	Hrs	0.03	0.00	0.00	0.00
II) TUBE WELL(T.W) TIME	Hrs	0.54	--	12.75	0.73
a) OWNED	Hrs	0.26	22.00	5.81	0.33
b) HIRED	Hrs	0.28	25.00	6.94	0.40
III) C+T.W TIME	Hrs	0.90	--	6.72	0.38
a) OWNED	Hrs	0.31	22.00	6.72	0.38
b) HIRED	Hrs	0.59	0.00	0.00	0.00
F) LAB USE PER HARVEST	Hrs	34.77	--	141.73	8.09
a) PERMANENT	Hrs	28.94	3.89	112.56	6.43
b) CASUAL	Hrs	5.83	5.00	29.17	1.67
G) HARVEST TIME	Hrs	101.77	--	408.71	23.34
a) PERMANENT	Hrs	90.22	3.89	350.97	20.04
b) CASUAL	Hrs	11.55	5.00	57.74	3.30
H) LAND REVENUE	Rs.	-	-	25.20	1.44
I) RENT	Rs.	-	-	438.63	25.04
TOTAL COST (TC)	Rs.	-	-	1751.41	*100
GROSS INCOME	Kgs	612.76	2.50	1531.90	-
VARIABLE COST(VC)	Rs.	-	-	441.52	-
GROSS MARGIN	Rs.	-	-	1090.38	-
NET INCOME	Rs./Acre	-	-	-219.52	-
COST/UNIT OF OUT PUT	Rs./40Kg	-	-	114.33	-

TC =(A+B+C+D+E+F+G+H+I)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF TRACTOR OWNED AND 50% OF TUBE WELL OWNED COST.

Table-103

ENTERPRISE BUDGET OF MAIZE ON OWNERS FARMS IN DISTRICTS TOBA TEK SINGH AND JHANG.

(Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	21.20	17.16	363.75	20.16
B) TRACTOR TIME	Hrs	1.67	--	112.28	6.22
a) OWNED	Hrs	0.96	65.00	62.11	3.44
b) HIRED	Hrs	0.72	70.00	50.17	2.78
C) SEED	Kgs	16.18	2.65	42.88	2.38
D) FERTILIZER	Kgs	35.55	--	226.81	12.57
a) NITROGEN	Kgs	25.79	5.75	148.28	8.22
b) PHOSPHORGUS	Kgs	9.77	8.04	78.52	4.35
E) IRRIGATION TIME	Hrs	12.27	--	15.02	0.83
I) CANAL (C)	Hrs	10.91	--	0.00	0.00
a) OWNED	Hrs	10.88	0.00	0.00	0.00
b) PURCHASED	Hrs	0.04	0.00	0.00	0.00
II) TUBE WELL(T.W) TIME	Hrs	0.50	--	11.67	0.65
a) OWNED	Hrs	0.24	22.00	5.24	0.29
b) HIRED	Hrs	0.26	25.00	6.43	0.36
III) C+T.W TIME	Hrs	0.86	--	3.35	0.19
a) OWNED	Hrs	0.15	22.00	3.35	0.19
b) HIRED	Hrs	0.70	0.00	0.00	0.00
F) LAB USE BEF HARVEST	Hrs	33.81	--	134.63	7.46
a) PERMANENT	Hrs	28.46	3.79	107.85	5.98
b) CASUAL	Hrs	5.36	5.00	26.78	1.48
G) HARVEST TIME	Hrs	102.16	--	401.37	22.24
a) PERMANENT	Hrs	90.41	3.79	342.67	18.99
b) CASUAL	Hrs	11.74	5.00	58.70	3.25
H) LAND.REVENUE	Rs.	-	-	25.20	1.40
I) RENT	Rs.	-	-	482.54	26.74
TOTAL COST (TC)	Rs.	-	-	1804.47	*100
GROSS INCOME	Kgs	650.05	2.50	1627.35	-
VARIABLE COST(VC)	Rs.	-	-	445.43	-
GROSS MARGIN	Rs.	-	-	1181.92	-
NET INCOME	Rs./Acre	-	-	-177.12	-
COST/UNIT OF OUT PUT	Rs./40Kg	-	-	111.04	-

* =(A+B+C+D+E+I +G+H+I)

\C=COST OF SEED,FERTILIZER.PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF TRACTOR OWNED AND 50% OF TUBE WELL OWNED COST.

Table-104

ENTERPRISE BUDGET OF MAIZE ON OWNER-CUM-TENANT FARMS IN DISTRICTS TOBA TEK--SINGH AND JHANG. (Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	16.63	14.40	239.40	14.68
B) TRACTOR TIME	Hrs	2.02	--	135.60	8.32
a) OWNED	Hrs	1.09	65.00	70.85	4.35
b) HIRED	Hrs	0.93	70.00	64.75	3.97
C) SEED	Kgs	16.35	2.65	43.33	2.66
D) FERTILIZER	Kgs	37.49	--	232.67	14.27
a) NITROGEN	Kgs	30.01	5.75	172.57	10.58
b) PHOSPHOROUS	Kgs	7.48	8.04	60.10	3.69
E) IRRIGATION TIME	Hrs	12.10	--	41.10	2.52
I) CANAL (C)	Hrs	10.00	--	0.00	0.00
a) OWNED	Hrs	10.00	0.00	0.00	0.00
b) PURCHASED	Hrs	0.00	0.00	0.00	0.00
II) TUBE WELL(T.W) TIME	Hrs	0.90	--	21.30	1.31
a) OWNED	Hrs	0.40	22.00	8.80	0.54
b) HIRED	Hrs	0.50	25.00	12.50	0.77
III) C+T.W TIME	Hrs	1.20	--	19.80	1.21
a) OWNED	Hrs	0.90	22.00	19.80	1.21
b) HIRED	Hrs	0.30	0.00	0.00	0.00
F) LAB USE BEF HARVEST	Hrs	40.63	--	164.43	10.09
a) PERMANENT	Hrs	32.00	3.79	121.29	7.44
b) CASUAL	Hrs	8.63	5.00	43.15	2.65
G) HARVEST TIME	Hrs	101.24	--	398.23	24.42
a) PERMANENT	Hrs	89.24	3.79	338.23	20.74
b) CASUAL	Hrs	12.00	5.00	60.00	3.68
H) LAND.REVENUE	Rs.	-	-	25.20	1.55
I) RENT	Rs.	-	-	350.46	21.49
TOTAL COST (TC)	Rs.	-	--	1630.42	*100
GROSS INCOME	Kgs	540.20	2.50	1349.36	-
VARIABLE COST(VC)	Rs.	-	-	496.22	-
GROSS MARGIN	Rs.	-	-	853.14	-
NET INCOME	Rs./Acre	-	-	-281.05	-
COST/UNIT OF OUT PUT	Rs./40kg	-	-	120.73	-

* =(A+B+C+D+E+F+G+H+I)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF TRACTOR OWNED AND 50% OF TUBE WELL OWNED COST.

Table-105

ENTERPRISE BUDGET OF MAIZE ON TENANT FARMS IN DISTRICTS TOBA TEK - -SINGH AND JHANG. (Figures on per acre basis)

PARTICULARS	UNITS	QUANTITY	RATE(Rs)	COST(Rs)	% OF TC
A) BULLOCK PAIR TIME	Hrs	18.34	14.00	256.79	17.67
B) TRACTOR TIME	Hrs	1.11	--	73.03	5.03
a) OWNED	Hrs	0.87	65.00	56.45	3.88
b) HIRED	Hrs	0.24	70.00	16.58	1.14
C) SEED	Kgs	16.79	2.65	44.49	3.06
D) FERTILIZER	Kgs	33.58	--	216.34	14.89
a) NITROGEN	Kgs	23.42	5.75	134.67	9.27
b) PHOSPHOROUS	Kgs	10.16	8.04	81.67	5.62
E) IRRIGATION TIME	Hrs	11.11	--	21.32	1.47
I) CANAL (C)	Hrs	9.89	--	0.00	0.00
a) OWNED	Hrs	9.89	0.00	0.00	0.00
b) PURCHASED	Hrs	0.00	0.00	0.00	0.00
II) TUBE WELL (T.W) TIME	Hrs	0.42	--	9.74	0.67
a) OWNED	Hrs	0.26	22.00	5.79	0.40
b) HIRED	Hrs	0.16	25.00	3.95	0.27
III) C+T.W TIME	Hrs	0.79	--	11.58	0.80
a) OWNED	Hrs	0.53	22.00	11.58	0.80
b) HIRED	Hrs	0.26	0.00	0.00	0.00
F) LAB COST PER HARVEST	Hrs	33.90	--	135.19	9.30
a) PERMANENT	Hrs	28.36	3.79	107.50	7.40
b) CASUAL	Hrs	5.54	5.00	27.69	1.91
G) HARVEST TIME	Hrs	100.20	--	391.88	26.97
a) PERMANENT	Hrs	90.20	3.79	341.86	23.53
b) CASUAL	Hrs	10.00	5.00	50.02	3.44
H) LAND.REVENUE	Rs.	-	-	25.20	1.73
I) RENT	Rs.	-	-	288.78	19.87
TOTAL COST (TC)	Rs.	-	-	1453.01	*100
GROSS INCOME	Kgs	478.51	2.50	1196.53	-
VARIABLE COST(VC)	Rs.	-	-	390.18	-
GROSS MARGIN	Rs.	-	-	806.35	-
NET INCOME	Rs./Acre	-	-	-256.48	-
COST/UNIT OF OUT PUT	Rs./10Kg	-	-	121.46	-

* =(A+B+C+D+E+F+G+H+I)

VC=COST OF SEED,FERTILIZER,PLANT PROTECTION,C.H.L,TRACTOR HIRED, WATER PURCHASED,50% OF TRACTOR OWNED AND 50% OF TUBE WELL OWNED COST.

FARM INCOME ANALYSIS

INTRODUCTION:

Farm Income analysis provides a deep insight into the profitability of farming business. It may study a farm from two angles: by its enterprises or the farm as a whole.

Enterprise studies are important in farm income analysis because these help explain the internal strength and weakness of the farm and show the direction in which the farm organization may be improved. More precisely the enterprise studies help assess the profitability of each enterprise relative to the resource used, productivity and contribution of inputs and in the last analysis provide a sound basis for making rational decisions about the kind and size of enterprise, cropping patterns, cropping intensity, etc. Profit from any enterprise is the difference between the gross income and the estimated cost of production from it.

Significance of studying farm as a whole lies in the fact that ultimate purchasing power, general well-being of the farmers is essentially a function of the net income from the farm as a whole. Further, utilization of the farm resource too can best be studied for the farm as a whole.

Various definitions have been used for the term farm income in the literature. These include (a) the gross income/ gross output i.e. the gross value of all goods produced on the farm, whether sold for cash or not. (b) the gross margin i.e. it is obtained by subtracting the variable costs from the gross output. (c) Net income i.e. it is obtained by subtracting the total cost of

production (i.e. variable cost + fixed costs) of the farm from the gross value of output. These concepts of farm income have been used in this study. However, their application is limited only to the crop sector, while the livestock sector is ignored in these calculations. It may, however, be pointed out that livestock sector contributes substantially to farm income especially on small farms.

II. METHODOLOGY

2.1 Universe

This type of study demands that it should be conducted in various crop ecological zones of the Punjab Province. However, due to limitations of funds, the present study was confined to the mixed cropping system zone of the Punjab Province. This zone has unique characteristics with regard to climate, cropping patterns, rainfall, soils, etc. Its height from the sea level is 250 meters. Rainfall varies from 200 to 400 mm. Climate in general is semi and subtropical continental with means maximum temperature of 42 C^0. The mean minimum temperature ranges from 4.5 C^0 to 5.5 C^0. Soil type is haplic yermosols. Sugarcane, cotton and kharif fodders are the major crops during the kharif season, while wheat and rabi fodders are the important crops during the rabi season. About 92.5% of farm land is canal irrigated.

2.2 Sampling

2.2.1 Selection of Districts:

In the mixed cropping zone, the study was conducted in the Jhang and Toba Tek Singh districts. The district of Jhang lies from 30 - 38 to 32 - 00 north latitude and 71^0 - 37^0 and 73^0 - 13^0

east latitudes, while Toba Tek Singh district lies between 31.17 north latitude and 72.30 east latitude. The total area of Jhang district is 8,809 sq. kilometers and that of Toba Tek Singh district 3260 sq. kilometers.

The total population of the Jhang district is 1978 thousands, of which 22.40% is urban and 76.60% rural. The total population of T.T. Singh is 1127 thousands, of which 16.5% urban and 83.5% rural.

Jhang district comprises 2432 chaks/mauzas with a cropped area of 724 thousand hectares. T.T. Singh district, on the other hand, comprises 539 chaks/mauzas with a cropped area of 356 thousand hectares.

2.2.2 Selection of Villages:

Two clusters of villages, one each from Jhang and T.T. Singh districts were selected for this study. The cluster in the Jhang district comprised chak No.256/J.B, 160/J.B., 168/J.B. and 251/J.B. while in the T.T. Singh district, this cluster consisted of Chak No.316/G.B., 315/G.B., 407/J.B. and 409/J.B.

2.2.3 Selection of Respondents:

In so far as sampling of the respondents is concerned, first of all, the farmers in each of the selected villages were enlisted in an ascending order with respect to the farm size. Secondly, a proportionate sample was drawn adopting the stratified random sampling technique and this very statistical technique was employed owing to the following advantages.

a) It increases the precision of the over-all population estimates.

b) The sub-division of the population results in relatively homogeneous groups as it minimises heterogenity.

c) It reduces the standard error.

The sample of respondents thus drawn is shown in Table 1.

The required primary data on various aspects of farming business for each of the sampled farmers were collected by interviewing the sampled respondents using five sets of well-designed and pre-tested interviewing schedules. In all, six visits were made to the respondents during the period September, 1988 to April 1990. The data were subsequently processed and analysed and farm budgets for the major crops (i.e. wheat, sugarcane, maize and cotton) were prepared and cost of production was computed on per acre basis which comprised the following items.

2.3 Cost Estimation Procedure

Estimation of the cost of production of a given farm enterprise is a complex issue. It involves estimation and allocation of the cost of fixed resources available on farm. Pakistan is diversified agriculturally, encompassing a host of all-the-year-round farm enterprises, all of which are interdependent and interrelated. Together they utilize the services of many cost items in varying proportions and intensities. Unless all the necessary details are skillfully mapped, the cost of fixed items, which represent the major portion of the total farm expenditure, cannot be appropriately allocated to various farm enterprises.

TABLE NO. 1

DISTRIBUTION OF RESPONDENTS BY FARM SIZE AND TENURIAL STATUS

	Farm Size			
Tenure type	Small 0-12.5 Acres	Medium 12.5-25.00 Acres	Large 25 Acres & above	Total
Owner Operators	166	29	17	212
Owner-cum-tenants	49	14	13	76
Tenants	15	2	1	18
Total	230	45	31	306

In the study in hand, the procedure adopted in estimating and apportioning cost of various items is as under.

2.3.1 **Labour Input:**

Farm labor, which was estimated in hours per acre, is of four types, each valued and utilized in a uniquefashion.

2.3.1.1 **Family Labour:**

It has no price tag, nor can any value be offered to a family worker. It has been priced differently in different countries. In this study opportunity cost of family labor was taken to be equal to the earnings of a permanent hired laborer, however, where labor cost is a significant portion of the total cost, MVPs of the family labor was the basis of imputing the cost of the family labor. This was done on the assumption that a family labor (which included male, female and children who were to be converted into male adult units and priced at market wage) unit could perfectly substitute for a permanent hired labor unit in an effective and satisfactory manner. Labor units of members of the family were, thus, estimated on the basis of actual time devoted to farm works. Further, while estimating contribution of family labor, sex and age of the members of family were also kept in view; a male member between 12-16 years of age was considered equivalent to half adult unit and that of 16 years or above, was taken as full adult unit. Females were considered equivalent to 0.75 unit of the corresponding age group of males. This bifurcation was done owing to the varying capacity of doing a job, of different age groups. Finally, the total labor hours were imputed and per acre cost of

labour in hours and consequently in rupees by multiplying hours with per hour wages in rupees was determined.

2.3.1.2 Permanent Hired Labor:

The cost incurred on the permanently hired labor was estimated by taking into account the actual cash payments plus the value of the supplementary payments in kind. Total cost of the family labor and permanent hired labor was apportioned to each activity commensurate with the time spent on it.

2.3.1.3 Casual Hired Labor:

The actual payment made in cash or/and in kind, to casual hired labourers engaged in the farm for different agricultural operations for instance, harvesting and sowing operations, was recorded and allocated to the crop for which it was specifically used.

2.4 Capital Input

2.4.1 Seed:

Information was collected regarding the seed rate and it was taken in kgs per acre. Cost incurred on seed of afore said major crops was computed as if the seed was purchased according to the actual quantities used and according to the amount of money paid by the farmers at the prevailing market price.

2.4.2 Chemical Fertilizer:

The value of the fertilizer together with the cost of transportation and application was charged directly to the concerned crop. Moreover, nitrogen and phosphorous used was dealt with separately and estimated in nutrient kgs. per acre.

2.4.3 **Draught Animals:**

Bullock power plays an extremely important role in the process of crop production, generally, at large farms and particularly and more significantly at small and medium sized farms. The charges for draught animals input included interest and depreciation on the capital value of draught animals, sheds and mangers, etc. Maintenance cost comprised the cost of feed, labor and other such variable items. Cost of draught animals was charged to each crop, in bullock hours per acre, in proportion to the time spent on each crop. 2.4.4 Mechanical Power:

The total mechanical traction power cmployed in the process of crop production was computed on per acre basis separately as hired and owned. Further, the cost of total bullock and tractor hours was calculated by using the per hour prevailing price in the project area.

2.5 **Irrigation Water Charges, Land Revenue, Water Rates and Other Taxes**

Tht actual amount paid to the government for each crop was debited to various crops. In so far as irrigation water charges were concerned, the cost incurred on this vital input was estimated by calculating the irrigation charges separately in hours per acre. Moreover, the conventional current per hour price of tubewell water in the project area was used while computing the actual cost incurred in rupees on this very input.

2.6 **Land Input**

The rent prevailing in the area was taken as the opportunity cost of the land. The per acre allocation to major crops was done

on the basis of time a given crop occupied the land.

2.7 Payment to Artisans

Payment made to artisans for the repair of hand tools and implements was also taken into account. Total payments made to artisans were debited to major crops in proportion to the cost of interest and depreciation of tools and implements allocated to various enterprizes. Finally, the total cost of production of a certain crop was computed by taking the simple averages and summing up. As a final measure, the percentage of distribution of farm expenditure by items of cost was estimated to determine the contribution of different farm inputs.

2.8 Estimation of Gross and Net Income

Gross income is the monetary value of the goods and of the services produced at the farm and is the composite result of all the farm inputs. In the first phase, however, the income realised by the farmers from the crops alone has been taken into account and for calculating gross income, the farm gate prices at the time of sale were used. Moreover, in the study in hand, the actual yield during the year was used to estimate the gross income per harvested acre and finally the net income was calculated by deducting the total cost of production, of a particular crop from the gross income.

The result so obtained for various crops were weighted according to the area of each crop to estimate gross income, total cost, gross marginal, net income per farm acre for each farm size. The results so obtained are depicted in table 2 to table 13.

Tab-2

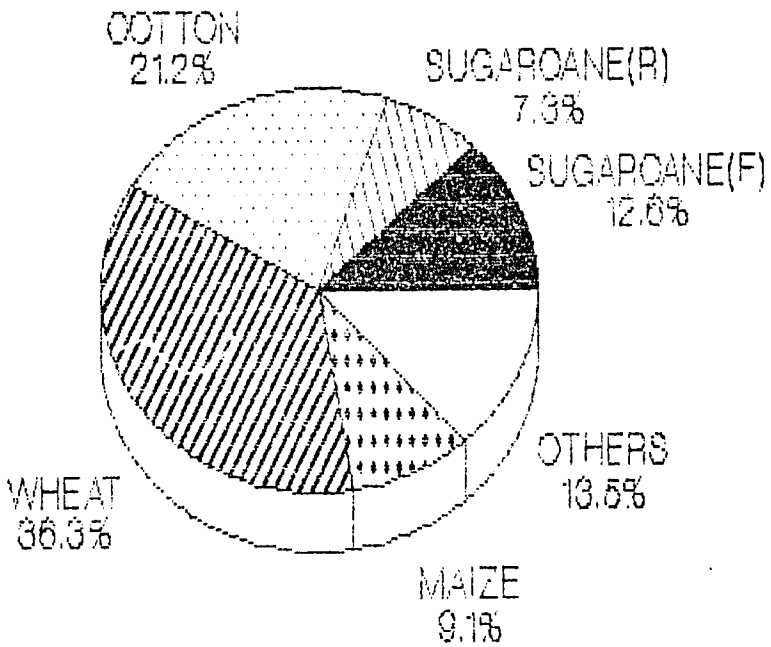
PER FARM GROSS INCOME IN RUPEES FROM CROPS IN DISTRICT TOBA TEK SINGH BY FARM SIZE.

FARM SIZE	SUGAR CANE FRESH	SUGAR CANE RATOON	COTTON	WHEAT	MAIZE	OTHERS	TOTAL
SMALL	2405.99	1447.91	3393.53	6745.63	1776.80	2636.71	18406.67
	(13.07)	(7.87)	(18.44)	(36.65)	(9.65)	(14.32)	(100)
MEDIUM	4350.48	1707.33	11327.86	14445.49	3152.40	6297.04	41280.60
	(10.54)	(4.14)	(27.44)	(34.99)	(7.64)	(15.25)	(100)
LARGE	9440.90	3666.67	25217.20	34513.98	6259.23	22545.23	101643.20
	(9.29)	(3.61)	(24.81)	(33.96)	(6.16)	(22.18)	(100)
OVERALL	3566.35	1723.37	7851.64	11324.47	2473.21	4310.24	31249.28
	(11.41)	(5.51)	(25.13)	(36.24)	(7.91)	(13.79)	(100)

FIGURES IN PARENTHESIS INDICATE PERCENTAGES.

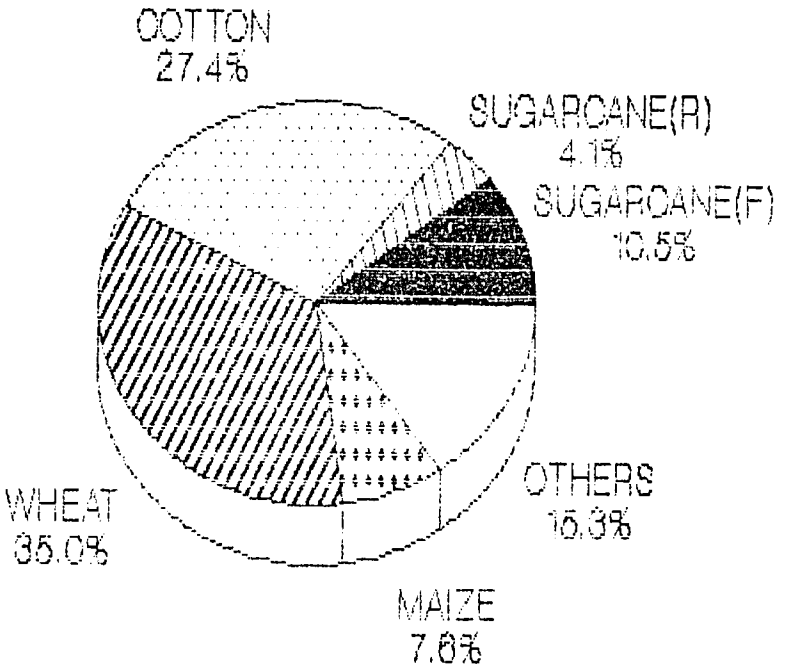
PER FARM INCOME FROM CROPS IN DISTRICT TOBA TEK SINGH.

(SMALL FARMS)



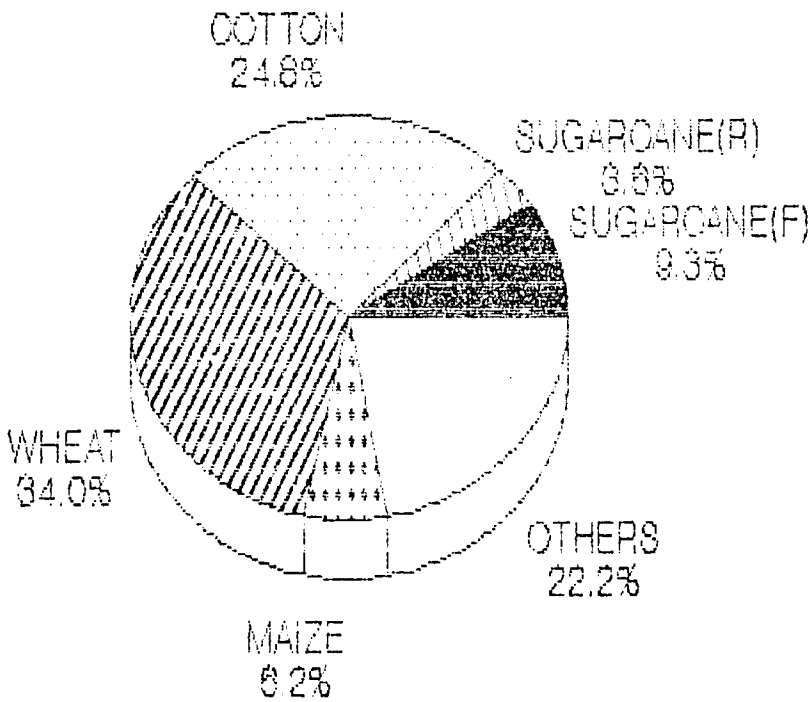
PER FARM INCOME FROM CROPS IN DISTRICT TOBA TEK SINGH.

(MEDIUM FARMERS)

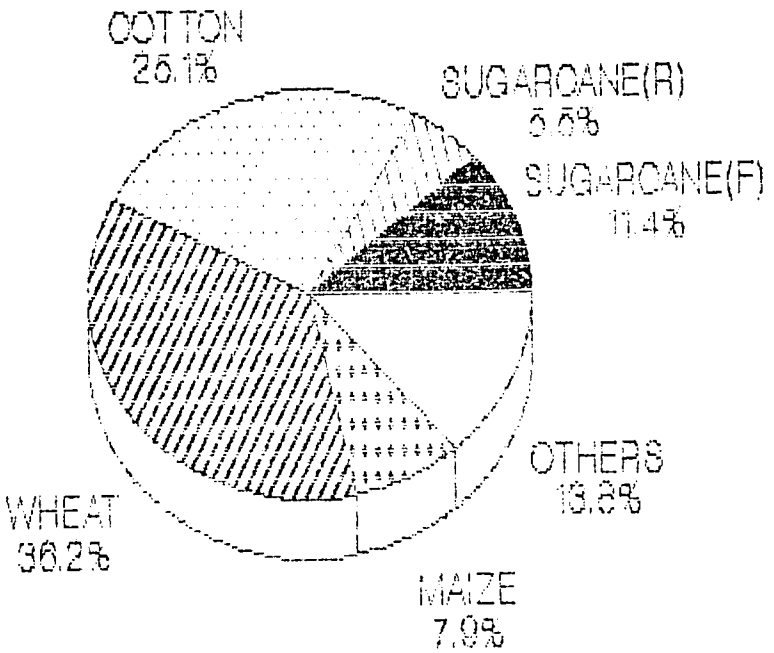


PER FARM INCOME FROM CROPS IN DISTRICT TOBA TEK SINGH.

(LARGE FARMS)



PER FARM INCOME FROM CROPS IN DISTRICT
TOBA TEK SINGH.
(OVERALL)



Tab-3

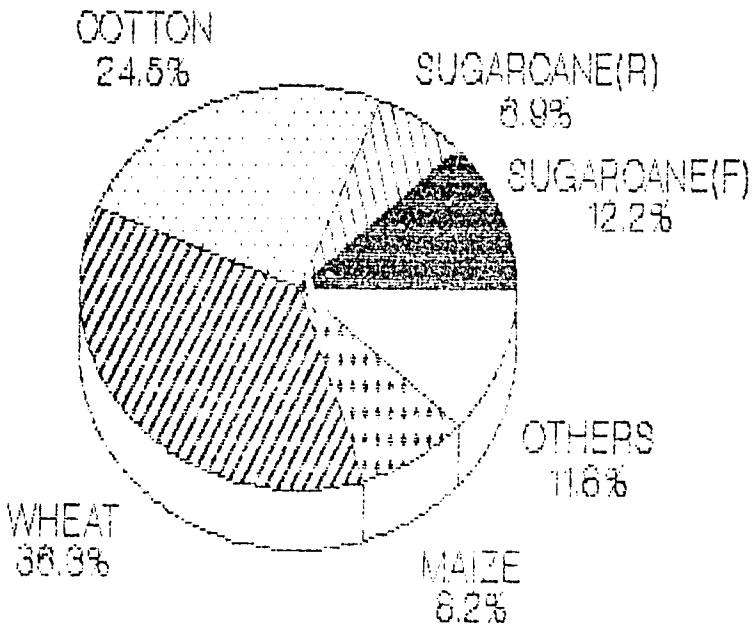
PER FARM GROSS INCOME IN RUPEES FROM CROPS IN DISTRICT JHANG BY FARM SIZE.

FARM SIZE	SUGAR CANE FRESH	SUGAR CANE RATOON	COTTON	WHEAT	MAIZE	OTHERS	TOTAL
SMALL	2166.29	1230.53	4363.97	6466.28	1467.86	2097.46	17792.39
	(12.18)	(6.92)	(24.53)	(36.34)	(8.25)	(11.79)	(100)
MEDIUM	4897.83	2536.51	10241.18	17387.77	1153.07	5432.46	41648.83
	(11.76)	(6.09)	(24.59)	(41.75)	(2.77)	(13.04)	(100)
LARGE	7694.03	4825.33	18364.29	39393.27	2327.62	21781.36	94385.89
	(8.15)	(5.11)	(19.46)	(41.74)	(2 47)	(23.08)	(100)
OVERALL	3177.09	2096.14	7471.25	10545.37	1684.39	4495.36	29469.60
	(10.78)	(7.11)	(25.35)	(35.78)	(5.72)	(15.25)	(100)

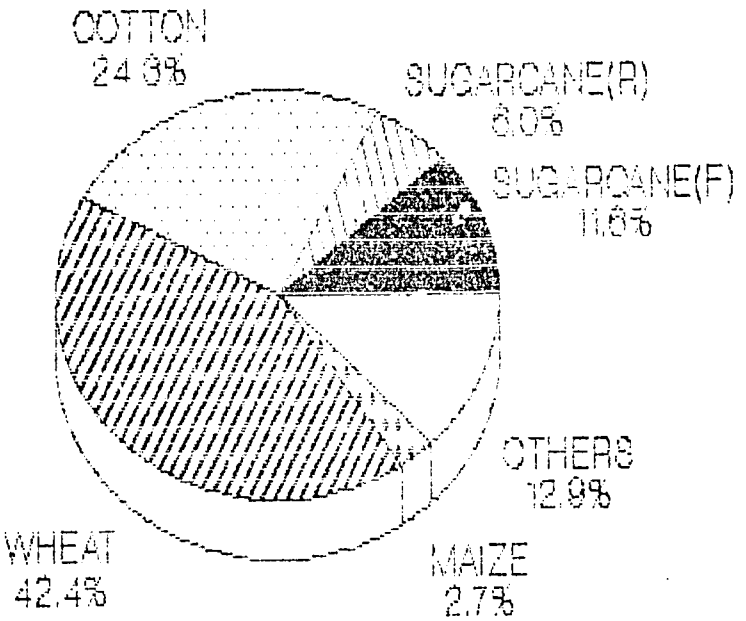
FIGURES IN PARENTHESIS INDICATE PERCENTAGES.

PER FARM INCOME FROM CROPS IN DISTRICT JHANG.

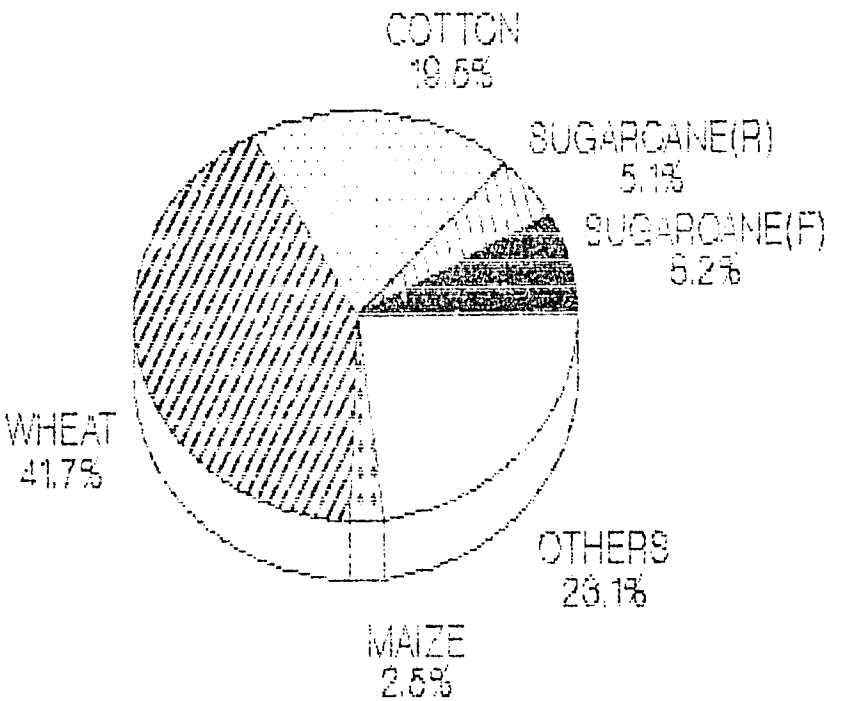
(SMALL FARMS)



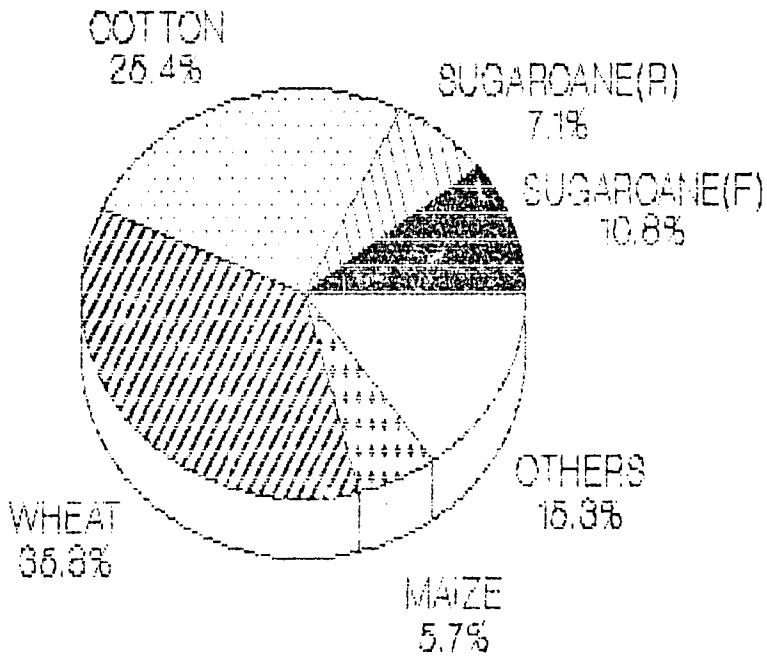
PER FARM INCOME FROM CROPS IN DISTRICT JHANG.
(MEDIUM FARMERS)



PER FARM INCOME FROM CROPS IN DISTRICT JHANG.
(LARGE FARMERS)



PER FARM INCOME FROM CROPS IN DISTRICT JHANG.
(OVERALL)



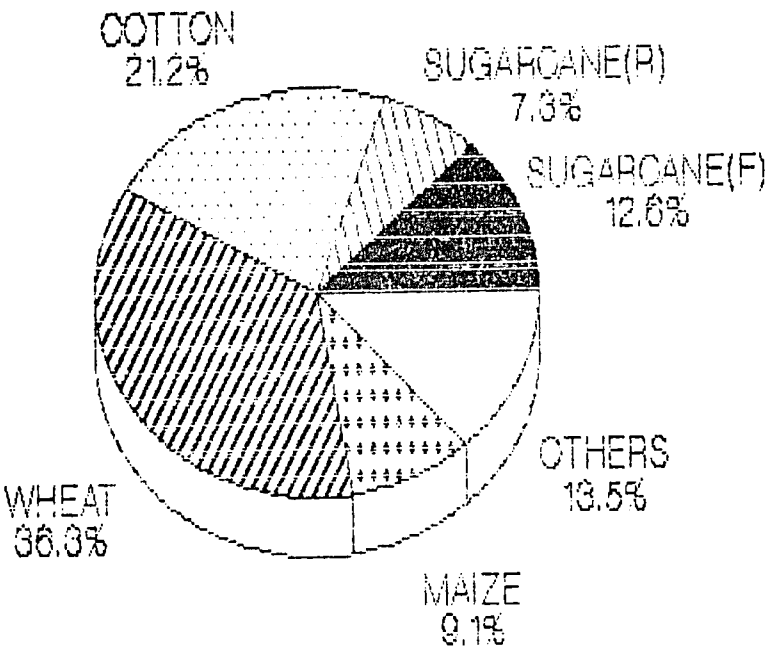
Tab-4

PER FARM GROSS INCOME IN RUPEES FROM CROPS IN DISTRICTS TOBA TEK SINGH AND JHANG BY FARM SIZE.

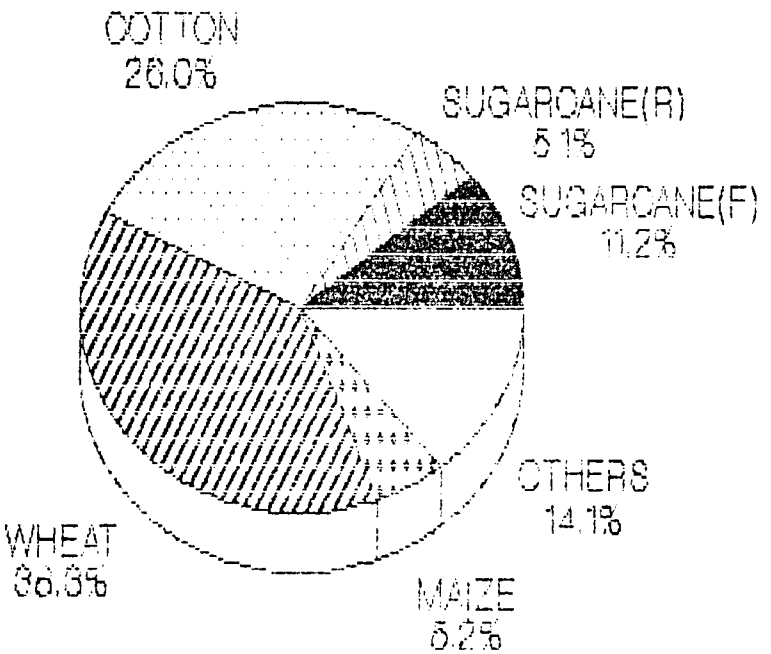
FARM SIZE	SUGAR CANE FRESH	SUGAR CANE RATOON	COTTON	WHEAT	MAIZE	OTHERS	TOTAL
SMALL	2285.95	1333.12	3864.22	6611.76	1655.13	2449.34	18099.53
	(12.56)	(7.33)	(21.33)	(36.33)	(9.09)	(13.46)	(100)
MEDIUM	4633.29	2123.85	10793.44	15891.25	2169.20	5853.68	41464.71
	(11.17)	(5.17)	(26.03)	(38.32)	(5.23)	(14.12)	(100)
LARGE	8545.73	4233.99	21944.57	36932.62	4437.43	21920.20	98014.54
	(8.72)	(4.32)	(22.39)	(37.68)	(4.53)	(22.36)	(100)
OVERALL	3368.97	1907.43	7674.92	10944.80	2130.27	4333.06	30359.44
	(11.10)	(6.28)	(25.28)	(36.05)	(7.02)	(14.27)	(100)

FIGURES IN PARENTHESIS INDICATE PERCENTAGES.

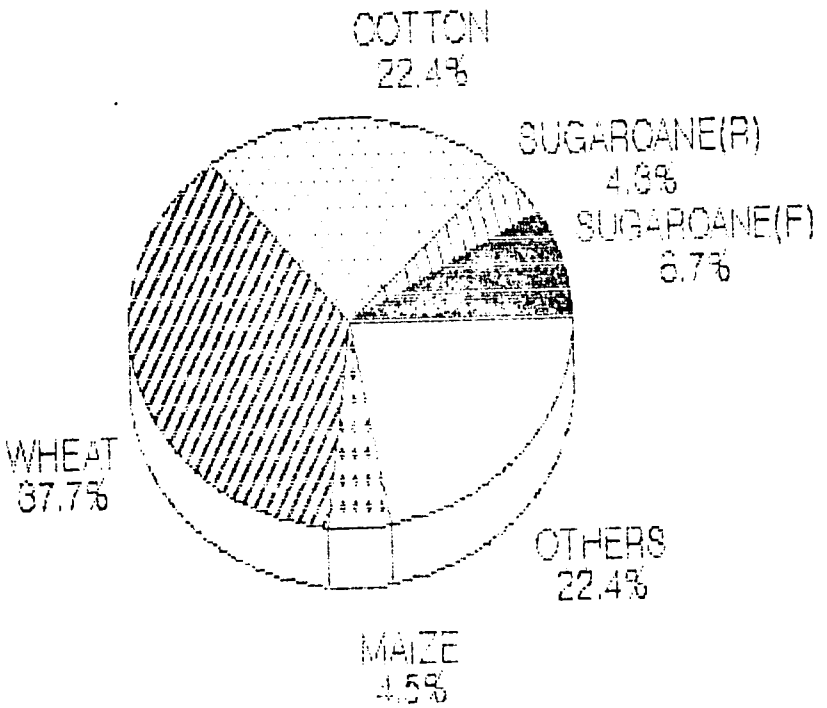
PER FARM INCOME FROM CROPS IN DISTRICTS TOBA TEK SINGH AND JHANG. (SMALL FARMERS)



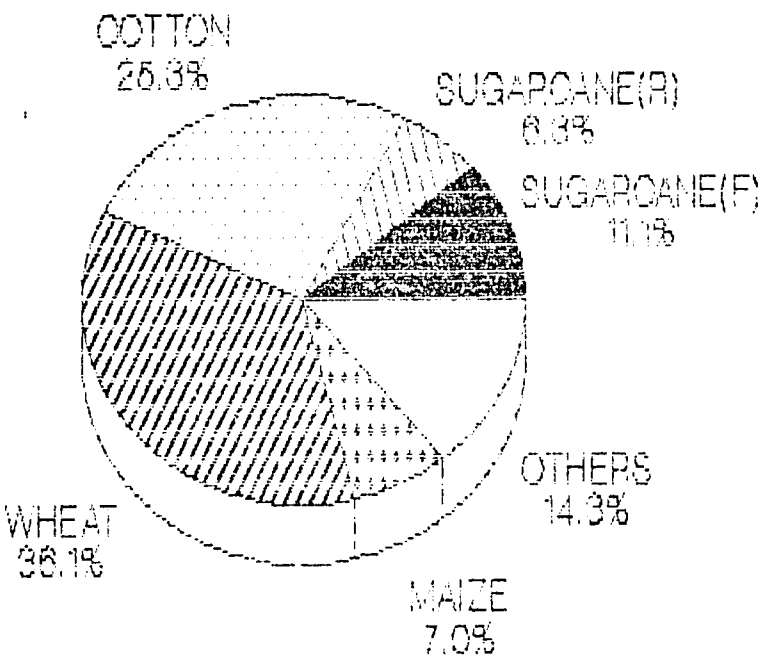
PER FARM INCOME FROM CROPS IN DISTRICTS TOBA TEK SINGH AND JHANG. (MEDIUM FARMERS)



PER FARM INCOME FROM CROPS IN DISTRICTS
TOBA TEK SINGH AND JHANG.
(LARGE FARMERS)



PER FARM INCOME FROM CROPS IN DISTRICTS TOBA TEK SINGH AND JHANG. (OVERALL)



Tab-5

AGGREGATE PER FARM INCOME IN RUPEES IN DISTRICT TOBA TEK SINGH BY FARM SIZE.

FARM CATEGORIES	CROPS	L.STOCK	TOTAL INCOME
SMALL	18406.67	6303.51	24710.18
	(74.49)	(25.51)	(100)
MEDIUM	41280.60	13146.76	54427.36
	(75.85)	(24.15)	(100)
LARGE	101643.20	19611.82	121255.02
	(83.83)	(16.17)	(100)
OVERALL	31249.28	9567.16	40816.44
	(76.56)	(23.44)	(100)

FIGURES IN PARENTHESIS INDICATE PERTCENTAGES.

Tab-6

AGGREGATE PER FARM INCOME IN RUPEES IN DISTRICT JHANG BY FARM SIZE.

FARM CATEGORIES	CROPS	L.STOCK	TOTAL INCOME
SMALL	17792.39	7527.29	25319.68
	(70.27)	(29.73)	(100)
MEDIUM	41648.83	13225.48	54874.31
	(75.90)	(24.10)	(100)
LARGE	94385.89	20745.71	115131.60
	(81.98)	(18.02)	(100)
OVERALL	29469.60	9286.59	38756.19
	(76.04)	(23.96)	(100)

FIGURES IN PARENTHESIS INDICATE PERTCENTAGES.

Tab-7

AGGREGATE PER FARM INCOME IN RUPEES IN DISTRICTS TOBA TEK SINGH AND JHANG BY FARM SIZE.

FARM CATEGORIES	CROPS	L.STOCK	TOTAL INCOME
SMALL	18099.53	6915.40	25014.93
	(72.46)	(27.54)	(100)
MEDIUM	41464.71	13186.12	54650.83
	(75.18)	(24.82)	(100)
LARGE	98014.54	20178.77	118193.31
	(82.93)	(17.07)	(100)
OVERALL	30359.44	9426.87	39786.31
	(76.31)	(23.69)	(100)

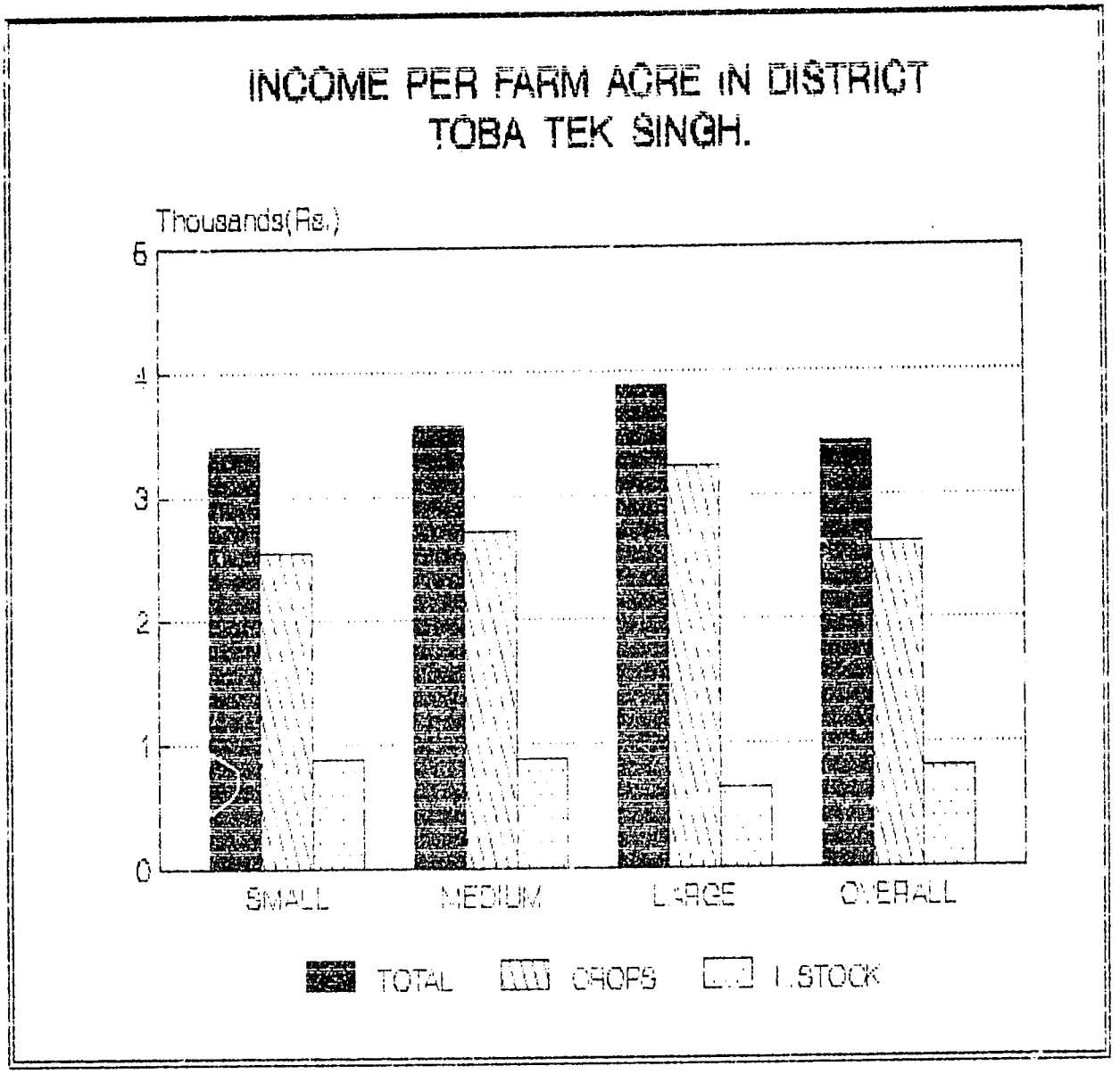
FIGURES IN PARENTHESIS INDICATE PERTCENTAGES.

Tab-8

INCOME PER FARM ACRE IN RUPEES IN DISTRICT TOBA TEK SINGH BY FARM SIZE.

FARM CATEGORIES	CROPS	L.STOCK	TOTAL INCOME
SMALL	2532.21	867.17	3399.38
	(74.49)	(25.51)	(100)
MEDIUM	2701.61	860.39	3562.00
	(75.85)	(24.15)	(100)
LARGE	3240.80	625.30	3866.10
	(83.83)	(16.17)	(100)
OVERALL	2621.33	802.53	3423.86
	(76.56)	(23.44)	(100)

FIGURES IN PARENTHESIS INDICATE PERTCENTAGES.

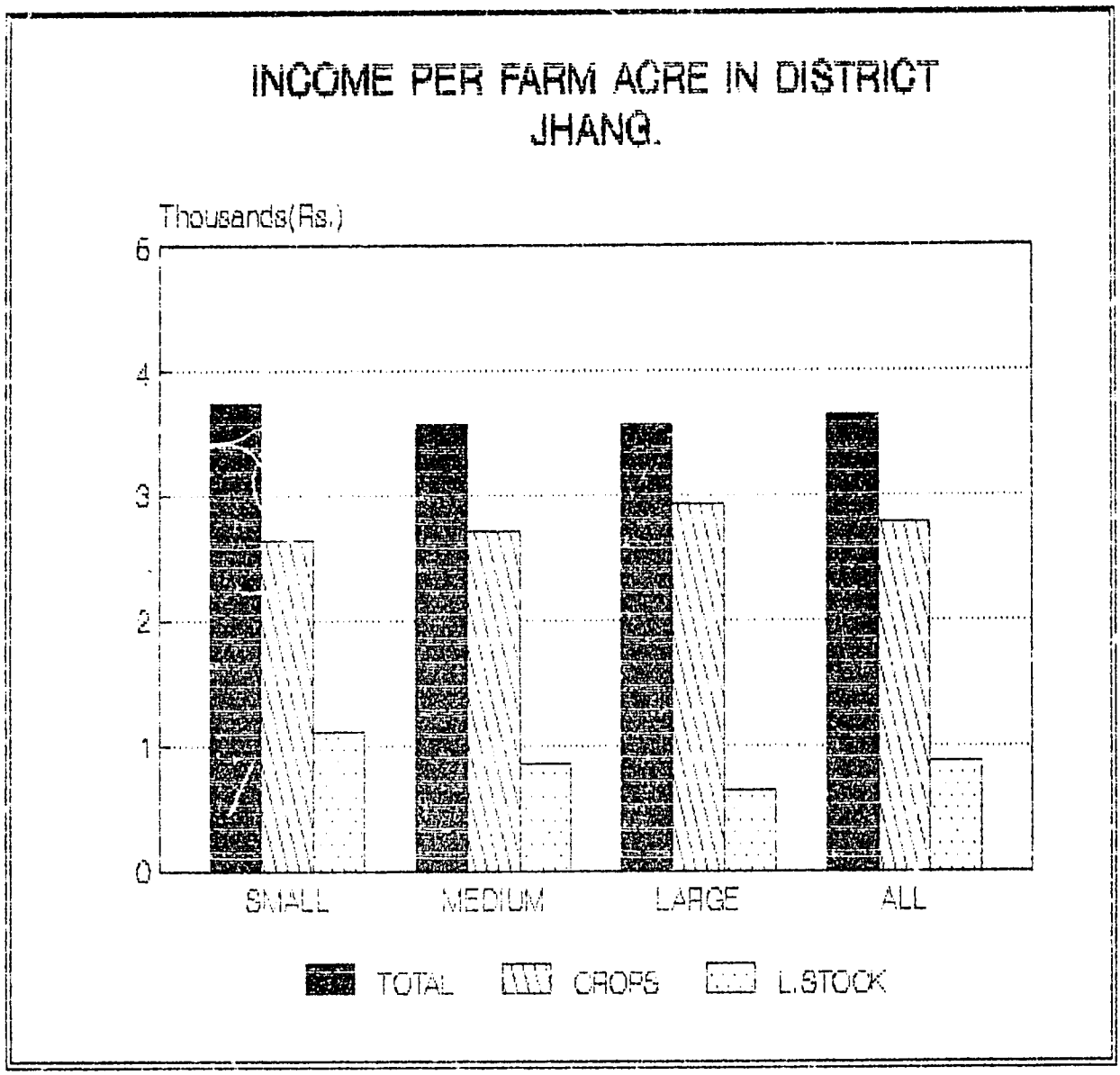

INCOME PER FARM ACRE IN DISTRICT
TOBA TEK SINGH.
Thousands(Rs.)
5
4
3
2
1
0
SMALL
MEDIUM
LARGE
OVERALL
TOTAL
CROPS
L.STOCK

Tab-9

INCOME PER FARM ACRE IN RUPEES IN DISTRICT JHANG BY FARM SIZE.

FARM CATEGORY	CROPS	L.STOCK	TOTAL INCOME
SMALL	2624.93	1110.51	3735.44
	(70.27)	(29.73)	(100)
MEDIUM	2697.90	856.71	3554.61
	(75.90)	(24.10)	(100)
LARGE	2926.69	643.28	3569.97
	(81.98)	(18.02)	(100)
OVERALL	2765.99	871.63	3637.63
	(76.04)	(23.96)	(100)

FIGURES IN PARENTHESIS INDICATE PERCENTAGES.

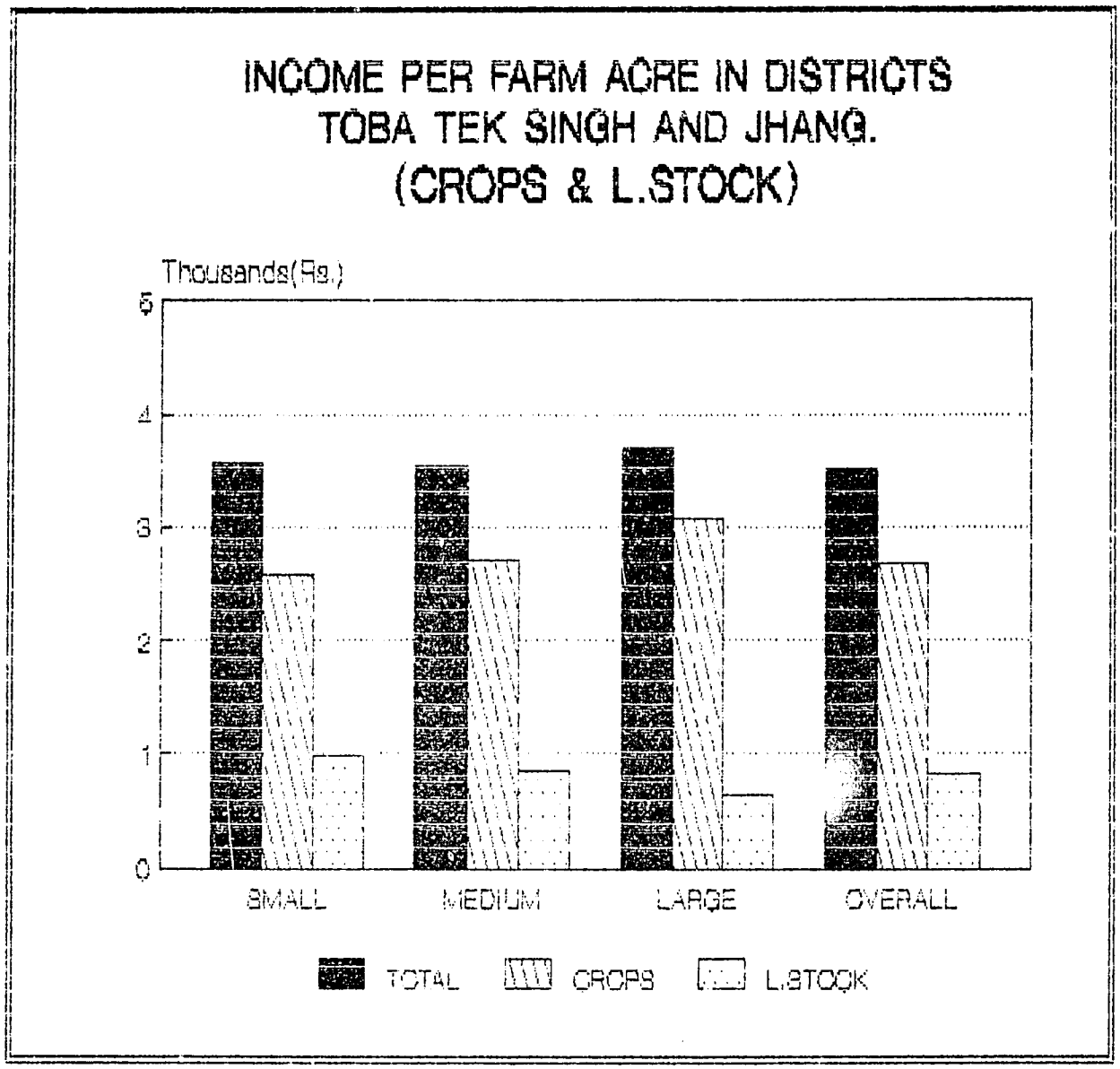

INCOME PER FARM ACRE IN DISTRICT JHANG.
Thousands(Rs.)
6
4
3
2
1
0
SMALL
MEDIUM
LARGE
ALL
TOTAL
CROPS
L.STOCK

Tab-10

INCOME PER FARM ACRE IN RUPEES IN DISTRICTS TOBA TEK SINGH AND JHANG BY FARM SIZE.

FARM CATEGORY	CROPS	L.STOCK	TOTAL INCOME
SMALL	2576.95	984.59	3561.54
	(72.35)	(27.65)	(100)
MEDIUM	2699.33	858.41	3557.74
	(75.87)	(24.13)	(100)
LARGE	3081.56	634.42	3715.97
	(82.93)	(17.07)	(100)
OVERALL	2689.60	835.14	3524.74
	(76.31)	(23.69)	(100)

FIGURES IN PARENTHESIS INDICATE PERTCENTAGES.


INCOME PER FARM ACRE IN DISTRICTS
TOBA TEK SINGH AND JHANG.
(CROPS & L.STOCK)
Thousands(Rs.)
5
4
3
2
1
0
SMALL
MEDIUM
LARGE
OVERALL
TOTAL
CROPS
L.STOCK

Tab-11

AGGREGATE FARM INCOME IN RUPEES PER LABOUR HOUR IN DISTRICT TOBA TEK SINGH BY FARM SIZE.

FARM CATEGORIES	CROPS	L.STOCK	TOTAL INCOME
SMALL	17.89	1.51	4.75
MEDIUM	36.76	2.98	9.83
LARGE	89.29	4.13	20.61
OVERALL	29.23	2.19	7.51

Tab-12

AGGREGATE FARM INCOME IN RUPEES PER LABOUR HOUR IN DISTRICT JHANG BY FARM SIZE.

FARM CATEGORIES	CROPS	L.STOCK	TOTAL INCOME
SMALL	16.61	2.19	5.61
MEDIUM	39.67	3.27	10.78
LARGE	91.03	5.63	24.40
OVERALL	27.78	2.60	8.37

Tab-13

AGGREGATE FARM INCOME IN RUPEES PER LABOUR HOUR IN DISTRICTS TOBA TEK SINGH AND JHANG BY FARM SIZE.

FARM CATEGORIES	CROPS	L.STOCK	TOTAL INCOME
SMALL	17.24	1.82	5.15
MEDIUM	38.17	3.12	10.29
LARGE	90.12	4.79	22.30
OVERALL	28.50	2.38	7.90

RESEARCH TEAM

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