

**Draft**

Operations handbook no. 3

**Specification of Variables to be Included  
in Data Files  
for  
Consequences of Small Rice Farm Mechanization  
Project**

by

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CONSEQUENCES OF SMALL RICE FARM  
MECHANIZATION PROJECT

Specifications of the Variables to be  
Included in the Data Files

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INTRODUCTION

The purpose in the following documents is to provide site supervisors with the opportunity to systematically set out the exact details of the data which they have been collecting. As with any large, multi-site project it is inevitable that some local modifications will have been introduced, and many may not be readily identifiable except by those directly involved at the sites. So that we can eventually construct data sets which are consistent across sites, we would appreciate supervisors completing the following pages and returning one set to Los Baños. A second set is included for your records.

When completing the document, the following checks need to be made:

1) Where a variable is listed as having a specific location on a form, check that the location is correct. If not, delete and insert the correct location. Where a file location is indicated there is no need to check since this will be created by the system.

2) Insert the unit you have used for collection of the data under the column marked local unit. For example if you collected the amount of an input in a Resource Utilization Form in litres make the local unit as "l". For those items where a decimal point is automatically recorded, for example the area of parcels express the local unit on the basis of the unit used in the final column. Hence if land area is recorded to

3 decimal places note that the local unit is  $10^{-3}$  ha, if to 2 decimal places then it is  $10^{-2}$  ha. If any items are not absolutely clear set out units, in detail, in an attachment to the main listing.

3) In the column marked conversion factor insert the relationship between the local unit and the standard unit for those measures which are country specific. Unless there are any strong objections all values will be converted on the basis of US\$1 = ₱7.50 ∴ ₱20 = Rp625.

4) For variables which have value labels (eg. soil type, rice varieties, etc) record all codes, and their meanings, which are different to those set out in Operations Handbook No. 1. These values should also be returned to Los Baños.

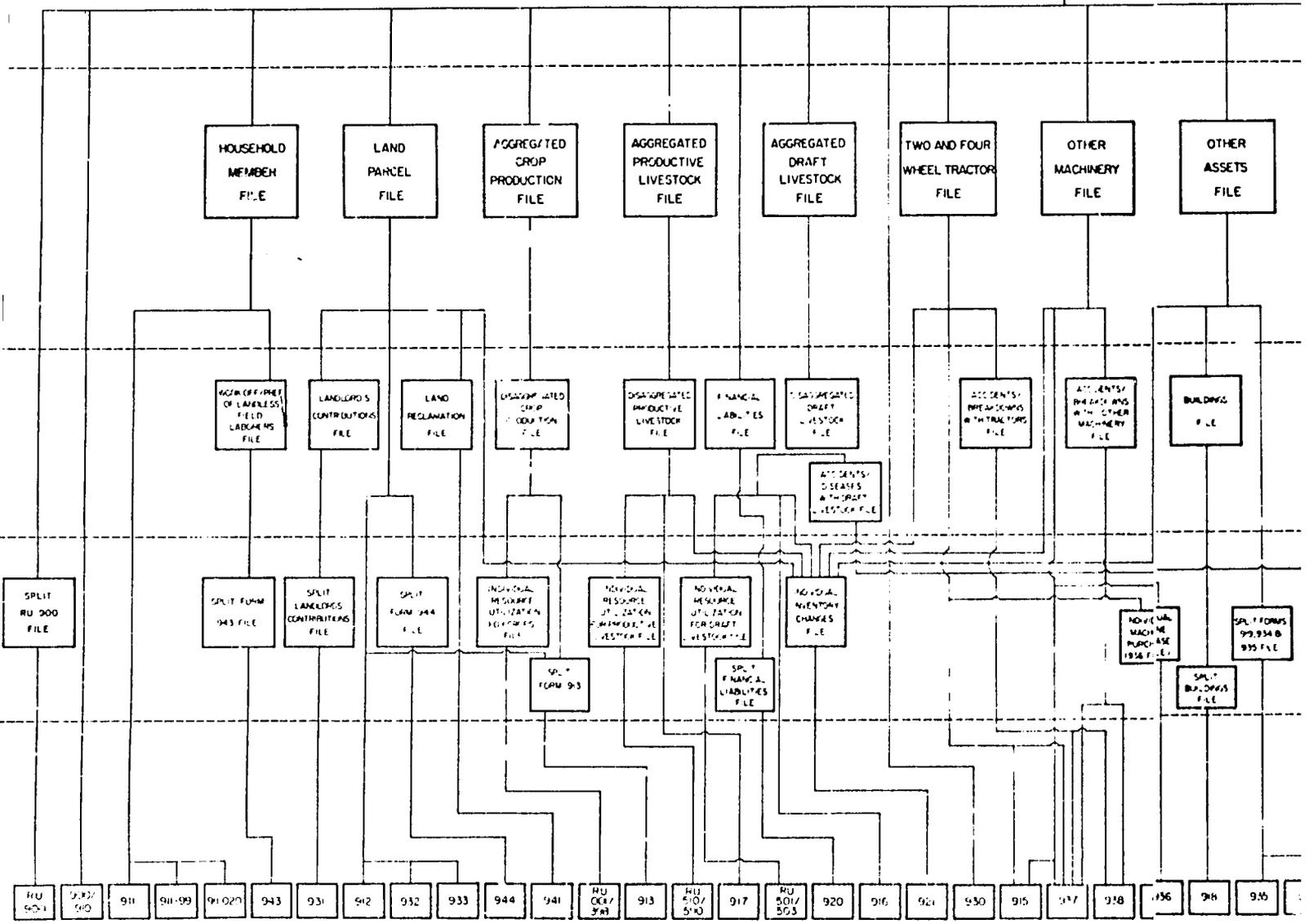
The remainder of the document refers only to the Survey component of the study. The FRK component is to be developed in the next few weeks. In order to facilitate this work it would be useful if you could check through the FRK forms listed at the end of this document and tell us of any differences which exists in your copies of the forms and these standards. Also please send explanations of all of the codes which are not fully explained on our documentation (eg. where it says "Open for...." please list codes which you have used and their meaning).

Finally it should be noted that this document is required for the sole purpose of getting the data into a standardized form. Once the data have been set up, and the retrieval system finalized, a manual will be issued to explain how data are handled together with data file structure.

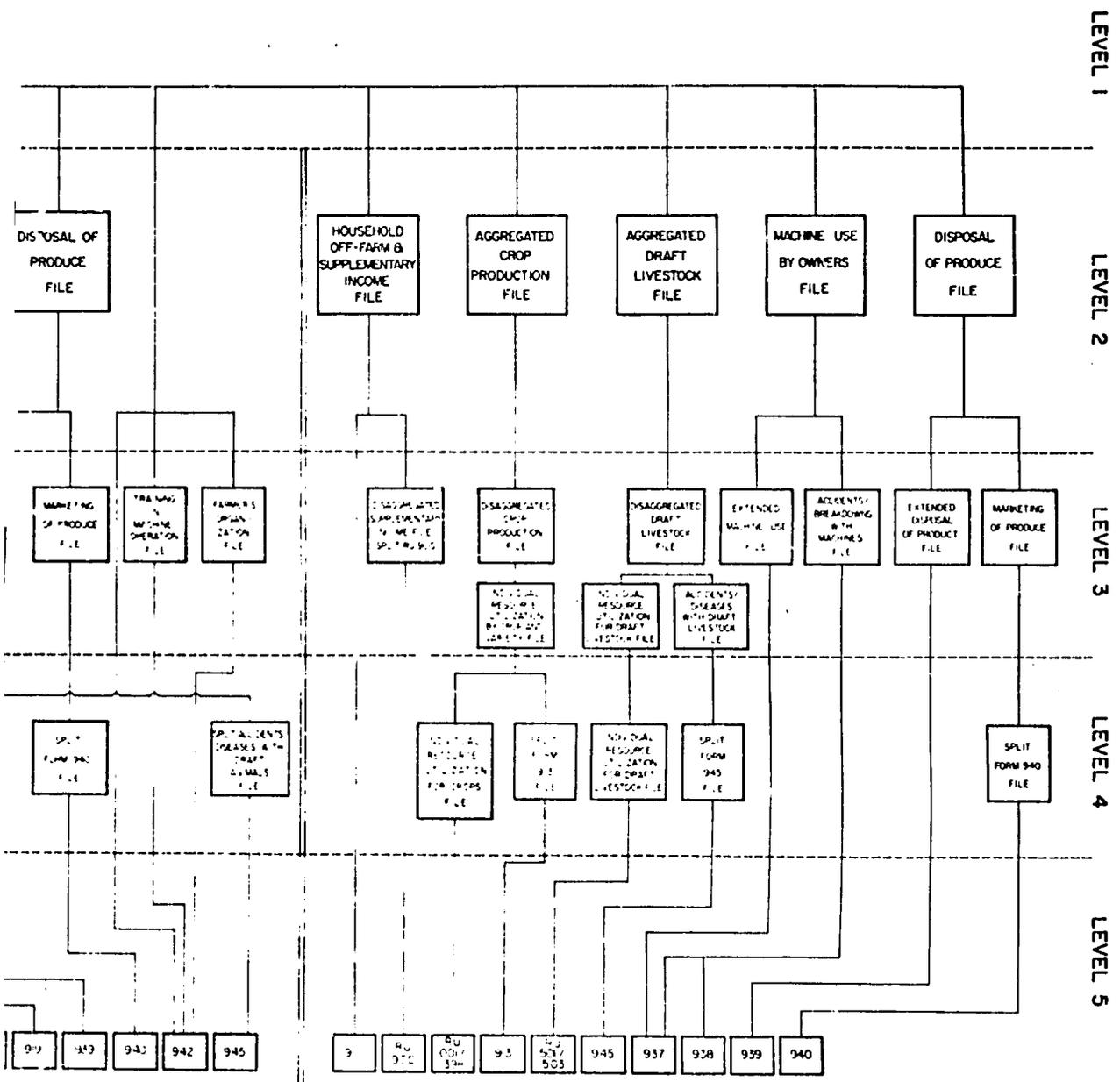
# CONSEQUENCES OF MECHANIZATION

## DATA FILES

1 ANNUAL HOUSEHOLD FILE



# SURVEY



**FRK**

913

1. LEVEL 4 files

The level 4 files are set up with the simple purpose of facilitating data manipulation in those instances where forms have multiple entries. They are not intended for use in analyses.

1.1 Split Resource Utilization (RU) 900 File

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
1	Enterprise	1 - 3	na <sup>1/</sup>		
2	Type of input/output	7 - 9	na		
3	Date	13 - 15	m & wk		
4	Amount	16 - 20	na if cash kg or l if kind		
5	Cash/kind	21	na		
6	Value	22 - 27	US\$		
7	Card ID	74	na		
8	HH code	75-77	na		
9	Project code	78-80	na		
1	Enterprise	1-3	na		
2	Type of input/output	28-30	na		
3	Date	34-36	m & wk		
4	Amount	37-41	na if cash kg or l if kind		
5	Cash/kind	42	na		
6	Value	43 - 48	US\$		
7	Card ID	74	na		
8	HH code	75-77	na		

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<sup>1/</sup> not applicable

<u>Variable</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
9	Project code	78-80	na		
1	Enterprise	1-3	na		
2	Type of input/output	49-51	na		
3	Date	55-57	m & wk		
4	Amount	58-62	na if cash kg or l if kind		
5	Cash/kind	63	na		
6	Value	64-69	US\$		
7	Card ID	74	na		
8	HH code	75-77	na		
9	Project code	78-80	na		

1.2 Split form 943 file

1	Mandatory code	1-3	na		
2	Type of HH member	5-6	na		
3	Age	7-8	years		
4	HH member identification	9	na		
5	Year of minimum 50% mechanization in village	10-11	4 digit year		
6	Main type of work at that time	12-13	na		
7	Second type of work at that time	14-15	na		
8	Third type of work at that time	16-17	na		
9	Main current type of work	18-19	na		
10	Second current type of work	20-21	na		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
11	Third current type of work	22-23	na		
12	Reason for change	24	na		
13	Most preferred alternative work at present	25-26	na		
14	Second preferred alternative work at present	27-28	na		
15	Reason for preference	29	na		
16	Card no.	74	na		
17	HH code	75-77	na		
18	Project code	78-80	na		
1	Mandatory code	1-3	na		
2	Type of HH member	30-31	na		
3	Age	32-33	years		
4	HH member identification	34	na		
5	Year of minimum 50% mechanization in village	35-36	4 digit year		
6	Main type of work at that time	37-38	na		
7	Second type of work at that time	39-40	na		
8	Third type of work at that time	41-42	na		
9	Main current type of work	43-44	na		
10	Second current type of work	45-46	na		
11	Third current type of work	47-48	na		
12	Reasons for change	49	na		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
13	Most preferred alternative work at present	50-51	na		
14	Second preferred alternative work at present	52-53	na		
15	Reason for preference	54	na		
16	Card no.	74	na		
17	HH code	75-77	na		
18	Project code	78-80	na		

1.3 Split Landlord's Contribution File (Form 931)

1	Mandatory code	1-3	na		
2	Parcel/subparcel ID	4-6	na		
3	Sub-subparcel no.	28	na		
4	Tenure status of parcel	9-10	na		
5	Whether landlord contributes to cultivation cost	11	yes/no		
6	Percent of land preparation costs from landlord	12-13	%		
7	Percent of seed costs from landlord	14-15	%		
8	Percent of planting labor costs from landlord	16-17	%		
9	Percent of fertilizer costs from landlord	18-19	%		
10	Percent of pesticide costs from landlord	20-21	%		
11	Percent of weeding labor costs from landlord	22-23	%		
12	Percent of harvesting costs from landlord	24-25	%		
13	Percent of threshing/ winnowing costs from landlord	26-27	%		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
14	Cropping season	69	na		
15	Card number	74	na		
16	HH code	75-77	na		
17	Project code	78-80	na		
1	Mandatory code	1-3	na		
2	Parcel/Subparcel ID	29-31	na		
3	Sub-subparcel no.	73	na		
4	Tenure status of parcel	32-33	na		
5	Whether landlord contributes to cultivation costs	34	na		
6	Percent of land preparation costs from landlord	35-36	%		
7	Percent of seed costs from landlord	37-38	%		
8	Percent of planting labor costs from landlord	39-40	%		
9	Percent of fertilizer costs from landlord	41-42	%		
10	Percent of pesticide costs from landlord	43-44	%		
11	Percent of weeding labor costs from landlord	45-46	%		
12	Percent of harvesting costs from landlord	47-48	%		
13	Percent of winnowing/threshing costs from landlord	49-50	%		
14	Cropping season	69	na		
15	Card number	74	na		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
16	HH code	75-77	na		
17	Project code	78-80	na		

1.4 Split Form 944 file

1	Mandatory code	1-3	na		
2	Parcel ID	4-6	na		
3	Sub-subparcel No.	7	na		
4	Date for starting ploughing	9-11	wk & day		
5	Most ideal date to start ploughing	12-14	wk & day		
6	Reason for delay in ploughing	15	na		
7	Date for starting harrowing	16-18	wk & day		
8	Most ideal date to start harrowing	19-21	wk & day		
9	Reason for delay in harrowing	22	na		
10	Date for starting planting	23-25	wk & day		
11	Most ideal date to start planting	26-28	wk & day		
12	Reason for delay in planting	29	na		
13	Date for starting harvesting	30-32	wk & day		
14	Most ideal date to start harvesting	33-35	wk & day		
15	Reason for delay in harvesting	36	na		
16	Cropping season	69	na		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
17	Card no.	74	na		
18	HH code	75-77	na		
19	Project code	78-80	na		
1	Mandatory code	1-3	na		
2	Parcel ID	37-39	na		
3	Sub-subparcel No.	40	na		
4	Date for starting ploughing	41-43	wk & day		
5	Most ideal date to start ploughing	44-46	wk & day		
6	Reason for delay in ploughing	47	na		
7	Date for starting harrowing	48-50	wk & day		
8	Most ideal date to start harrowing	51-53	wk & day		
9	Reason for delay in harrowing	54	na		
10	Date for starting planting	55-57	wk & day		
11	Most ideal date to start planting	58-60	wk & day		
12	Reason for delay in planting	61	na		
13	Date for starting harvesting	62-64	wk & day		
14	Most ideal date to start harvesting	65-67	wk & day		
15	Reason for delay in harvesting	68	na		
16	Cropping season	69	na		
17	Card no.	74	na		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
18	HH code	75-77	na		
19	Project code	78-80	na		

1.5 Individual resource utilization for crops file (split RU 001/398)

1	Enterprise	1-3	na		
2	Parcel ID	4-6	na		
3	Type of input/output	7-9	na		
4	Activity	10-12	na		
5	Date	13-15	m & wk		
6	Amount	16-20	hrs, kg, l		
7	Cash/kind	21	na		
8	Value	22-27	US\$		
9	Mixture pointer	70-72	na		
10	Subparcel ID	73	na		
11	Card ID	74	na		
12	HP code	75-77	na		
13	Project code	78-80	na		
1	Enterprise	1-3	na		
2	Parcel ID	4-6	na		
3	Type of input/output	28-30	na		
4	Activity	31-33	na		
5	Date	34-36	m & wk		
6	Amount	37-41	hrs, kg, l		
7	Cash/kind	42	na		
8	Value	43-48	US\$		
9	Mixture pointer	70-72	na		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
10	Sub-subparcel ID	73	na		
11	Card ID	74	na		
12	HH code	75-77	na		
13	Project code	78-80	na		
1	Enterprise	1-3	na		
2	Parcel	4-6	na		
3	Type of input/output	49-51	na		
4	Activity	52-54	na		
5	Date	55-57	m & wk		
6	Amount	58-62	hrs, kg, l		
7	Cash/kind	63	na		
8	Value	64-69	US\$		
9	Mixture pointer	70-72	na		
10	Sub-subparcel ID	73	na		
11	Card ID	74	na		
12	HH code	75-77	na		
13	Project code	78-80	na		

1.6 Split form 913 file

1	Mandatory code	1-3	na		
2	Parcel ID	4-6	na		
3	Area of parcel	9-12	ha.		
4	Main crop	13-15	na		
5	Second crop	16-18	na		
6	Third crop	19-21	na		
7	Variety group	25-26	trad/mod.		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
8	Variety	25-26	na		
9	Mixture pointer	22-24	na		
10	Sub-subparcel ID	34	na		
11	Method of planting	29-30	na		
12	Month planted	31-32	month (1-12)		
13	Week planted	33	wk (1-4)		
14	Cropping season	69	na		
15	Card no.	74	na		
16	HH code	75-77	na		
17	Project code	78-80	na		
1	Mandatory code	1-3	na		
2	Parcel ID	40-42	na		
3	Area of parcel	43-46	ha		
4	Main crop	47-49	na		
5	Second crop	50-52	na		
6	Third crop	53-55	na		
7	Variety group	59-60	trad/mod		
8	Variety	59-60	na		
9	Mixture pointer	56-58	na		
10	Sub-subparcel ID	73	na		
11	Method of planting	61-62	na		
12	Month planted	63-64	month (1-12)		
13	Week planted	65	wk (1-4)		
14	Cropping season	69	na		
15	Card no.	74	na		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
16	HH code	75-77	na		
17	Project code	78-80	na		

1.7 Individual resource utilization for productive livestock file (split RU 510/590)

1	Enterprise	1-3	na		
2	Type of input/output	7-9	na		
3	Activity	10-12	na		
4	Date	13-15	m & wk		
5	Amount	16-20	hrs, kg, l		
6	Cash/kind	21	na		
7	Value	22-27	US\$		
8	Card ID	74	na		
9	HH code	75-77	na		
10	Project code	78-80	na		
1	Enterprise	1-3	na		
2	Type of input/output	28-30	na		
3	Activity	31-33	na		
4	Date	34-36	m & wk		
5	Amount	37-41	hrs, kg, l		
6	Cash/kind	42	na		
7	Value	43-48	US\$		
8	Card ID	74	na		
9	HH code	75-77	na		
10	Project code	78-80	na		
1	Enterprise	1-3	na		
2	Type of input/output	49-51	na		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
3	Activity	52-54	na		
4	Date	55-57	m & wk		
5	Amount	58-62	hrs, kg, l		
6	Cash/kind	63	na		
7	Value	64-69	US\$		
8	Card ID	74	na		
9	HH code	75-77	na		
10	Project code	78-80	na		

1.8 Individual resource utilization for draft livestock file

1	Enterprise	1-3	na		
2	Type of input/output	7-9	na		
3	Activity	10-12	na		
4	Date	13-15	m & wk		
5	Amount	16-22	hrs, kg, l		
6	Cash/kind	21	na		
7	Value	22-27	US\$		
8	Card ID	74	na		
9	HH code	75-77	na		
10	Project code	78-80	na		
1	Enterprise	1-3	na		
2	Type of input/output	28-30	na		
3	Activity	31-33	na		
4	Date	34-36	m & wk		
5	Amount	37-41	hrs, kg, l		
6	Cash/kind	42	na		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
7	Value	43-48	US\$		
8	Card ID	74	na		
9	HH code	75-77	na		
10	Project code	78-80	na		
1	Enterprise	1-3	na		
2	Type of input/output	49-54	na		
3	Activity	52-54	na		
4	Date	55-57	m & wk		
5	Amount	58-62	hrs, kg, l		
6	Cash/kind	63	na		
7	Value	64-69	US\$		
8	Card ID	74	na		
9	HH code	75-77	na		
10	Project code	78-80	na		

1.9 Split financial liabilities file (920)

1	Mandatory code	1-3	na		
2	Type of financial liability	8	na		
3	Yr. liability incurred	to be ext. fr. question- naire	na		
4	Month liability incurred	"	na		
5	Total duration of financing	11-12	months		
6	Annual interest rate	13-17	%		
7	Cash/kind	18	na		
8	Amount of liability	19-24	US\$		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
9	Security	26	na		
10	Main purpose of loan	27	na		
11	2nd purpose of loan	28	na		
12	Source	29-30	na		
13	Cropping season	69	na		
14	Card no.	74	na		
15	HH code	75-77	na		
16	Project code	78-80	na		
1	Mandatory code	1-3	na		
2	Type of financial liability	32	na		
3	Yr. liability incurred	to be ext. fr. questionnaire	na		
4	Month liability incurred	"	na		
5	Total duration of financing	35-36	months		
6	Annual interest rate	37-41	%		
7	Cash/kind	42	na		
8	Amount of liability	43-48	US\$		
9	Security	50	na		
10	Main purpose of loan	51	na		
11	2nd purpose of loan	52	na		
12	Source	53-54	na		
13	Cropping season	69	na		
14	Card no.	74	na		
15	HH code	75-77	na		
16	Project code	78-80	na		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
1.10 <u>Individual inventory changes file (921)</u>					
1	Mandatory code	1-3	na		
2	Subject group	7-9	na		
3	Main group	10-12	na		
4	Subtype for livestock	13-14	na		
5	Type of change	15	na		
6	Month of change	16-17	month		
7	Week of change	18	week		
8	Amount of change	19-24	number		
9	Cash/kind	25	na		
10	Value of change	26-30	US\$		
11	Cropping season	69	na		
12	Card number	74	na		
13	Household code	75-77	na		
14	Project code	78-80	na		
1	Mandatory code	1-3	na		
2	Subject group	31-33	na		
3	Main group	34-36	na		
4	Subtype for livestock	37-38	na		
5	Type of change	39	na		
6	Month of change	40-41	month		
7	Week of change	42	week		
8	Amount of change	43-48	number		
9	Cash/kind	49	na		
10	Value of change	50-54	US\$		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
11	Cropping season	69	na		
12	Card number	74	na		
13	Household code	75-77	na		
14	Project code	78-80	na		
1.11 <u>Individual machine purchase file (form 936)</u>					
1	Mandatory code	1-3	na		
2	Machine ID	4	na		
3	Type of machine	7-8	na		
4	No. of hp of machine	9-11	hp		
5	Fuel used	12	na		
6	Implement regularly attached to machine	13-14	na		
7	Main decision maker for machine purchase	15	na		
8	2nd decision maker for machine purchase	16	na		
9	Main advantage of owning machine	17-18	na		
10	2nd advantage of owning machine	19-20	na		
11	3rd advantage of owning machine	21-22	na		
12	Card number	74	na		
13	HH code	75-77	na		
14	Project code	78-80	na		
1	Mandatory code	1	na		
2	Machine ID	28	na		
3	Type of machine	29-30	na		

<u>Variable No</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
4	No. of hp of machine	31-35	hp		
5	Fuel used	34	na		
6	Implement regularly attached to machine	35-36	na		
7	Main decision maker for machine purchase	37	na		
8	2nd decision maker for machine purchase	38	na		
9	Main advantage of owning machine	39-40	na		
10	2nd advantage of owning machine	41-42	na		
11	3rd advantage of owning machine	43-44	na		
12	Card number	74	na		
13	HH code	75-77	na		
14	Project code	78-80	na		
1	Mandatory code	1-3	na		
2	Machine ID	50	na		
3	Type of machine	51-52	na		
4	No. of hp of machine	53-55	hp		
5	Fuel used	56	na		
6	Implement regularly attached to machine	57-58	na		
7	Main decision maker for machine purchase	59	na		
8	2nd decision maker for machine purchase	60	na		
9	Main advantage of owning machine	61-62	na		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
10	2nd advantage of owning machine	63-64	na		
11	3rd advantage of owning machine	65-66	na		
12	Card number	74	na		
13	Household number	75-77	na		
14	Project number	78-80	na		

1.12 Split buildings file (918)

1	Mandatory code	1-3	na		
2	Type of building	7-8	na		
3	Type of construction materials	9	na		
4	Area of building	10-12	sq.m.		
5	Enterprise to which bldg. attributable	13-15	na		
6	Age of building	17-18	years		
7	Repair and maintenance costs/year <sup>1</sup>	21-24	US\$		
8	Repair & maintenance cost last year <sup>1</sup>	21-24	US\$		
9	Original construction cost	25-30	US\$		
10	Card no.	74	na		
11	HII code	75-77	na		
12	Project code	78-80	na		
1	Mandatory code	1-3	na		
2	Type of building	31-32	na		

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<sup>1</sup>Please indicate which variable was collected for your field site.

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
3	Type of construction materials	33	na		
4	Area of building	34-36	sq. m.		
5	Enterprise to which bldg. attributable	37-39	na		
6	Age of building	40-41	years		
7	Repair & maintenance cost per year <sup>1</sup>	45-48	US\$		
8	Repair & maintenance cost last year <sup>1</sup>	45-48	US\$		
9	Original construction cost	49-54	US\$		
10	Card no.	74	na		
11	HH code	75-77	na		
12	Project code	78-80	na		
<u>1.13 Split farm implements file (919)</u>					
1	Mandatory code	1-3	na		
2	Type of implement/tool	8-9	na		
3	Number of this type of implement/tool	10-12	number		
4	Total value	13-18	US\$		
5	Card no.	74	na		
6	HH code	75-77	na		
7	Project code	78-80	na		
1	Mandatory code	1-3	na		

<sup>1</sup>Please indicate which variables was collected from your field site.

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
2	Type of implement/tool	20-21	na		
3	No. of this type of implement/tool	22-24	number		
4	Total value	25-30	US\$		
5	Card no.	74	na		
6	HH code	75-77	na		
7	Project code	78-80	na		
1	Mandatory code	1-3	na		
2	Type of implement/tool	32-33	na		
3	No. of this type of implement/tool	34-36	number		
4	Total value	37-42	US\$		
5	Card no.	74	na		
6	HH code	75-77	na		
7	Project code	78-80	na		
1	Mandatory code	1-3	na		
2	Type of implement/tool	44-45	na		
3	No. of this type of implement/tool	46-48	number		
4	Total value	49-54	US\$		
5	Card no.	74	na		
6	HH code	75-77	na		
7	Project code	78-80	na		
1	Mandatory code	1-3	na		
2	Type of implement/tool	56-57	na		
3	No. of this type of implement/tool	58-60	number		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
4	Total value	61-66	US\$		
5	Card no.	74	na		
6	HH no.	75-77	na		
7	Project code	78-80	na		

1.14 Other assets (non-agricultural land) file (934)

1	Mandatory code	1-3	na		
2	Type of land	8	na		
3	Area	9-12	sq. m.		
4	Present sales value	13-17	US\$		
5	Card no.	74	na		
6	PI code	75-77	na		
7	Project code	78-80	na		
1	Mandatory code	1-3	na		
2	Type of land	18	na		
3	Area	19-22	sq.m.		
4	Present sales value	23-27	US\$		
5	Card no.	74	na		
6	HH code	75-77	na		
7	Project code	78-80	na		

1.15 Other assets (vehicles) file (934)

1	Mandatory code	1-3	na		
2	Type of vehicle	29	na		
3	Age	30-31	years		
4	Purchase price	32-36	US\$		
5	Remaining useful life	37-38	years		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols.)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
6	Maintenance costs last year	39-42	US\$		
7	Card no.	74	na		
8	HH code	75-77	na		
9	Project code	78-80	na		
1	Mandatory code	1-3	na		
2	Type of vehicle	43	na		
3	Age	44-45	years		
4	Purchasing price	46-50	US\$		
5	Remaining useful life	51-52	years		
6	Maintenance costs last year	53-56	US\$		
7	Card no.	74	na		
8	HH code	75-77	na		
9	Project code	78-80	na		
1	Mandatory code	1-3	na		
2	Type of vehicle	57	na		
3	Age	58-59	years		
4	Purchase price	60-64	US\$		
5	Remaining useful life	65-66	years		
6	Maintenance costs last year	67-69	US\$		
7	Card no.	74	na		
8	HH code	75-77	na		
9	Project code	78-80	na		
1.16	<u>Other assets (home consumer durables) file (935)</u>				
1	Mandatory code	1-3	na		
2	Type of home consumer durable	7-8	na		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
3	Years owned	9-10	years		
4	Acquisition cost	11-14	US\$		
5	Estimated remaining useful life	15-16	years		
6	Card no.	74	na		
7	HH code	75-77	na		
8	Project code	78-80	na		
1	Mandatory code	1-3	na		
2	Type of home consumer durable	17-18	na		
3	Year owned	19-20	years		
4	Acquisition cost	21-24	US\$		
5	Estimated remaining useful life	25-26	years		
6	Card no.	74	na		
7	HH code	75-77	na		
8	Project code	78-80	na		
1	Mandatory code	1-3	na		
2	Type of home consumer durable	27-28	na		
3	Years owned	29-30	years		
4	Acquisition cost	31-34	US\$		
5	Estimated remaining useful life	35-36	years		
6	Card no.	74	na		
7	HH code	75-77	na		
8	Project code	78-80	na		
1	Mandatory code	1-3	na		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
2	Type of home consumer durable	37-38	na		
3	Years owned	39-40	years		
4	Acquisition cost	41-44	US\$		
5	Estimated remaining useful life	45-46	years		
6	Card no.	74	na		
7	HH code	75-77	na		
8	Project code	78-80	na		
1	Mandatory code	1-3	na		
2	Type of home consumer durable	47-48	na		
3	Years owned	49-50	years		
4	Acquisition cost	51-54	US\$		
5	Estimated remaining useful life	55-56	years		
6	Card no.	74	na		
7	HH code	75-77	na		
8	Project code	78-80	na		
1	Mandatory code	1-3	na		
2	Type of home consumer durable	57-58	na		
3	Years owned	59-60	years		
4	Acquisition cost	61-64	US\$		
5	Estimated remaining useful life	65-66	years		
6	Card no.	74	na		
7	HH code	75-77	na		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
8	Project code	78-80	na		
<u>1.17 Split form 940 file (sale/marketing of product)</u>					
1	Mandatory code	1-3	na		
2	Parcel/subparcel ID	4-6	na		
3	Sub-subparcel no.	73	na		
4	Crop	70-72	na		
5	No. of times produce sold this season	10	number		
6	No. of this sale	to be derived	na		
7	Time when sale occurred	11	na		
8	Amount sold	12-16	kg		
9	Quality of produce sold	17	na		
10	Price per kg.	18-21	US\$/kg		
11	Total value	22-27	US\$		
12	Location of market for sale	28	na		
13	Distance of market from store for produce	29-31	km.		
14	Adequacy of transportation to market	32	na		
15	Cost of transport	33-35	US\$		
16	Cropping season	69	na		
17	Card no.	74	na		
18	HH code	75-77	na		
19	Project code	78-80	na		
1	Mandatory code	1-3	na		
2	Parcel/subparcel ID	4-6	na		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
3	Sub-subparcel No.	73	na		
4	Crop	70-72	na		
5	No. of times produce sold this season	10	number		
6	No. of this sale	to be derived	na		
7	Time when sale occurred	36	na		
8	Amount sold	37-42	kg.		
9	Quality of produce sold	43	na		
10	Price per kg.	44-47	US\$/kg		
11	Total value	48-53	US\$		
12	Location of market for sale	54	na		
13	Distance of market from store for produce	55-57	km		
14	Adequacy of transportation to market	58	na		
15	Cost of transport	59-61	US\$		
16	Cropping season	69	na		
17	Card no.	74	na		
18	HH code	75-77	na		
19	Project code	78-80	na		

1.18 Split draft animal diseases file (945)

1	Mandatory code	1-3	na		
2	Type of draft animal	7-8	na		
3	Number contracting disease	9-10	number		
4	Type of disease	11	na		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
5	Whether contracted during period of field activity	12	na		
6	Delay in field activity	13-15	days		
7	Period for which animal unable to work	16-17	days		
8	Cropping season	69	na		
9	Card no.	74	na		
10	HH code	75-77	na		
11	Project code	78-80	na		
1	Mandatory code	1-3	na		
2	Type of draft animal	18-19	na		
3	Number of contracting disease	20-21	number		
4	Type of disease	22	na		
5	Whether contracted during period of field activity	23	na		
6	Delay in field activity	24-26	days		
7	Period for which animal unable to work	27-28	days		
8	Cropping season	69	na		
9	Card no.	74	na		
10	HH code	75-77	na		
11	Project code	78			
1	Mandatory code	1-3	na		
2	Type of draft animal	29-30	na		
3	Number contracting disease	31-32	number		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
4	Type of disease	33	na		
5	Whether contracted during period of field activity	34	na		
6	Delay in field activity	35-37	days		
7	Period for which animal unable to work	38-39	days		
8	Cropping season	69	na		
9	Card no.	74	na		
10	HH code	75-77	na		
11	Project code	78-80	na		

1.19 Accidents with draft animals file (945)

1	Mandatory code	1-3	na		
2	Type of draft animal	40-41	na		
3	Type of accident	42	na		
4	Seriousness of accident	43	na		
5	Cropping season	69	na		
6	Card no.	74	na.		
7	HH code	75-77	na		
8	Project code	78-80	na		
1	Mandatory code	1-3	na		
2	Type of draft animal	44-45	na		
3	Type of accident	46	na		
4	Seriousness of accident	47	na		
5	Cropping season	69	na		
6	Card no.	74	na		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
7	HH code	75-77	na		
8	Project code	78-80	na		
1	Mandatory code	1-3	na		
2	Type of draft animal	48-49	na		
3	Type of accident	50	na		
4	Seriousness of accident	51	na		
5	Cropping season	60	na		
6	Card no.	74	na		
7	HH code	75-77	na		
8	Project code	78-80	na		

## 2. DEFINITION OF LEVEL 3 FILES

### 2.1 Work Opportunities and Preferences of Landless Workers File

This file is derived from the split form 943 file (file 1.2). Additional descriptive data are included so that each entry may be readily identified and linked to the entries in other files.

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
1	Household identifier	from annual hh file	na		
2	Country	To be provided with each data set			
3	Province	"	na		
4	Municipality	"	na		
5	Village	1.2, V17 1st digit	na		
6	HH member identification	1.2, V4	na		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
7	Type of HH member	1.2, V2	na		
8	Age	1.2, V3	years		
9	Year of predominant mechanization in village	1.2, V5	4 digit yr		
10	Main type of work at that time	1.2, V6	na		
11	2nd type of work at that time	1.2, V7	na		
12	3rd type of work at that time	1.2, V8	na		
13	Main current type of work	1.2, V9	na		
14	2nd current type of work	1.2, V10	na		
15	3rd current type of work	1.2, V11	na		
16	Reason for change	1.2, V12	na		
17	Most preferred alternative work at present	1.2, V13	na		
18	2nd preferred alternative work at present	1.2, V14	na		
19	Reason for preference	1.2, V15	na		

## 2.2 Non-wage Income file

This file is generated from file 1.1 and provides the basis for detailed analysis of non-wage income. The data are summarized in the annual household file.

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
1	Household identifier	from annual HH file	na		
2	Country	to be provided w/ each data set	na		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
3	Province	to be provided w/ each data set	na		
4	Municipality	"	na		
5	Village	100's digit of V8	na		
6	Type of non-wage income	V2	na		
7	Year received	supplied externally	na		
8	Month received	V3, 100's and 10's digit	na		
9	Week received	V3, unit digit	na		
10	Value	V6	US\$		
11	Amount	V4	na if cash kg/l if kind		
12	Unit	to be defined	kg/l		
13	Cash/kind	V5	na		

### 2.3 Landlord's Contribution file

This file is generated directly from file 1.3 with the addition of other standard variables to define each observation. An entry is only recorded if the landlord makes a contribution to costs.

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
1	Household number	From annual hh file	na		
2	Country	To be pro- vided with	na		
3	Province	each data set	na		
4	Municipality		na		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
5	Village	From V16 III code	na		
6	Parcel/subparcel ID	V2 file 1.3	na		
7	Sub-subparcel no.	V3 file 1.3	na		
8	Year	to be supplied	year		
9	Cropping season	V14	na		
10	Tenure status of sub-subparcel	V4	na		
11	% of land preparation costs paid by landlord	V6	%		
12	% of seed costs paid by landlord	V7	%		
13	% of planting labor costs paid by landlord	V8	%		
14	% of fertilizer costs paid by landlord	V9	%		
15	% of pesticide costs paid by landlord	V10	%		
16	% of weeding labor costs paid by landlord	V11	%		
17	% of harvesting costs paid by landlord	V12	%		
18	% of threshing/winnowing costs paid by landlord	V13	%		

#### 2.4 Seasonal land sub-subparcel file

Much of the data collected on land parcels/sub-parcels and sub-subparcels relates to a particular cropping season. Furthermore the land area to which the data relate is frequently not definable across seasons. That is sub-subparcel 1 in season 1 may differ from sub-

subparcel 1 in season 2. Since this file also contains some seasonal data relating to whole parcels, all parcels must be represented by at least one sub-subparcel entry. For further details of the definition see Section 3.2.

Data included in this file are derived from forms 912, 932 and 933 as well as the split form 944 file (1.4), the split form 913 file (1.6) and the landlord's contributions file (2.3).

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
1	Household identifier	From annual HH file	na		
2	Country	To be provided w/ each data set	na		
3	Province	"	na		
4	Municipality	"	na		
5	Village	912, col. 75	na		
6	Parcel/subparcel ID	912, 4-6	na		
7	Sub-subparcel no.	912, 73	na		
8	Year	932/1, 8-9	4 digit yr.		
9	Cropping season	912, 60 or 933, 69	1,2 or 3		
10	Tenurial status of sub-subparcel	912, 38-39 or 1.3, V4			
11	Whether machine used in land preparation this season	933, 10	yes/no		
12	Is machine use/non-use in V11 a regular feature	933, 10	yes/no		
13	Year machine first used in land preparation	933, 11-12	year		
14	Type of machine used	933, 13-14	na		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
15	No. 1 reason for using	933, 15-16	na		
16	No. 2 reason for using	933, 17-18	na		
17	No. 3 reason for using	933, 19-20	na		
	<u>Cropping data</u>				
18	Area of sub-subparcel	1.6, V3	has		
19	Main crop	1.6, V4	na		
20	Variety group of main crop	1.6, V7 where V4 = V9	trad/ modern		
21	Variety of main crop	1.6, V8 where V4 = V9	na		
22	Method of planting main crop	1.6, V11 where V4 = V9	na		
23	Planting month of main crop	1.6, V12 where V4 = V9	na		
24	Planting week of main crop	1.6, V13 where V4 = V9	na		
25	Second crop	1.6, V5	na		
26	Variety group of second crop	1.6, V7 where V5 = V9	trad/ modern		
27	Variety of second crop	1.6, V8 where V5 = V9	na		
28	Method of planting second crop	1.6, V11 where V5 = V9	na		
29	Planting month of second crop	1.6, V12 where V5 = V9	na		
30	Planting week of second crop	1.6, V13 where V5 = V9	na		
31	Third crop	1.6, V6	na		
32	Variety group of third crop	1.6, V7 where V6 = V9	trad/ modern		
33	Variety of third crop	1.6, V8 where V6 = V9	na		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
34	Method of planting of third crop	1.6, V - 1 where V6 = V9	na		
35	Planting month of third crop	1.6, V12 where V6 = V9	na		
36	Planting week of third crop	1.6, V13 where V6 = V9	na		
37	Adequacy of irrigation supply in survey year	Form 932/1, col. 24 if WS	na		
		Form 932/1, col. 38 if DS1	na		
		Form 932/1, col. 52 if DS2	na		
38	Adequacy of irrigation supply in year before mechanization	Form 932/2, 24 if WS	na		
		Form 932/2, 38 if DS1	na		
		Form 932/2, 52 if DS2	na		
39	Main crop in year before mechanization	Form 932/2, 25-27 if WS	na		
		Form 932/2, 39-41 if DS1	na		
		Form 932/2, 53-55 if DS2	na		
40	Second crop in year before mechanization	Form 932/2, 28-30 if WS	na		
		Form 932/2, 42-44 if DS1	na		
		Form 932/2, 56-58 if DS2	na		
41	Third crop in year before mechanization	Form 932/2, 31-33 if WS	na		
		Form 932/2, 45-47 if DS1	na		
		Form 932/2, 59-61 if DS2	na		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
42	Are these data on this sub-subparcel in the landlord's contribution file (2.3)	2.3	yes/no		
	Information on actual and ideal dates for activities				
43	Date for starting ploughing	1.4, V4	mo. & wk		
44	Most ideal date to start ploughing	1.4, V5	"		
45	Reason for delay in starting, ploughing	1.4, V6	na		
46	Date for starting harrowing	1.4, V7	mo. & wk.		
47	Most ideal date to start harrowing	1.4, V8	"		
48	Reason for delay in starting harrowing	1.4, V9	na		
49	Date for starting planting	1.4, V10	mo. & wk		
50	Most ideal date to start planting	1.4, V11	"		
51	Reason for delay in starting planting	1.4, V12	na		
52	Date for starting harvesting	1.4, V13	mo. & wk		
53	Most ideal date to start harvesting	1.4, V14	"		
54	Reason for delay in starting harvesting	1.4, V15	na		

## 2.5 Land Reclamation file

The land reclamation file is coded directly from form 941. It includes variables describing type of reclamations and inputs used for reclamation of parcels and subparcels.

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
1	Household number	from annual HH file	na		
2	Country	to be provided with each data set	na		
3	Province	"	na		
4	Municipality	"	na		
5	Village	col. 75	na		
6	Parcel/subparcel ID	4-6	na		
7	Year reclaimed	7-8	year		
8	Area	9-12	hectares		
9	Type of land before reclamation	13	na		
10	Sales value before reclamation	14-18	US\$		
11	Type of land after reclamation	19	na		
12	Sales value after reclamation	20-24	US\$		
13	Type of power used for land reclamation	25-26	na		
14	No. of people who worked to reclaim land	27-28	no.		
15	Hours spent by people for reclaiming land	29-32	hours		
16	Value of human labor	33-36	US\$		
17	No. of animals used for reclaiming land	37-38	no.		
18	No. of hours of animal labor	39-42	hours		
19	Value of animal labor	43-46	US\$		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
20	No. of machines used for reclaiming land	47	no.		
21	No. of hours machine used in reclaiming land	48-50	hours		
22	Value of machine labor	51-54	US\$		
23	Possible to reclaim land without a machine	55	yes/no		
24	Main reason for using a machine	56	na		
25	Second reason for using a machine	57	na		
	Types of machine used for reclaiming this parcel of land				
26	2-wheel tractor	58	yes/no		
27	4-wheel tractor	59	"		
28	Crawler tractor	60	"		
29	Grader	61	"		
30	Bulldozer	62	"		
31	Others	63	"		

## 2.6 Disaggregated Crop Production File

This file is compiled from the individual resource utilization for crops file (1.5), the seasonal sub-subparcel file (2.4), and form 939.

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
1	Household number	from annual HH file	na		
2	Country	to be provided w/ each data set	na		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
3	Province	to be supplied w/ each data set	na		
4	Municipality	"	na		
5	Village	V12, 1st digit	na		
6	Parcel/subparcel ID	1.5, V2	na		
7	Sub-subparcel no.	2.4, V7	na		
8	Year	2.4, V8	4 digits		
9	Cropping season	2.4, V9	1,2 or3		
10	Crop status	2.4	main/2nd/ 3rd crop		
11	Crop enterprise	1.5, V1	na		
12	Variety group	2.4, V20, 26 or 32	na		
13	Variety	2.4, V21, 27 or 33	na		
14	Area of crop	2.4, V18	hectares		
15	Activity	1.5, V4	na		
16	Month and week	1.5, V5	na		
17	Amount of farmer labor	1.5, V6 if V3 = ?01 <sup>1/</sup>	hours		
18	Sex of farmer	3.1, V9	m/f		
19	Amount of spouse labor	1.5, V6 if V3 = ?02 + 3.2	hours		
20	Sex of spouse	2.6, V18	m/f		
21	Amount of family children under 10 yrs. labor	1.5, V6 if V3 = ?12	hours		
22	Amount of family other males, 10 yrs and over, labor	1.5, V6 if V3 = ?13	hours		

<sup>1/</sup>The inclusion of a question mark (?) with this, and subsequent location guides, indicates that one of several values may occur at this point.

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cc's)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
23	Amount of family other females, 10 yrs and over labor	1.5, V6 if V3 = ?14	hours		
24	Amount of undetermined family labor	1.5, V6 if V3 = ?19	hours		
25	Amount of undetermined permanent labor	1.5, V6 if V3 = ?21	hours		
26	Method of payment	1.5, V7	cash/kind		
27	Value of payment	1.5, V8	US\$		
28	Amount of children under 10 yrs permanent labor	1.5, V6 if V3 = ?22	hours		
29	Method of payment	1.5, V7	cash/kind		
30	Value of payment	1.5, V8	US\$		
31	Amount of male 10 yrs. and over permanent labor	1.5, V6 if V3 = ?23	hours		
32	Method of payment	1.5, V7	cash/kind		
33	Value of payment	1.5, V8	US\$		
34	Amount of female 10 yrs and over permanent labor	1.5, V6 if V3 = ?24	hours		
35	Method of payment	1.5, V7	cash/kind		
36	Value of payment	1.5, V8	US\$		
37	Amount of undetermined seasonal hired labor	1.5, V6 if V3 = ?31	hours		
38	Method of payment	1.5, V7	cash/kind		
39	Value of payment	1.5, V8	US\$		
40	Amount of children under 10 yrs seasonal hired labor	1.5, V6 if V5 = ?32	hours		
41	Method of payment	1.5, V7	cash/kind		
42	Value of payment	1.5, V8	US\$		
43	Amount of male 10 yrs and over seasonal hired labor	1.5, V6 if V5 = ?33	hours		
44	Method of payment	1.5, V7	cash/kind		
45	Value of payment	1.5, V8	US\$		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
46	Amount of female 10 yrs and over seasonal hired labor	1.5, V6 if V5 = ?34	hours		
47	Method of payment	1.5, V7	cash/kind		
48	Value of payment	1.5, V8	US\$		
49	Amount of undetermined exchange labor	1.5, V6 if V3 = ?41	hours		
50	Amount of children under 10 yrs exchange labor	1.5, V6 if V3 = ?42	hours		
51	Amount of male 10 yrs under exchange labor	1.5, V6 if V3 = ?43	hours		
52	Amount of female 10 yrs and over exchange labor	1.5, V6 if V3 = ?44	hours		
53	Amount of undetermined contract labor	1.5, V6 if V3 = ?51	hours		
54	Method of payment	1.5, V7	cash/kind		
55	Value of payment	1.5, V8	US\$		
56	Amount of children under 10 yrs. contract labor	1.5, V6 if V3 = ?52	hours		
57	Method of payment	1.5, V7	cash/kind		
58	Value of payment	1.5, V8	US\$		
59	Amount of male 10 yrs and over contract labor	1.5, V6 if V3 = ?53	hours		
60	Method of payment	1.5, V7	cash/kind		
61	Value of payment	1.5, V8	US\$		
62	Amount of female 10 yrs and over contract labor	1.5, V6 if V3 = ?53	hours		
63	Method of payment	1.5, V7	cash/kind		
64	Value of payment	1.5, V8	US\$		
65	Type of power used	1.5, V3	na		
66	Amount of power used	1.5, V6	hours		
67	Ownership status of power unit	to be decided	na		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
68	Method of payment	1.5, V7	cash/kind		
69	Value of payment (excl. labor)	1.5, V8	US\$		
70	Type of plant material used	1.5, V3 if V = 201-203	na		
71	Amount of seeds used	1.5, V6 if V3 = 201	kg		
72	Valuation basis for seeds	1.5, V7	cash/kind		
73	Value of seeds used	1.5, V8	US\$		
74	Amount of plants/seedlings/cuttings used	1.5, V6 if V3 = 202 or 203	units		
75	Valuation basis for plants/seedlings/cuttings	1.5, V7	cash/kind		
76	Value of plants/seedlings/cuttings used	1.5, V8	US\$		
77	Type of fertilizer used	1.5, V3 if V3 = 209-269	na		
78	Amount of fertilizer used	1.5, V6	kg		
79	N content of fertilizer	1.6, V74 & 75	kg		
80	P <sub>2</sub> O <sub>5</sub> content of fertilizer	2.6, V74 & 75	kg		
81	K <sub>2</sub> O content of fertilizer	2.6, V74 & 75	kg		
82	Method of purchase	1.5, V7	cash/kind		
83	Value of fertilizer used	1.5, V8	US\$		
84	Type of powder/granular insecticide	1.5, V3 if V <sub>e</sub> = powder or granular insecticide code	na		
85	Amount of powder/granular insecticide used	1.5, V6	kg		
86	Method of purchase	1.5, V7	cash/kind		
87	Value of powder/granular insecticide used	1.5, V8	US\$		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
88	First type of liquid insecticide used	1.5, V3 if V3 = liquid insecticide code	na		
89	Amount of first liquid insecticide used	1.5, V6	litres		
90	Method of purchase	1.5, V7	cash/kind		
91	Value of first liquid insecticide used	1.5, V8	US\$		
92	Second type of liquid insecticide used	1.5, V3 if V3 = liquid insecticide code	na		
93	Amount of second liquid insecticide used	1.5, V6	litres		
94	Method of purchase	1.5, V7	cash/kind		
95	Value of second liquid insecticide used	1.5, V8	US\$		
96	Third type of liquid insecticide used	1.5, V3 if V3 = liquid insecticide code	na		
97	Amount of third liquid insecticide used	1.5, V6	litres		
98	Method of purchase	1.5, V7	cash/kind		
99	Value of 3rd liquid insecticide used	1.5, V8	US\$		
100	Type of powder/granular herbicide used	1.5, V3 = V3 = 310-319	na		
101	Amount of powder/granular herbicide used	1.5, V6	kg		
102	Method of purchase	1.5, V7	cash/kind		
103	Value of powder/granular herbicide used	1.5, V8	US\$		
104	1st type of liquid herbicide used	1.5, V3 if V3 = 410-416	na		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
105	Amount of 1st liquid herbicide used	1.5, V6	litres		
106	Method of purchase	1.5, V7	cash/kind		
107	Value of 1st liquid herbicide used	1.5, V8	US\$		
108	2nd type of liquid herbicide used	1.5, V3 if V3 = 410 - 416	na		
109	Amount of 2nd liquid herbicide used	1.5, V6	litres		
110	Method of purchase	1.5, V7	cash/kind		
111	Value of 2nd liquid herbicide used	1.5, V8	US\$		
112	Type of rodenticide used	1.5, V3 if V3 = rodenticide code	na		
113	Amount of rodenticide used	1.5, V6	kg		
114	Value of rodenticide used	1.5, V8	US\$		
115	Type of powder/granular fungicide used	1.5, V3 if V3 = fungicide code	na		
116	Amount of powder/granular fungicide used	1.5, V6	kg		
117	Value of powder/granular fungicide used	1.5, V8	US\$		
118	1st type of liquid fungicide used	1.5, V3 if V3 = 400 - 404	na		
119	Amount of first liquid fungicide used	1.5, V6	litres		
120	Value of 1st liquid fungicide used	1.5, V8	US\$		
121	2nd type of liquid fungicide used	1.5, V3 if V3 = 400 - 404	na		
122	Amount of second liquid fungicide used	1.5, V6	litres		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
123	Value of 2nd liquid fungicide used	1.5, V8	US\$		
124	Type of miscellaneous input (incl. packing materials)	1.5, V3	na		
125	Amount of miscellaneous input	1.5, V6	na		
126	Unit for miscellaneous input	to be defined	unit		
127	Value of miscellaneous input	1.5, V8	US\$		
128	Type of main output	939, 70-72	na		
129	Amount of main output	939, 7-11	kg		
130	Value of main output	939, 12-17	US\$		
131	Type of byproduct	939, 32	na		
132	Value of byproduct	939, 33-37	US\$		

## 2.7 Opening Inventory of Productive Livestock File

This file contains the opening inventory of productive livestock as defined on form 917. Changes in inventory, whether by sale or purchase of livestock in existing categories or by purchase of livestock in new categories, are accounted for in file 3.5. The variables are defined as follows. Variables 13 to 42 are defined by locating the sub-type defined cols. 13-15, 25-27, 37-39, 49-51 and 61-63 of form 917 and transferring the relevant data. In the case of a subtype defined in columns 13-15, the number of animals is recorded in columns 16-18 and the total value in columns 19-24. These items are transferred to the

relevant variables. The locations of the numbers and values for other subtypes may be readily located on form 917.

<u>Variables No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
1	Household identifier	from annual HH file	na		
2	Country	to be provided with each data set	na		
3	Province	"	na		
4	Municipality	"	na		
5	Village	917 col. 75	na		
6	Date of inventory (yr. & month)	to be supplied	na		
7	Type of productive animal	917, col. 5-6	na		
8	Type of breed	917, col. 7-8	local/ improved/ mixed		
9	Management practice followed	917, col. 9-10	na		
10	Main purpose of keeping productive animal	917, col. 11	na		
11	Second purpose of keeping productive animal	917, col. 12	na <sup>1</sup>		
12	Reason for keeping productive animals	917, col. 12	na <sup>1</sup>		
13	No. of males of undetermined age	"	no.		
14	Value of males of undetermined age	"	US\$		
15	No. of males under six months	"	no.		

<sup>1</sup>Please specify which has been collected for your site

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
16	Value of male under 6 months	917, Col. 12	US\$		
17	No. of males 6 months to 1 year	"	no.		
18	Value of males 6 months to 1 year	"	US\$		
19	No. of males 1 to 3 years	"	no.		
20	Value of males 1 to 3 years	"	US\$		
21	No. of males over 3 years	"	no.		
22	Value of males over 3 years	"	US\$		
23	No. of females of undetermined age	"	no.		
24	Value of females of undetermined age	"	US\$		
25	No. of females under 6 months	"	no.		
26	Value of females under 6 months	"	US\$		
27	No. of females 6 months to one year	"	no.		
28	Value of females 6 months to one year	"	US\$		
29	No. of females 1 to 3 years	"	no.		
30	Value of females 1 to 3 years	"	US\$		
31	No. of females over 3 years	"	no.		
32	Value of females over 3 years	"	US\$		
33	No. of undetermined sex of undetermined age	"	no.		
34	Value of undetermined sex of undetermined age	"	US\$		
35	No. of undetermined sex under 6 months	"	no.		
36	Value of undetermined sex under 6 months	"	US\$		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (col)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
37	No. of undetermined sex 6 months to 1 year	"	no.		
38	Value of undetermined sex 6 months to 1 year	"	US\$		
39	No. of undetermined sex 1 to 3 years	"	no.		
40	Value of undetermined sex 1 to 3 years	"	US\$		
41	No. of undetermined sex over 3 years	"	no.		
42	Value of undetermined sex over 3 years	"	US\$		

## 2.8 Opening Inventory of Draft Livestock File

This file is the draft livestock equivalent of file 2.7.

Variables 11 to 40 are defined by locating the appropriate sub-type in cols. 13-15, 25-27, 37-39, 49-51 and 61-63, and then transferring the number and cost information as described for file 2.7.

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
1	Household identifier	from annual hh file	na		
2	Country	to be provided with each data set	na		
3	Province	"	na		
4	Municipality	"	na		
5	Village	916 col. 75	na		
6	Date of inventory (yr & month)	to be supplied			
7	Type of draft animal	916, col. 5-6	na		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
8	Type of breed	916 col. 7-8	na		
9	First management practice used	916 col. 9-10	na		
10	2nd management practice used	916 col. 11-12	na		
13	No. of males undetermined age	"	no.		
14	Value of males of undetermined age	"	US\$		
15	No. of males under 6 months	"	no.		
16	Value of males under 6 months	"	US\$		
17	No. of males 6 months to 1 year	"	no.		
18	Value of males 6 months to 1 year	"	US\$		
19	No. of males 1 to 3 years	"	no.		
20	Value of males 1 to 3 years	"	US\$		
21	No. of males over 3 years	"	no.		
22	Value of males over 3 years	"	US\$		
23	No. of females of undetermined age	"	no.		
24	Value of females of undetermined age	"	US\$		
25	No. of females under 6 months	"	no.		
26	Value of females under 6 months	"	US\$		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
27	No. of females 6 months to 1 year	916, col. 11-12	no.		
28	Value of females 6 months to 1 year	"	US\$		
29	No. of females 1 to 3 years	"	no.		
30	Value of females 1 to 3 years	"	US\$		
31	No. of females over 3 years	"	no.		
32	Value of females over 3 years	"	US\$		
33	No. of undetermined sex of undetermined age	"	no.		
34	Value of undetermined sex of undetermined age	"	US\$		
35	No. of undetermined sex under 6 months	"	no.		
36	Value of undetermined sex under 6 months	"	US\$		
37	No. of undetermined sex 6 months to 1 year	"	no.		
38	Value of undetermined sex 6 months to 1 year	"	US\$		
39	No. of undetermined sex 1 to 3 years	"	no.		
40	Value of undetermined sex 1 to 3 years	"	US\$		
41	No. of undetermined sex over 3 years	"	no.		
42	Value of undetermined sex over 3 years	"	US\$		

2.9 Diseases/Accidents with Draft Livestock File

The diseases/accidents with draft livestock file is compiled from files 1.18 (Split animal diseases file) and 1.19 (Accidents with animals file).

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
1	Household identifier	from annual HH	na		
2	Country	file			
3	Province	to be provided	na		
4	Municipality	with each data set			
5	Village	1.18 V10 1st digit or 1.19 V7 1st digit supplied	na		
6	Year				
7	Cropping season	1.18, V8 or 1.19 V5	na		
8	Accident or Disease	whether file 1.18 or 1.19	na		
9	Type of draft animal	1.18 or 1.19, V2	na		
	<u>For diseases</u>				
10	Type of disease	1.18, V4	na		
11	No. of draft animals contracting disease	1.18, V3	na		
12	Whether contracted during period of field activity	1.18, V5	yes/no		
13	Delay in field act.	1.18, V6	days		
14	Period for which animal unable to work	1.18, V7	days		
	<u>For accidents</u>				
15	Type of accident	1.19, V3	na		
16	Seriousness of accident	1.19, V4	na		

2.10 Financial Liabilities File

The financial liabilities file is derived from file 1.9, the split financial liabilities file, and provides a record of all loans which were active during the period of the survey. No attempt has been made to monitor the repayment of loans although the annual household file contains data on further loan acquisition and repayment. The variables in the financial liabilities file are:

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
1	Household identifier	from annual hh file	na		
2	Country				
3	Province	to be provided with each data set	na		
4	Municipality				
5	Village	1.9, V15 1st digit	na		
6	Year liability incurred	1.9, V3	na		
7	Month liability incurred	1.9, V4	na		
8	Total duration of financing	1.9, V5	months		
9	Annual interest rate	1.9, V6	%		
10	Form of loan (cash/kind)	1.9, V7	cash/kind		
11	Amount of liability	1.9, V8	US\$		
12	Security	1.9, V9	na		
13	Purpose #1 of loan	1.9, V10	na		
14	Purpose #2 of loan	1.9, V11	na		
15	Source of loan	1.9, V12			
16	Whether repaid by end of survey	to be decided	na		
17	Year repaid	"	na		
18	Month repaid	"	na		

2.11 Utilization, Income and Maintenance of Machinery File

The Utilization, Income and Maintenance of Machinery file is compiled directly from form 937. It contains a full set of data for every activity for which the machine was used. For ease of identification each machine in a household is allocated a unique ID. This allocation of ID will be undertaken by the computer and the mechanism should not concern the supervisors. The variables defined are as follows:

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
1	Household identifier	from annual hh file	na		
2	Country	to be supplied with each data set	na		
3	Province	"	na		
4	Municipality	"	na		
5	Village	col. 75	na		
6	Cropping season	col. 69	na		
7	Machine ID	col. 4, 7-8 & 9-11	na		
8	Type of machine	col. 7-8	na		
9	Machine specification (no. of HP)	col. 9-11	HP		
10	Fuel/power used	col. 12	na		
11	Farm activity	col. 15-17	na		
12	Type of work	col. 20	na		
13	Unit in which work is measured	col. 21	na		
14	Units accomplished for this activity	col. 22	na		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
15	Unit for charging if used for custom work		na		
16	Amount charged per unit if custom work	col. 25-27	na		
17	Total income, from custom work, received for this activity	col. 28-31	na		
18	No. of liters of fuel consumed for this activity	col. 38-40	litres		
19	Total cost of fuel used	col. 41-44	US\$		
20	No. of litres of oil used	col. 45-46	litres		
21	Total cost of oil used	col. 47-49	US\$		
22	No. of new filters fitted during this activity	col. 50	no.		
23	Total cost of new filters	col. 51-52	US\$		
24	No. of times tires repaired for this activity	col. 53-54	no.		
25	Total cost of tire repairs	col. 55-56	US\$		
26	No. of hours of family labor used for this operation	col. 58-60	hours		
27	No. of hours of hired labor used for this operation	cols. 61-63	hours		
28	Payments to hired labor for this operation	cols, 64-67	US\$		

2.12 Breakdowns/Accidents with Machinery File

The Breakdowns/Accidents with Machinery File is compiled directly from forms 937 and 938. It provides machinery data comparable to that for draft livestock contained in file 2-9, the Diseases/Accidents with draft livestock file. The following variables are defined.

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
1	Household identifier	from annual hh file	na		
2	Country				
3	Province	to be provided with each data set	na		
4	Municipality				
5	Village	937, Col. 75	na		
6	Cropping season	937, 69 or 938, 69	na		
7	Accident or breakdown	Whether form 937 or 938	na		
8	Type of machine	937 or 938, 7-8	na		
9	Machine ID	2.11, V7	na		
10	Machine specification (no. of HP)	937 or 938, 9-11	HP		
11	Fuel/power used	937 or 938, 12	na		
	<u>For breakdowns</u>				
12	Kind of breakdown	938, 15-16	na		
13	Seriousness of breakdown	938, 17	na		
14	Whether machine repaired	938, 18	yes/no		
15	It repaired, no. of days machine is inoperable	938, 19-21	days		
16	If during field activity, days of delay in activity	938, 22	days		
17	Whether delay in repairing machine	938, 23	yes/no		
18	Main reason for delay	938, 24	na		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
19	Second reason for delay	938, 24	na		
20	If lack of spare parts, action taken	938, 25	na		
21	Total value of spare parts used	938, 27-30	US\$		
22	Hours of family labor used for repair	938, 31-33	hours		
23	Hours of hired mechanic labor used for repair	938, 34-36	hours		
24	Total amount paid to hired labor	938, 37-40	US\$		
25	Location of repair	938, 41	na		
26	Distance of location of repair from farm	938, 42-43	km		
27	Cost of transport of machine to and from place of repair	938, 44-46	US\$		
28	Whether satisfied with repair	938, 47	yes/no		
29	No. of occurrences of this breakdown with this machine	938, 48	no		
30	Age of machine	938, 49	years		
31	Month of breakdown	938, 50-52	na		
32	Week of breakdown	"	na		
	<u>For accidents</u>				
33	Type of accident with machine	937, 70 or 71	na		
34	Seriousness of accident	937, 72 or 73	na		

### 2.13 Marketing of produce file

The marketing of produce file summarizes the data contained on form 940. A separate entry is included for each sale of produce.

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
1	Household identifier	from annual hh file	na		
2	Country				
3	Province	to be provided with each data set	na		
4	Municipality				
5	Village	940, col. 75	na		
6	Cropping season	940, col. 69	na		
7	Parcel/Subparcel ID <sup>1/</sup>	940, col. 4-6	na		
8	Sub-subparcel no. <sup>1/</sup>	940, col. 73	na		
9	Crop	940, cols 70-72	na		
10	No. of times produce sold from this parcel this season	940, Col. 10	na		
11	Number of sale	940, location of data	na		
12	Time of sale	940, Col. 11 & 36	na		
13	Amount sold	940, cols. 12-16 & 37-42	kg		
14	Quality of produce sold	940, Col 17 & 43	na		
15	Price received per kg.	940, cols. 18-21 & 44-47	US\$/kg		
16	Total amount received	940, Cols. 22-27, & 48-53	US\$		
17	Market location for sale	940, cols. 28 & 54	na		
18	Distance of market from produce store	940, cols. 29-31 & 55-57	km		
19	Adequacy of transportation	940, col. 32 & 58	yes/no		
20	Total cost of transportation	940, Cols. 33-35 & 59-61	US\$		

<sup>1/</sup>These items must be checked with files 2.4 and 3.2 to ensure correct matching

3 DEFINITION OF LEVEL 2 FILES

3.1 Household member file

The household member file is compiled directly from forms 911, 911-99, 911-020, 911-090, 911-021 and 930 together with the work opportunities and preferences of landless workers file (2.1), and the individual inventory changes file (1.10). The variables defined in the file are as follows:

<u>Variable No.</u>	<u>Variable name</u>	<u>Location (col)</u>	<u>Unit</u>	<u>Local Unit</u>	<u>Conversion factor</u>
1	Household identifier	From annual HH file	na		
2	Country	To be provided with each data set	na		
3	Province	"	na		
4	Municipality	"	na		
5	Village	Col. 75 of 911, 911-99 & 911-020	na		
6	HH member identification	Col. 74 of 911. For 911-99 relevant col. no. plus no. of forms. <sup>1/</sup> For 911-020 no. of 911 forms plus total other hh members plus card number for 911-020. <sup>2/</sup>	na		

<sup>1/</sup> For example, if we have 4 forms 911 completed, these will be numbered household members 1-4. Additional numbers 1 in cols 9-10 and 2 in columns 13-14 will be recorded as hh members 5,6 and 7 respectively.

<sup>2/</sup> Continuing with the numbering system card no. 1 of 911-020 will contain data for household member number 8, and so on.

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
7	Type of hh member	col. 5-6 of 911 location in 911-99, permanent laborer if from 911-020			
8	Sex of hh member	col. 4 in 911 if hh head otherwise col. 5-6, 911-99 location or 911-020	m/f		
9	Age	col. 7-8 in 911 and 911-020 <sup>3/</sup>	years		
10	No. of years of study	col. 9-10 in 911 na to 911-99 na to 911-020	years		
11	No. of years in farming	HH head only cols. 11 - 12 of 911	years		
<u>Types of work other than on own farm</u>					
12	Agriculture	From cols. 13-14 in 911, na to 911-99 and 911-020	yes/no		
13	Forestry	"			
14	Fishery	"			
15	Handicraft	"			
16	Industry	"			
17	Commerce	"			
18	Service	"			
19	Others	"			
20	Crop year	Given	four digit		

<sup>3/</sup>We need to discuss the possibility of incorporating age data for other hh members into the files. This information should be recorded on form 911-99.

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
21	First month of crop year	given on 911 and 911-020	month no.		
	<u>Number of days worked per month</u>				
22	January	19-20 of 911 & 911-020	days		
23	February	21-22 of 911 & 911-020	days		
24	March	23-24 of 911 & 911-020	days		
25	April	25-26 of 911 & 911-020	days		
26	May	27-28 of 911 & 911-020	days		
27	June	29-30 of 911 & 911-020	days		
28	July	31-32 of 911 & 911-020	days		
29	August	33-34 of 911 & 911-020	days		
30	September	35-36 of 911 & 911-020	days		
31	October	37-38 of 911 & 911-020	days		
32	November	39-40 of 911 & 911-020	days		
33	December	41-42 of 911 & 911-020	days		
34	Total	Sum of V22 to V33	days		
	<u>Income per month (cash &amp; kind)</u>				
35	January	911-090 or 911-021, 11-15	US\$		
36	February	911-090 or 911-021, 16-20	US\$		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (ccls)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
37	March	911-090 or 911-020, 21-25	US\$		
38	April	911-090 or 911- 020, 26-30	US\$		
39	May	911-090 or 911- 020, 31-35	US\$		
40	June	911-090 or 911- 020, 36-40	US\$		
41	July	911-090 or 911- 020, 41-45	US\$		
42	August	911-090 or 911 020, 46-50	US\$		
43	September	911-090 or 911 020, 51-55	US\$		
44	October	911-090 or 911 020, 56-60	US\$		
45	November	911-090 or 911 020, 61-65	US\$		
46	December	911-090 or 911 020, 66-70	US\$		
47	Earnings in cash this yr.	cols. 43-48 of 911 & 911- 020, na 911-99	US\$		
48	Earnings in kind this year	cols. 49-54 of 911 & 911-020 na 911-99	US\$		
	For wives of hh head only <sup>4/</sup>				
49	Age when first married	col. 4-5 or 10-11 of 930	years		

<sup>4/</sup>Not applicable for either other household members or for women who are household heads.

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
50	No. of times given birth (incl still-born)	cols. 6-7 or 12-13 of 930	no.		
51	No. of children died (incl. still-born)	cols. 8-9 or 14-15 of 930	no.		
<u>For permanent laborers only</u>					
52	Entry in file 2.1	file 2.1	1 = yes 0 = no		
53	Enterprise for which employed (if only one)	cols. 55-57 of 911-020	na		
Additional provisions provided to laborer					
54	Food	col. 58, 911-020	yes/no		
55	Clothing	col. 59, 911-020	yes/no		
56	Lodging	col. 60, 911-020	yes/no		
57	Land	col. 61, 911-020	yes/no		
58	Others	col. 63-66, 911-020	yes/no		
59	Value of additional provisions	col. 63-66, 911-020	US\$		
<u>For all hh members and permanent laborers</u>					
Change in status during year and time of change					
60	Birth - month	file 1.10 <sup>5/</sup>	month		
61	Birth - week	"	week		
62	Death - month	"	month		
63	Death - week	"	week		
64	Left household - month	"	month		

<sup>5/</sup>To extract data from file 1.10 select the subfile of all records where V2 = 911. Then V5 indicates the type of change.  
 1 is birth                      4 is left household  
 2 is death                      6 is joined household  
 The month is in V6 and week in V7

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
65	Left household - week	file 1.10	week		
66	Joined household - month	"	month		
67	Joined household - week	"	week		

### 3.2 Land Parcel File

The land parcel file is compiled from forms 913, 932 and 933, the individual inventory change file (1.11), the landlord's contribution file (2.3), the seasonal sub-subparcel file (2.4) and the land reclamation file (2.5).

In order to rationalize the data base, we have been forced to slightly amend the definitions of parcels, subparcels and sub-subparcels. These alternative definitions provide a more consistent basis for data analysis while avoiding the generation of new problems in the current, or future, data.

a) The parcel of land remains a contiguous piece of land. However, it may consist of a piece of land which is owned and cultivated by the owner as well as a piece which is owned and rented out for less than a year.

b) Subparcels may consist of two contiguous pieces of land, one of which is owned and the other of which is rented in. These will be recorded as two subparcels, and the rented in subparcel may be rented in for part of the year only. Similarly, if a part of the owned parcel is rented out for the entire year it is treated as a subparcel.

c) Sub-subparcels are reserved for pieces of land which can only be defined on a seasonal basis. Hence a piece of land leased for a season

is recorded as a sub-subparcel. Similarly, a piece of land planted to a particular crop is recorded as a sub-subparcel. Each parcel/subparcel must, by definition, have at least one sub-subparcel to record certain essential statistics by season.

Parcel/subparcel data are recorded in the current file. Seasonal sub-subparcel data are recorded in file 2.5.

The variables in the Land Parcel file are defined as follows:

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
1	Household number	from annual hh file	na		
2	Country	to be provided with each data set	na		
3	Province	"	na		
4	Municipality	"	na		
5	Village	912, 75	na		
6	Parcel/subparcel ID	912, 4-6	na		
7	Survey year	932/1, 8-9	4 digits		
8	Year of mechanization	932/2, 8-9	4 digits		
9	Area of parcel/subparcel at beginning of year	912, 9-12	ha.		
10	Tenurial status	912, 38-39	na		
11	Soil texture	912, 13	na		
12	Soil color	912, 14	na		
13	Topography	912, 15	na		
14	Restricting factors	912, 17-18	na		
15	Source of permanent irrigation	912, 19	na		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
16	Type of water control in survey year	932/1, 18	na		
17	Type of water control in year before mechanization	932/2, 18	na		
18	Estimated value of parcel for owners/amortizing owners only	912/25-30	US\$		
19	Land tax on-parcel for owners/amortizing owners only	912, 31-36	US\$		
20	Original cost of parcel	912, 61-66	US\$		
21	Annual repair and maintenance cost. Improvements made to parcel/sub-parcel				
22	land clearing	912, 55 & 56	yes/no		
23	levelling	912, 55 & 56	yes/no		
24	terracing	912, 55 & 56	yes/no		
25	land consolidation	912, 55 & 56	yes/no		
26	others	912, 55 & 56	yes/no		
27	history of parcel cultivation	932/1 and/or 932/2, col. 10	0 cult. both yrs 1 not cult. yr. before mech. 2 not cult. survey year		
28	Changes in cropping pattern since yr. before mechanization	933, 21	yes/no		
29	Year in which cropping pattern change occurred	933, 22-23	4 digits		
<u>Reasons for cropping pattern changes</u>					
30	Plant another crop because of improved irrigation	933, 24	yes/no		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
31	Plant another crop because of mechanization	933, 25	yes/no		
32	More profitable to plant another crop	933, 26	yes/no		
33	Not enough water to plant former crop	933, 27	yes/no		
34	Others	933, 28	yes/no		
35	Changes in irrigation/ water supply since year before mechanization	933, 29	yes/no		
36	Year of change	933, 30-31	4 digits		
	<u>Type of change</u>				
37	Construction of concrete dam	933, 32	yes/no		
38	Construction of diversion dam	933, 33	yes/no		
39	Construction of water gates	933, 34	yes/no		
40	Construction of new canals	933, 35	yes/no		
41	Rehabilitation of old system	933, 36	yes/no		
42	Installation of system pump	933, 37	yes/no		
43	Installation of farm level pump	933, 38	yes/no		
44	Irrigation supply stopped/ become poor	933, 39	yes/no		
45	Others	933, 40	yes/no		
46	Change in tenure status since year before mechanization	933, 41	yes/no		

<u>Variable No.</u>	<u>Variable name</u>	<u>Location</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
47	Year of change in tenure status	933,42-43	4 digits		
	<u>Reasons for change in tenure status</u>				
48	Land reform	933, 44	Yes/no		
49	Had enough money to acquire land	933, 45	"		
50	Others	933, 46	"		
<u>Changes in status of parcel during cropping year</u>					
51	Number of changes	1.10 no. of entries where V2=912	na		
52	Purchase of part or whole of parcel	1.10, V5=5	Yes/no		
53	Month of purchase	1.10, V6	na		
54	Week of purchase	1.10, V7	"		
55	Area of land purchased	to be decided	ha		
56	Value of purchase	1.10 V10	US\$		
57	Sale of part or whole of parcel	1.10, V5=3	Yes/no		
58	Month of sale	1.10, V6	na		
59	Week of sale	1.10, V7	"		
60	Area of land sold	to be decided	ha		
61	Value of sale	1.10, V10	US\$		
62	Renting in of part <sup>1</sup> or whole of parcel	1.10, V5=6	Yes/no		
63	Month of renting in	1.10, V6	na		
64	Week of renting in	1.10, V7	"		
65	Area rented in	to be decided	na		
66	Whether paid in cash or in kind	1.10, V9	na		
67	Amount paid	1.10, V10	US\$		

<sup>1</sup>Status of land can be determined on the basis of the value of a change (V10). Land returned should show 0 value. These items need to be double checked,

<u>Variable No.</u>	<u>Variable name</u>	<u>Location</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
68	Relinquish renting in of part or whole of parcel <sup>1</sup>	1.10, V5=4	Yes/no		
69	Month of relinquishing, renting in	1.10,V6	na		
70	Week of relinquishing renting in	1.10,V7	na		
71	Area relinquished	to be decided	ha		
72	Renting out of part or whole of parcel <sup>1</sup>	1.10, V5=4	Yes/no		
73	Month in which renting out started	1.10, V6	na		
74	Week in which renting out started	1.10,V7	"		
75	Area rented out	to be decided	ha		
76	Whether rent received in cash or kind	1.10,V9	na		
77	Value of rent	1.10,V10	"		
78	Return of rented out land <sup>1</sup>	1.10,V5=6	Yes/no		
79	Month in which returned	1.10,V6	na		
80	Week in which returned	1.10,V7	"		
81	Area returned	to be decided	ha		
82	No. of entries in Landlord's contributions file (2.3) - WS	2.3	na		
83	No. of entries in landlord's contribution file (2.3) - DS1	2.3	"		
84	No. of entries in landlord's contribution file (2.3) - DS2	2.3	"		
85	No. of entries in seasonal land sub-subparcel file (2.4) - WS	2,4	"		

<sup>1</sup>Status of land can be determined on the basis of the value of a change (V10). Land returned should show 0 value. These items need to be double checked.

<u>Variable No.</u>	<u>Variable name</u>	<u>Location</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
86	No. of entries in seasonal land sub-subparcel file (2.4)-DS1	2.4	na		
87	No. of entries in seasonal land sub-subparcel file (2.4)-DS2	2.4	"		
88	Entry in land reclamation file (2.5)	2.5	Yes/no		
89	% of area of parcel normally prepared by machine in WS	2.4,V12 &V9	%		
90	% of area of parcel normally prepared by machine in DS1	2.4,V12 &V9	%		
91	% of area of parcel normally prepared by machine in DS2	2.4,V12 &V9	%		
92	Mechanization status in WS	3.2, V89	} non mech. = 0 } } mechanized = 1 } } na = ∞		
93	Mechanization status in DS1	3.2,V90			
94	Mechanization status in DS2	3.2,V91			
95	Irrigation status	932,17	non-irrigated = 0 irrigated = 1		

### 3.3 Aggregated Crop Production File

This file provides a fairly comprehensive summary of the data stored in the Disaggregated Crop Production file, in a format suited to production function analyses.

The labor variables are computed, from file 2.6, as follows:

Activities are identified by V15

Unpaid male adult labor = V17 + V19 + V22 + V37 + V43 + V51 + V59

Paid male adult labor = V17 + V19 + V22 + V37 + V43 + V51 + V59

Unpaid female adult labor = V18 + V20 + V23 + V34 + V46 + V52 + V62

Paid female adult labor = V34 + V46 + V62

Unpaid children under 10 years labor = V21 + V28 + V42 + V50 + V56

Paid children under 10 years labor = V28 + V42 + V56

Unpaid undetermined labor = V24 + V37 + V49 + V53

Paid undetermined labor = V37 + V49 + V53

Whether or not the labor is paid is determined, other than for exchange labor, by the value in the relevant entry of file 2.6 for actual payment.

Exchange labor is, by definition, unpaid (presumably any food received will be repaid when the exchange labor is returned). The amount of payments are

defined as Payment to male adult labor = V33 + V45 + V61

Payment to female adult labor = V36 + V48 + V64

Payment to children under 10 yrs. labor = V30 + V42 + V58

Payment to undetermined labor = V27 + V39 + V58

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
1	Household number	from annual hh file	na		
2	Country	to be supplied with each data set	na		
3	Province	"	na		
4	Municipality	"	na		
5	Village	2.6, V5	na		
6	Parcel/subparcel ID	2.6, V6	na		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
7	Sub-subparcel ID	2.6, V7	na		
8	Year	2.6, V8	na		
9	Cropping season	2.6, V9	na		
10	Crop status	2.6, V10	main/second/ third		
11	Crop enterprise	2.6, V11	na		
12	Variety group	2.6, V12	na		
13	Variety	2.6, V13			
14	Area of crop	2.6, V14	hectares		
15	Unpaid male adult labor for land preparation (plough & harrow inseparable (p&h))	2.6 as noted	hours		
16	Paid male adult labor for land preparation (p&h)	"	hours		
17	Amount paid to male adult labor for land preparation (p&h)	"	US\$		
18	Unpaid female adult labor for land preparation (p&h)	"	hours		
19	Paid female adult labor for land preparation (p&h)	"	hours		
20	Amount paid to female adult labor for land preparation (p&h)	"	US\$		
21	Unpaid children under 10 yrs. labor for land preparation (p&h)	"	hours		
22	Paid children under 10 yrs. labor for land preparation (p&h)	"	hours		
23	Amount paid to children under 10 yrs. labor for land preparation (p&h)	"	US\$		
24	Unpaid undetermined labor for land preparation (p&h)	"	hours		
25	Paid undetermined labor for land preparation (p&h)	"	hours		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
26	Amount paid to undetermined labor for land preparation (p&h)	2.6 as noted	US\$		
27	Unpaid adult male labor for ploughing	"	hours		
28	Paid adult male labor for ploughing	"	hours		
29	Amount paid to adult male labor for ploughing	"	US\$		
30	Unpaid adult female labor for ploughing	"	hours		
31	Paid adult female labor for ploughing	"	hours		
32	Amount paid to adult female labor for ploughing	"	US\$		
33	Unpaid children under 10 yrs. labor for ploughing	"	hours		
34	Paid children under 10 yrs labor for ploughing	"	hours		
35	Amount paid to children under 10 yrs. labor for ploughing	"	US\$		
36	Unpaid undetermined labor for ploughing	"	hours		
37	Paid undetermined labor for ploughing	"	hours		
38	Amount paid to undetermined labor for ploughing	"	US\$		
39-50	"Land clearing" by categories listed in V26 - V37				
51-62	"Harrowing" by categories listed in V26 - V37				
63-74	"Application of basic fertilizer" by categories listed in V26 - V37				
75 - 85	"Direct seeding of parcel" by categories listed in V26 - V37				

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
87-98	"Transplanting" by categories listed in V26 - V37				
99-110	"Seedbed preparation" by categories listed in V26 - V37				
111-122	"Levelling" by categories listed in V26-V37				
123-134	"Pulling of seedlings" by categories listed in V26 - V37				
135-146	"Draining of parcel" by categories listed in V26 - V37				
147-158	"Repair/construction/cleaning of levees" by categories listed in V26 - V37				
159-170	"Seeding of seedbed" by categories listed in V26 - V37				
171-182	"Seed preparation" by categories listed in V26 - V37				
183-194	"Replanting" by categories listed in V26-V37				
195-206	"Puddling" by categories listed in V26 - V37				
207-218	"Putting in climbing poles" by categories listed in V26 - V37				
219-230	"Transporting of seedlings" by categories listed in V26 - V37				
231-242	"Weeding" by categories listed in V26 - V37				
243-254	"Applying herbicide/Weedicide" by categories listed in V26 - V37				
255-266	"Applying top dressing fertilizer" by categories listed in V26 - V37				
267-278	"Applying insecticide" by categories listed in V26 - V37				

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
279-290	"Mulching" by categories listed in V26 - V37				
291-302	"Earthing up" by categories listed in V26-V37				
303-314	"Applying rodenticide" by categories listed in V26 - V37				
315-326	"Applying fertilizer and pesticide combined" by categories listed in V26 - V37				
327-338	"pre-sowing irrigation" by categories listed in V26 - V37				
339-350	"Regular irrigation" by categories listed in V26 - V37				
351-362	"Watering by hand" by categories listed in V26 - V37				
363-374	"Harvesting/Processing" by categories listed in V26 - V37				
375-386	"Transplanting, milling & marketing" by categories listed in V26-V37				
387	Type of animal power used in land preparation (p&h)	2.6, V15 & V65	na		
388	Amount of animal power used in land preparation (p&h)	2.6, V15 & V66	hours		
389	Type of labor input used with animal power input	2.6, V15, V65 & V17 to V64	na		
390	Value of animal power input (excl. labor)	2.6, V15, V65 & V69	US\$		
391	Amount of 2-wheel tractor input for land preparation (p&h)	2.6, V16, V65 & V66	hours		
392	Type of labor used with 2-wheel tractor	2.6, V15, V65 & V17 to V64	na		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
393	Value of 2-wheel tractor input (excl. labor)	1.6, V15, V65 & V69	US\$		
394	Amount of 4-wheel tractor input for land preparation (p&h)	2.6, V15, V65 & V66	na		
395	Type of labor used with 4 wheel tractor	2.6, V15, V65 & V17-64	na		
396	Value of 4-wheel tractor input (excl. labor)	2.6, V15, V65 & V69	US\$		
397-406	"Ploughing" by categories in V387-V396				
407-416	"Land clearing" by categories in V387-V396				
417-426	"Narrowing" by categories in V387-V396				
427-436	"Levelling" by categories in V387-V396				
437-448	"Puddling" by categories in V387-V396				
449	Value of seeds used	2.6, V15 & V73	US\$		
450	Value of plants/seedlings/cuttings used	2.6, V15 & V76	US\$		
451	Value of base-fertilizer used	2.6, V15 & V83	US\$		
452	Amount of N applied as base fertilizer	2.6, V15 & V79	kg		
453	Amount of P <sub>2</sub> O <sub>5</sub> applied as base fertilizer	2.6, V15 & V80	kg		
454	Amount of K <sub>2</sub> O applied as base fertilizer	2.6, V15 & V81	kg		
455	Value of top dressed fertilizer	2.6, V15 & V83	US\$		
456	Amount of N applied as top dressed fertilizer	2.6, V15 & V79	kg		
457	Amount of P <sub>2</sub> O <sub>5</sub> applied as top dressed fert.	2.6, V15 & V80	kg		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
458	Amount of K <sub>2</sub> O applied as top dressed fert.	2.6, V15 & V81	kg		
459	Value of insecticides used	2.6, V15 & V87 + V91 + V95 + V99	US\$		
460	Value of herbicides used	2.6, V15 & V103 + V107 + V111	US\$		
461	Value of rodenticides used	2.6, V15 & V114	US\$		
462	Value of fungicides used	2.6, V15 & V117 + V120 + V123	US\$		
463	Irrigation costs (irrigation water or irrigation fee)	2.6, V15 & V127	US\$		
464	Type of main output	2.6, V15 & V128	na		
465	Amount of main output	2.6, V15 & V129	kg		
466	Value of main output	2.6, V15 & V130	US\$		
467	Type of by-product	2.6, V15 & V131	na		
468	Value of by-product	2.6, V15 & V133	US\$		

### 3.4 Productive Livestock File

The productive livestock file provides a monthly summary of livestock status, inputs to productive livestock and outputs from them. The variables are derived from files 1.7 (the Individual Resource Utilization for Productive Livestock File) and 2.7 (the Opening Inventory of Productive Livestock File) together with the relevant parts of

File 1.10 (the Individual Inventory Changes File) to update this livestock status. Data are recorded on a monthly basis.

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
1	Household identifier	from annual hh file	na		
2	Country	to be provided with each data set	na		
3	Province	"	na		
4	Municipality	"	na		
5	Village	2.7, V5	na		
6	Year	supplied	na		
7	Month	2.7, V6	na		
8	Type of productive animal	2.7 V7	na		
9	Type of breed	2.7, V8	na		
10-39	Monthly opening. No. and value by subtypes	2.7, V13-42 in 1st mo., then update by inventory change (1.7) no. & US\$			
40	Type of livestock activity	1.7, V3	na		
41	Type of human labor input	1.7, V2	na		
42	Amount of human labor input	1.7, V5	hours		
43	Method of payment	1.7, V6	cash/kind		
44	Value of payment	1.7, V7	US\$		
45	Type of livestock expenses	1.7, V2	na		
46	Amount of input	1.7, V5	kg		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
47	Method of payment	1.7, V6	cash/kind		
48	Value of payment	1.7, V7	US\$		
49	Type of output	1.7, V2	na		
50	Unit of output	1.7, V2	kg., litre, units		
51	Amount of output	1.7, V5	V18		
52	Method of receipt	1.7, V6	cash/kind		
53	Value of receipt	1.7, V6	US\$		
54	No. of animals born this month	Inventory change (1.9)	no.		
55	No. of animals purchased this month	"	no.		
56	No. of animals sold this month	"	no.		
57	No. of animals died this month	"	no.		
58	No. of animals consumed, given away or returned this month	"	no.		
59	No. of animals received this month	"	no.		
60	Change in valuation of stock this month	"	US\$		

### 3.5 Draft Livestock File

The Draft Livestock file provides a monthly summary of inventory changes and inputs to draft livestock. It is compiled from files 2.8 and 1.8 together with updating of livestock inventory from file 1.9

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
1	Household identifier	from annual hh file	na		
2	Country	to be provided with each data set	na		
3	Province	"	na		
4	Municipality	"	na		
5	Village	2.8, V5	na		
6	Year	supplied	na		
7	Month	2.8, V6	na		
8	Type of draft animal	2.8, V7	na		
9	Type of breed	2.8, V8	na		
10-39	Monthly opening no. & value by subtypes	2.8, V11-40 in 1st month, then update by inventory change (1.9)	no. & US\$		
40	Type of livestock activity	1.8, V3	na		
41	Type of human labor input	1.8, V2	na		
42	Amount of human labor input	1.8, V5	hours		
43	Method of payment	1.8, V7	cash/kind		
44	Value of payment	1.8, V2	US\$		
45	Type of livestock expense	1.8, V2	na		
46	Amount of input	1.8, V5	kg		
47	Method of payment	1.7, V6	cash/kind		
48	Value of payment	1.7, V7	US\$		
49	No. of animals born this month	Inventory change (1.9)	no.		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
50	No. of animals purchased this month	Inventory change (1.9)	no.		
51	No. of animals sold this month	"	no.		
52	No. of animals died this month	"	no.		
53	No. of animals received this month	"	no.		
54	No. of animals given away this month	"	no.		
55	Change in valuation of stock this month	"	US\$		

### 3.6 Farm Machinery File

The Farm Machinery file provides an annual summary of machines owned, machine use, maintenance, breakdowns and accidents. It is compiled from Form 915, together with files 2.11 (the Utilization, Income and Maintenance of Machinery file), 2.12 (the Breakdowns/Accidents with Machinery File), 1.10 (the Individual Inventory Changes File) and 1.11 (the Individual Machine Purchase File).

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
1	Household identifier	from annual hh file	na		
2	Country	to be provided w/ each data set	na		
3	Province	"	na		
4	Municipality	"	na		
5	Village	915, col. 75	na		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
6	Machine ID	915, cols. 4, 5-6 & 7-9	na		
7	Type of machine	915, cols. 5-6	na		
8	Machine specification (HP)	915, cols. 7-9	.HP		
9	Fuel/power used	1.11, V5	na		
10	Enterprise for which machine used	915, cols. 10-12	na		
11	Implement regularly attached to machine	1.11, V6	na		
12	Age of machine	915, cols. 13-14	years		
13	Share in machine if jointly owned	915, cols. 17-18	%		
14	Acquisition cost of machine	915, cols. 20-24	US\$		
15	Total annual fixed cost (tax and insurance)	915, cols. 31-36	US\$		
16	Main person involved in decision to purchase machine	1.11, V7	na		
17	2nd person involved in decision to purchase machine	1.11, V8	na		
18	Main advantage of owning machine	1.11, V9	na		
19	2nd advantage of owning machine	1.11, V10	na		
20	3rd advantage of owning machine	1.11, V11	na		
	<u>If machine purchased during year<sup>1/</sup></u>				
21	Month of purchase	1.10, V6	na		
22	Week of purchase	1.10, V7	na		
23	Cost of machine	1.10, V10	US\$		

<sup>1/</sup>Transaction recorded in inventory change file, subject group 915.

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
	<u>If machine sold during year<sup>1/</sup></u>				
24	Month of sale	1.10, V6	na		
25	Week of sale	1.1, V7	na		
26	Receipt from sale	1.10, V10	US\$		
	<u>Income from machine</u>				
	<u>Machine Use/Breakdown/Accidents in wet season</u>				
27	Type of work undertaken in wet season	2.11, V12	na		
28	Unit in which work is measured	2.11, V13	na		
29	Units accomplished for this activity	2.11, V14	na		
30	Unit for charging if custom work	2.11, V15	na		
31	Amount charged per unit if custom work	2.11, V16	na		
32	Total income from custom work	2.11, V17	US\$		
33	No. of litres of fuel used	2.11, V18	litres		
34	Total cost of fuel used	2.11, V19	US\$		
35	No. of litres of oil used	2.11, V20	litres		
36	Total cost of oil used	2.11, V21	US\$		
37	Cost of new filters fitted	2.11, V23	US\$		
38	Cost of tire repairs	2.11, V25	US\$		
39	Total value of other spare parts used in repairs	2.12, V21	US\$		
40	Hours of family labor used in repairs	2.12, V22	hours		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
41	Hours of hired mechanic labor used in repairs	2.12, V23	hours		
42	Amount paid to hired mechanic labor	2.12, V24	US\$		
43	Transportation costs for repairs	2.12, V27	US\$		
44	No. of breakdowns this cropping season	2.12, no. of entries for breakdowns	no		
45	No. of hours of family labor used with machine this season	2.11, V26	hours		
46	No. of hours of hired labor used with machine this season	2.11, V27	hours		
47	Payments to hired labor this season	2.11, V28	US\$		
48	No. of accidents with machine this season	2.12, V33	no		
<u>Machine Use/Breakdowns/Accidents in first dry season</u>					
49-70	Repeat of V27 - V48 for first dry season				
<u>Machine Use/Breakdowns/Accidents in second dry season</u>					
71-92	Repeat of V27 - V48 for second dry season				

### 3.7 Other Assets File

The Other Assets file provides a summary of all assets, other than farmland, livestock and machinery, owned by the farmer. It is compiled from files 1.12 (Split Building File), 1.13 (Split Farm Implements File), 1.14 (Other Assets (non-agricultural land) File), 1.15 (Other Assets (vehicles) File) and 1.16 (Other Asset (home consumer durables) File).

Changes in inventory status during the year are derived from file 1.10  
(Individual Inventory Changes file).

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
1	Household identifier	from annual hh file	na		
2	Country	to be provided with each data set	na		
3	Province	"	na		
4	Municipality	"	na		
5	Village	1.12, V11; 1.13, V6; 1.14, V6; 1.15, V8; 1.6, V7	na		
6	Type of asset	whether 1.12, 1.13, 1.14, 1.15 or 1.16	na		
7	Sub-type of asset	1.12, V2 or 1.13 V2 or 1.14, V2 or 1.15, V2 or 1.6, v2	na		
8	No. of this asset	1.13, V3 others = 1	no.		
9	Age of asset	1.12, V6; 1.15, V3, 1.16, V3, 1.13, nr; 1.14	na	years	
10	Area	1.12, V4; 1.14, V3, 1.13, na, 1.15 na; 1.16, na	sq. m.		
11	Type of construction material	1.12, V3; 1.13-1.16	na		
12	Enterprise to which attributable	1.12, V5, 1.13-1.16, na	na		
13	Repair and maintenance cost per year	1.12, V7, 1.13, nr <sup>1</sup> 1.14, na, 1.15, V6, 1.16, nr.	US\$		

<sup>1</sup>/n.r. - not recorded

<u>Variables No.</u>	<u>Variables Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
14	Repair & maintenance cost last year	1.12, V7; 1.13, n.r.; 1.14, na; 1.15, V6; 1.16, nr	US\$		
15	Original construction cost (buildings)	1.12, V9; 1.13, nr, 1.14, nr; 1.15, V4, 1.16, V4	US\$		
16	Total present value	1.13, V4; 1.14, V4; 1.12, nr; 1.15, nr; 1.16, nr	US\$		
17	Remaining useful life	1.15, V5, 1.16, V5, 1.12, nr, 1.13, nr; 1.16, nr	years		
18	Month of purchase	1.10, V6	na		
19	Week of purchase	1.10; V7	na		
20	Number of purchase	1.10, V8	no.		
21	Value of purchase	1.10; V10	US\$		
22	Month of sale	1.10, V6	na		
23	Week of sale	1.10, V7	na		
24	Number sold	1.10, V8	no.		
25	Value of sale	1.10, V10	US\$		

### 3.8 Disposal of Produce File

The Disposal of Produce File is compiled from form 939 and file 2.13. It contains a summary, by season, of the disposal of produce to various sources by sub-subparcel. A summary for the whole farm is located in the Annual Household File. Form 939 comprises two cards designated 939/1 and 939/2, with the 1 or 2 located in column 74.

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
1	Household identifier	from annual hh file	na		
2	Country	to be provided with each data set	na		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
3	Province	to be supplied with each data set	na		
4	Municipality	"	na		
5	Village	939/1, col. 75	na		
6	Cropping season	939/1, col. 69	na		
7	Parcel/subparcel ID	939/1, col. 04	na		
8	Sub-subparcel no.	939/1, col. 73	na		
9	Total production this season	939/1, cols. 7-11	kg		
10	Value of total production	939/1, cols. 12-17	US\$		
11	Payment to harvesters/threshers	939/1, col. 18	na		
12	Paying arrangement	939/1, cols.19-20	na		
13	Amount paid to harvesters/threshers	939/1, cols. 21-25	kg		
14	Value of produce paid to harvesters/threshers	939/1, cols. 26-30	US\$		
15	Payment to landlord	939/1, col. 31	yes/no		
16	Amount paid to landlord	939/1, cols.32-36	kg		
17	Value of produce paid to landlord	939/1 cols.37-41	US\$		
18	Payment of debts	939/1 cols. 42	yes/no		
19	Amount used to pay debts	939/1 cols.43-47	kg		
20	Value of produce used to pay debts	939/1, cols. 48-54	US\$		
21	Produce sold this season	939/1, col. 53	yes/no		
22	Amount of produce sold	939/1, cols.54-58	kg		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
23	Total value of produce sold	939/1 cols. 59-63	US\$		
24	No. of times produce sold	2.15, V9	na		
25	Produce retained this season	939/2, col. 7	yes/no		
26	Purpose for which produce retained	939/2, col. 8	na		
27	Amount of produce retained	939/2, cols. 9-13	kg		
28	Value of produce retained	939/2, cols. 14-18	US\$		
29	Produce used for other purposes	939/2, col. 19	yes/no		
30	Purpose for which produce used	939/2, col. 20	na		
31	Amount of produce used for other purposes	939/2, cols. 21-25	kg		
32	Value of produce used for other purposes	939/2, cols. 26-31	US\$		
33	By-products used or sold	939/2, col. 32	na		
34	Value of by-products used and sold	939/2, cols. 33-38	US\$		

#### 4. DEFINITIONS OF LEVEL 1 FILE

##### 4.1 Annual Household File

This is the most aggregated, and comprehensive, file used in the study. It contains summaries of the data from all LEVEL 2 files and from some LEVEL 3 files. In addition some of the basic data are recorded directly in the Annual Household File. The variables recorded are as follows:

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
1	Household identifier	sequential no. connecting all files	na		
2	Country	to be provided with each data set	na		
3	Province	"	na		
4	Municipality	"	na		
5	Village	100's digit of hh code	na		
6	Year in which survey started	to be supplied	4 digits		
7	Month in which survey started	"	2 digits		
8	No. of hh members during year	3.1	no.		
9	Family members of which	3.1	no.		
10	Male	3.1	no.		
11	Female	3.1	no.		
12	Child	3.1	no.		
13	Permanent laborers of which	3.1	no.		
14	Male	3.1	no.		
15	Female	3.1	no.		
16	Child	3.1	no.		
17	Family members with off- or non-farm work	3.1	no.		
18	Male	3.1	no.		
19	Female	3.1	no.		
20	Child	3.1	no.		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
<u>Days of off-farm work of family members</u>					
21	January	3.1, V22	days		
22	February	3.1, V23	days		
23	March	3.1, V24	days		
24	April	3.1, V25	days		
25	May	3.1, V26	days		
26	June	3.1, V27	days		
27	July	3.1, V28	days		
28	August	3.1, V29	days		
29	September	3.1, V30	days		
30	October	3.1, V31	days		
31	November	3.1, V32	days		
32	December	3.1, V33	days		
33	Total	3.1, V34	days		
<u>Family income by month</u>					
34	January	3.1, V35	US\$		
35	February	3.1, V36	US\$		
36	March	3.1, V37	US\$		
37	April	3.1, V38	US\$		
38	May	3.1, V39	US\$		
39	June	3.1, V40	US\$		
40	July	3.1, V41	US\$		
41	August	3.1, V42	US\$		
42	September	3.1, V43	US\$		
43	October	3.1, V44	US\$		
44	November	3.1, V45	US\$		
45	December	3.1, V46	US\$		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
46	Family income from off-farm work - cash	3.1, V47	US\$		
47	Family income from off-farm work - kind	3.1, V48	US\$		
48	Age of hh head	3.1, V9 & V7	years		
49	Sex of hh head	3.1, V8 & V7	m/f		
50	No. of years of study for hh head	3.1, V10 & V7	years		
51	No. of years farming for hh head	3.1, V11 & V7	years		
52	No. of wives <sup>1/</sup>	3.1	no.		
53	No. of wives who have died <sup>1/</sup>	from form 930	no.		
54	Total no. of times wives have given birth (incl. still born) <sup>1/</sup>	3.1, V50	no.		
55	Total no. of children who have died (incl. still born) <sup>1/</sup>	3.1, V51	no.		
56	No. of birth this yr.	3.1, V60	no.		
57	No. of death this yr.	3.1, V62	no.		
58	No. left hh this yr. (excl. permanent laborers)	3.1, V64	no.		
59	No. joined hh this year (excl. permanent laborers)	3.1, V66	no.		
<u>Household non-wage income by month</u>					
60	January	2.2, V11	US\$		
61	February	"	US\$		
62	March	"	US\$		

<sup>1/</sup>These variables are not filled for cases where the household head is female.

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
63	April	2.2, V11	US\$		
64	May	"	US\$		
65	June	"	US\$		
66	July	"	US\$		
67	August	"	US\$		
68	September	"	US\$		
69	October	"	US\$		
70	November	"	US\$		
71	December	"	US\$		
72	Total	"	US\$		

Non-permanent hh members returning to help in farm work during wet season (form 930)<sup>2/</sup>

73	Total number returning	col. 16-17	no.		
74	No. helping in land preparation	col. 18	no.		
75	No. helping in planting	col. 19	no.		
76	No. helping in weeding	col. 20	no.		
77	No. helping in harvesting/threshing	col. 21	no.		
78	No. of days contributed	col. 22-24	days		

Non-permanent hh members returning to help in farm work during first dry season (form 930)<sup>2/</sup>

79	Total no. returning	col. 16-17	no.		
80	No. helping in land preparation	col. 18	no.		
81	No. helping in planting	col. 19	no.		
82	No. helping in weeding	col. 20	no.		

<sup>2/</sup>The cropping season is defined from the project code on form 930.

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
83	No. helping in harvesting/threshing	col. 21	no.		
84	No. of days contributed	col. 22-24	days		
<u>Non-permanent hh members returning to help in farm work during second dry season (form 930)<sup>2/</sup></u>					
85	Total no. returning	col. 16-17	no.		
86	No. helping in land preparation	col. 18	no.		
87	No. helping in planting	col. 19	no.		
88	No. helping in weeding	col. 20	no.		
89	No. helping in harvesting/threshing	col. 21	no.		
90	No. of days contributed	cols. 22-24	days		
91	Whether hh mechanized in land preparation <sup>3/</sup>	930 col. 25-26	yes/no		
92	Year machine adopted for land preparation <sup>3/</sup>	930 col. 25-26	year (4 digit)		
93	No. of hh members permanently leaving since mechanization	930 col. 27-28	no.		
Classification of, and reasons for, most recent 5					
94	Type of 1st hh member	col. 29-30	na		
95	Reason for 1st hh member	col. 39-40	na		
96	Type of 2nd hh member	col. 31-32	na		
97	Reason for 2nd hh member	col. 41-42	na		

<sup>2/</sup>The cropping season is defined from the project code on form 930.

<sup>3/</sup>Where variable 68 is equal to 0, variable 69 represents a year selected for the questions relating to outmigration which are answered in variables 84 through 95.

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
98	Type of 3rd hh member	col. 33-34	na		
99	Reason for 3rd hh member	col. 43-44	na		
100	Type of 4th hh member	col. 35-36	na		
101	Reason for 4th hh member	col. 45-46	na		
102	Type of 5th hh member	col. 37-38	na		
103	Reason for 5th hh member	col. 47-48	na		
104	No. of hh members becoming seasonal migration workers	col. 49	na		
105	Whether the household has an irrigation supply <sup>4/</sup>	col. 50-51	yes/no		
106	Yr. hh got irrigation supply <sup>4/</sup>	col. 50-51	year		
107	No. of hh members permanently leaving since introduction of irrigation supply	col. 52-53	no.		
	Classification of, and reasons for, most recent 5				
108	Type of 1st hh member	col. 54-55	na		
109	Reason for 1st hh member	col. 64-65	na		
110	Type of 2nd hh member	col. 56-57	na		
111	Reason for 2nd hh member	col. 66-67	na		
112	Type of 3rd hh member	col. 58-59	na		
113	Reason for 3rd hh member	col. 68-69	na		

<sup>4/</sup>Where variable 82 is equal to 0, variable 83 represents a year selected for the questions relating to outmigration which are answered in variables 84 through 95.

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
114	Type of 4th hh member	60-61	na		
115	Reason for 4th hh member	70-71	na		
116	Type of 5th hh member	62-63	na		
117	Reason for 5th hh member	72-73	na		
118	No. of hh members becoming seasonal migration workers	74	no.		
119	No. of parcels at beginning of year	3.2 no. of entries	na		
120	Total area at beginning of year	3.2 $\Sigma$ V9	ha		
121	No. of parcels owned/amortized	3.2, V10	na		
122	Area of parcels owned	3.2, V10, $\Sigma$ V9	ha		
123	No. of parcels leased in	3.2, V10	na		
124	Area of parcels leased in	3.2, V10, $\Sigma$ V9	ha		
125	No. of parcels share-cropped in	3.2, V10	na		
126	Area of parcels share-cropped in	3.2, V10, $\Sigma$ V9	ha		
127	No. of parcels mortgaged in	3.2, V10	na		
128	Area of parcels mortgaged in	3.2, V10, $\Sigma$ V9	ha		
129	No. of other parcels rented in	3.2, V10	na		
130	Area of other parcels rented in	3.2, V10, $\Sigma$ V9	ha		
131	Tenure status of household	4.1, V96-107	na		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
132	Tenure status of largest parcel	3.2, V10 & V9	na		
133	Area of largest parcel	3.2, V9	ha		
134	Mech, status of largest parcel in WS	3.2, V9 & V92	mech/nonmech.		
135	Mech. status of largest parcel in DS1	3.2, V9 & V93	"		
136	Mech. status of largest parcel in DS2	3.2, V9 & V94	"		
137	Irrigation status of largest parcel	3.2, V9 & V95	irr/nonirr.		
138	No. of parcels at end of year	3.2, no. of entries	no.		
139	Total area at end of year	3.2, $\Sigma$ V9 + inventory changes	ha.		
140	No. of wet season crops for which data in 3.3	3.3	na.		
141	No. of 1st dry season crops for which data in 3.3	3.3	na		
142	No. of 2nd dry season crops for which data in 3.3	3.3	na		
143	Opening no. of productive cattle	2.7	no.		
144	Opening value of productive cattle	2.7	US\$		
145	Unpaid male labor for productive cattle	3.5, V41 & V42	hours		
146	Paid male labor for productive cattle	3.5, V41 & V42	hours		
147	Value of paid male labor for productive cattle	3.5, V44	US\$		
148	Unpaid female labor for productive cattle	3.5, V41 & V42	hours		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
149	Paid female labor for productive cattle	3.5, V41 & V42	hours		
150	Value of paid female labor for cattle	3.5, V44	US\$		
151	Unpaid child under 10 yrs. labor for cattle	3.5, V41 & V42	hours		
152	Paid child under 10 yr. labor for cattle	3.5, V41 & V42	hours		
153	Value of paid child under 10 yr. labor for productive cattle	3.5, V44	US\$		
154	Total other expenses for productive cattle	3.5, V48	US\$		
155	Total value of output from productive cattle	3.5, V53	US\$		
156-168	Repeat of V143-V155 for sheep				
169-181	Repeat of V143-V155 for goats				
182-194	Repeat of V143-V155 for buffaloes				
195-207	Repeat of V143-V155 for horses & donkeys				
208-220	Repeat of V143-V155 for poultry				
221-233	Repeat of V143-V155 for pigs				
234-246	Repeat of V143-V155 for others				
247-258	Repeat of V143-V154 for draft oxen/cattle				
259-270	Repeat of V143-V154 for draft buffaloes/ carabaos				

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
271-282	Repeat of V143-V154 for draft horses/donkeys				
283-294	Repeat of V143-V154 for other draft animals				
295	No. of occurrences draft cattle contracted diseases during WS	2.9, V8 & V9	na		
296	No. of occurrences water buffaloes contracted diseases during WS	"	na		
297	No. of occurrences of horses contracting diseases during WS	"	na		
298	No. of occurrences of other draft livestock contracting diseases during WS	"	na		
299-302	Repeat V295-298 for Dry Season 1				
303-306	Repeat V295-298 for Dry Season 2				
307	No. of accidents with draft cattle during SW	2.9, V8 & V9	na		
308	No. of accidents with water buffaloes during wet season	"	na		
309	No. of accidents with horses during WS	"	na		
310	No. of accidents with other draft animals during wet season	"	na		
311-314	Repeat of V307-310 for Dry Season 1				
315-318	Repeat of V307-310 for Dry Season 2				
319	No. of liabilities active at beginning of year	2.10	na		
320	Value of liabilities active at beginning of year	2.10, V11	US\$		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
321	Value of new liabilities incurred in January	2.10, V6, V7 & V11	US\$		
322	Value of new liabilities incurred in February	"	US\$		
323	Value of new liabilities incurred in March	"	US\$		
324	Value of new liabilities incurred in April	"	US\$		
325	Value of new liabilities incurred in May	"	US\$		
326	Value of new liabilities incurred in June	"	US\$		
327	Value of new liabilities incurred in July	"	US\$		
328	Value of new liabilities incurred in August	"	US\$		
329	Value of new liabilities incurred in September	"	US\$		
330	Value of new liabilities incurred in October	"	US\$		
331	Value of new liabilities incurred in November	"	US\$		
332	Value of new liabilities incurred in December	"	US\$		
333	Value of repayments of liabilities in January	1.10, V3 & V10	US\$		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
334	Value of repayments of liabilities in February	1.10, V3 & V10	US\$		
335	Value of repayments of liabilities in March	"	US\$		
336	Value of repayments of liabilities in April	"	US\$		
337	Value of repayments of liabilities in May	"	US\$		
338	Value of repayments of liabilities in June	"	US\$		
339	Value of repayments of liabilities in July	"	US\$		
340	Value of repayments of liabilities in August	"	US\$		
341	Value of repayments of liabilities in September	"	US\$		
342	Value of repayments of liabilities in October	"	US\$		
343	Value of repayments of liabilities in November	"	US\$		
344	Value of repayments of liabilities in December	"	US\$		
	<u>No. of farm machinery owned during year</u>				
345	Two-wheel tractors	3.6, V7	no.		
346	Four-wheel tractors	"	no.		
347	Crawler tractors	"	no.		
348	Thresher	"	no.		
349	Rice mill	"	no.		
350	Irrigation pump	"	no.		
351	Others	"	no.		
352	No. of buildings owned	3.7, V6	no.		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
353	Average age of building	3.7, V9	years		
354	Total construction cost	3.7, V15	US\$		
355	No. of types of farm implements/tools owned	3.7, V6	no.		
356	Total present value of farm implements/tools	3.7, V16	US\$		
357	No. of pieces of non-agricultural land owned	3.7, V6	na		
358	Total area of non-agricultural land owned	3.7, V10	sq. m.		
359	Total current value of non-agricultural land owned	3.7, V16	US\$		
360	No. of motorized vehicles owned	3.7, V6	no.		
361	Average age of motorized vehicles	3.7, V10	years		
362	Total purchase price	3.7, V15	US\$		
363	No. of non-motorized vehicles	3.7, V6	no.		
364	Average age of non-motorized vehicles	3.7, V10	years		
365	Total purchase price	3.7, V15	US\$		
366	No. of home consumer durables owned	3.7, V6	no.		
367	Total purchase price	3.7, V15	US\$		
368	Total rice production on farm in wet season	3.8, V6 & V9	kg		
369	Value of total rice production in wet season	3.8, V6 & V10	US\$		
370	Rice paid to harvesters/threshers in wet season	3.8, V6 & V13	kg		
371	Value of rice paid to harvesters/threshers in wet season	3.8, V6 & V14	US\$		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
372	Rice paid to landlord in wet season	3.8, V6 & V16	kg		
373	Value of rice paid to landlord in wet season	3.8, V6 & V17	US\$		
374	Rice used for other debts in wet season	3.8, V6 & V19	kg		
375	Value of rice used for other debts in wet season	3.8, V6 & V20	US\$		
376	Rice sold from wet season	3.8, V6 & V22	kg		
377	Value of rice sold from wet season	3.8, V6 & V23	US\$		
378	Rice from wet season left with farm operator	3.8, V6 & V27	kg		
379	Value of rice left with farm operator	3.8, V6 & V28	US\$		
380	Rice from wet season used for other purposes	3.8, V6 & V31	kg		
381	Value of rice from wet season used for other purposes	3.8, V6 & V32	US\$		
382	Value of by-products from wet season	3.8, V6 & V34	US\$		
383-397	Repeat of V368-V382 for 1st dry season				
NB	Second dry season has been excluded since there is unlikely to be much, if any, rice produced.				
398	First crop produced in season before beginning of survey	932/2, cols. 38-40	na		
399	Total sales and consumption of crop	939/2, cols. 44-48	kg		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
400	Average price per kg of crop	939/2, cols. 54-58	US\$/kg		
401	2nd crop produced in season before beginning of survey	939/2, cols. 41-43	na		
402	Total sales and consumption of crop	939/2, cols. 49-53	kg		
403	Average price per kg. of crop	939/2, cols. 59-63	US\$/kg		
404	Location of nearest extension worker's office	942, col. 7	na		
405	Information on planting practices received from extension worker	942, col. 8	yes/no		
406	Information on fertilizers received from extension worker	942, col. 9	yes/no		
407	Information on pest control received from extension worker	942, col. 10	yes/no		
408	Information on water control received from extension worker	942, col. 11	yes/no		
409	Information on use of HYV received from extension worker	942, col. 12	yes/no		
410	Other information received from extension worker	942, col. 13	yes/no		
411	No. of meetings conducted by extension worker attended in wet season	942, cols. 14 & 69	no.		
412	No. of visits to extension worker's office during wet season	942, cols. 15 & 69	no.		
413	No. of visits by extension worker during wet season	942, cols. 16 & 69	no.		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
414	No. of meetings conducted by extension worker during 1st dry season	942, cols. 14 & 69	no.		
415	No. of visits to extension worker's office during 1st dry season	942, cols. 15 & 69	no.		
416	No. of visits by extension worker during 1st dry season	942, cols. 16 & 69	no.		
417	No. of meetings conducted by extension worker during 2nd dry season	942, cols. 14 & 69	no.		
418	No. of visits to extension worker's office during 2nd dry season	942, cols. 15 & 69	no.		
419	No. of visits by extension worker during 2nd dry season	942, cols. 16 & 69	no.		
420	Rating of performance of extension worker	942, col. 17	no.		
421	If village head consulted about farm problems	942, cols. 18 or 91 = 1	yes/no		
422	If farmer's organization consulted about farm problems	942, cols. 18 or 19 = 2	yes/no		
423	If relative consulted about farm problems	942, cols. 18 or 19 = 3	yes/no		
424	If fellow farmer consulted about farm problems	942, cols. 18 or 19 = 4	yes/no		
425	If others consulted about farm problems	942, cols. 18 or 19 = 7	yes/no		
426	Whether trained in operation of any farm machine	942, col. 20	yes/no		
427	Trained to operate two-wheel tractor	942, cols. 21-22 or 26-27 = 11	yes/no		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
428	Organization providing training	942, cols.23 or 28	na		
429	Year training occurred	942, cols. 24- 25- or 29-30	year		
430	Trained to operate four- wheel tractor	942, cols. 21- 22 or 26-27=12	yes/no		
431	Organization providing training	942, cols. 23 or 28	na		
432	Year training occurred	942, cols. 24- 25 or 29-30	year		
433	Trained to operate combine	942, cols. 21- 22 or 26-27=61	yes/no		
434	Organization providing training	942, cols. 23 or 28	na		
435	Year training occurred	942, cols. 24- 25 or 29-30	year		
436	Trained to operate thresher	942, cols. 21- 22 or 26-27=64	yes/no		
437	Organization pro- viding training	942, cols. 23 or 28	na		
438	Year training occurred	942, cols. 24- 25 or 29-30	year		
439	Trained to operate rice mill	942, cols. 21- 22 or 26-27=67	yes/no		
440	Organization providing training	942, cols. 23 or 28	na		
441	Year training occurred	942, cols. 24- 25 or 29-30	year		
442	Trained to operate irrigation pump	942, cols. 21- 22 or 26-27=71	yes/no		
443	Organization providing training	942, cols. 23 or 28	na		
444	Year training occurred	942, cols. 24- 25 or 29-30	year		
445	Trained to operate crane or loader	942 cols. 21-22 or 26-27=81 or 82	yes/no		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
446	Organization providing training	942, cols. 21 or 28	na		
447	Year training occurred	942, cols. 24-25 or 29-30	year		
448	No. of organization to which farmer belongs	942, col. 32	no.		
449	Type of first organization	942, col. 33	na		
450	Main advantage of belonging to 1st org.	942, col. 34	na		
451	2nd advantage of belonging to 1st organization	942, col. 35	na		
452	Main disadvantage of belonging to 1st organization	942, col. 36	na		
453	2nd disadvantage of belonging to 1st organization	942, col. 37	na		
454	Whether required to join organization	942, col. 38	yes/no		
455	No. of meetings of organization in WS	942, col.s 39 & 69	no.		
456	No. of meetings of organization in 1st DS	"	no.		
457	No. of meetings of organization in 2nd dry season	"	no.		
458	No. of meetings farmer attended in wet season	942, cols. 40 & 69	no.		
459	No. of meetings farmer attended in 1st dry season	"	no.		
460	No. of meetings farmer attended in second dry season	"	no.		

<u>Variable No.</u>	<u>Variable Name</u>	<u>Location (cols)</u>	<u>Unit</u>	<u>Local unit</u>	<u>Conversion factor</u>
461-472	Repeat of V449-460 for second organization	942, cols. 41-48 & 69			
473-484	Repeat of V449-460 for third organization	942, cols. 49-56 & 69			
485	Whether a farm record-keeping household	from FRK data	yes/no		

Punch.  
card  
column

FRK RESOURCE UTILIZATION FORM: input/output,  
income/expenditures (3 forms with 3 sets of data each)

01	/ / / /	/ / / /	/ / / /	Enterprise <sup>1/</sup>
04	/ / / /	/ / / /	/ / / /	Parcel/field number
07	/ / / /	/ / / /	/ / / /	Type of input/output <sup>2/</sup>
10	/ / / /	/ / / /	/ / / /	Activity <sup>3/</sup>
13	/ / / /	/ / / /	/ / / /	Date (week & day)
16	/ / / / / /	/ / / / / /	/ / / / / /	Amount, in hours, kg.
21	/	/	/	1 = cash; 2 = kind;
22	/ / / / / . / /	/ / / / / . / /	/ / / / / . / /	Value
28	/ / / /	/ / / /	/ / / /	Type of input/output <sup>2/</sup>
31	/ / / /	/ / / /	/ / / /	Activity <sup>3/</sup>
34	/ / / /	/ / / /	/ / / /	Date (week & day)
37	/ / / / / /	/ / / / / /	/ / / / / /	Amount, in hours, kg.
42	/ /	/ /	/ /	1 = cash; 2 = kind;
43	/ / / / / . / /	/ / / / / . / /	/ / / / / . / /	Value
49	/ / / /	/ / / /	/ / / /	Type of input/output <sup>2/</sup>
52	/ / / /	/ / / /	/ / / /	Activity <sup>3/</sup>
55	/ / / /	/ / / /	/ / / /	Date (week & day)
58	/ / / / / /	/ / / / / /	/ / / / / /	Amount, in hours, kg.
63	/ /	/ /	/ /	1 = cash; 2 = kind;
64	/ / / / / . / /	/ / / / / . / /	/ / / / / . / /	Value
70	/ / / /	/ / / /	/ / / /	Mixture pointer
73	/ /	/ /	/ /	Sub-subparcel
74	/ /	/ /	/ /	Card no.
75	/ / / /	/ / / /	/ / / /	III CODE
78	/ / / /	/ / / /	/ / / /	PROJECT CODE

<sup>1/</sup>See subject code

<sup>2/</sup>See input/output code

<sup>3/</sup>See activities code

Punch card column	FRK	DISPOSAL OF PRODUCT (one form (2 pages) per crop parcel)
01	/9/3/9/	(Mandatory code)
04	/ / / / /	Parcel ID*
		<u>TOTAL PRODUCTION</u>
07	/ / / / / / / /	What was the total no. of kilograms you produce this harvest? (If not in kg., specify amount and unit and convert to kg.) _____
12	/ / / / / / / /	What was the market value of this total production? (Verify price per kg. = _____)
		<u>DISPOSAL OF PRODUCT</u>
		<u>QUANTITY PAID TO HARVESTERS AND THRESHERS</u>
18	/ /	Did you use any amount of your produce to pay your harvesters and threshers this season? 0 = no; 1 = yes
19	/ / /	What kind of paying arrangement did you have with your harvesters/threshers? 01 = 1/6 of harvest to H/T      32 = 5% to thresher owner 02 = 1/7 of harvest to H/T      33 = 6% to thresher owner 03 = 1/8 of harvest to H/T      34 = 7% to thresher owner 04 = 1/6 with free weeding      77 = others (specify) 05 = 1/7 with free weeding 06 = 1/8 with free weeding 30 = 1/9 with free weeding 31 = 1/10 with free weeding <u>Extra codes</u> 20-29 = Open for Indonesia 40-49 = Open for Thailand
21	/ / / / / / / /	How many kgs. did you pay your harvesters/threshers?
26	/ / / / / / / /	What was the total market value of the amount you used to pay your harvesters/threshers? (Verify price per kg. _____)
		<u>QUANTITY FOR LANDLORD</u>
31	/ /	Did you use any amount of your produce to pay your rent and/or debt to your landlord this season? 0 = no; 1 = yes
32	/ / / / / / / /	How many kg. did you give to your landlord?
37	/ / / / / / / /	What was the total market value of the amount you gave/will give to your landlord? (Verify price per kg. = _____)
		<u>QUANTITY FOR DEBTS</u>
42	/ /	Did you use any amount of your produce to pay any of your debts this season (excluding debt to landlord)? 0 = no; 1 = yes
43	/ / / / / / / /	How many kg. did you use to pay debts?
48	/ / / / / / / /	What was the total market value of amount you used/will use to pay your debts? (Verify price per kg. = _____)
53-65	skip	
66	/ / / /	Date (week and day)
69	/ /	Cropping season ID: 1 = wet season; 2 = 2nd season; 3 = 3rd season
70	/ / / /	Crop code
73	/ / / / /	Sub-subparcel ID
74	/ 1 /	Card no.
75	/ / / / /	HOUSEHOLD CODE
78	/ / / / /	PROJECT CODE

\*Record /6/6/6/ if the farmer does not know the total harvest for each parcel or if he cannot give the exact amount of harvest disposed per parcel (Example: the quantity paid to debts might be the harvest from all his parcels).





Punch card column

FRR MACHINE USE, INCOME, MAINTENANCE (one card per farm activity)

01	/9/3/7/	/9/3/7/	(Mandatory code) <u>NOTE TO INTERVIEWER:</u> Duplicate information for cols. 04-14 from Form 915 or 936
04	//	//	Machine ID
07	///	///	<u>Type of machine:</u> 11 = 2-wheel tractor (w/ PE); 12 = 4-wheel tractor (w/ PE); 13 = crawler tractor; 14 = 2-wheel tractor (w/o E); 15 = 4-wheel tractor (w/o E); 16 = engine; 64 = Unresher (w/ PE); 65 = thresher (w/o E); 67 = rice mill; 71 = irrigation pump (w/ PE); 73 = irrigation pump (w/o E); 77 = others (specify)
09	////	////	Machine specification (no. of HP)
12	//	//	<u>Fuel/power used:</u> 1 = gasoline; 2 = diesel; 3 = kerosene; 4 = electricity
13	///	///	<u>Implement regularly attached to machine</u> <sup>1/</sup>
15	////	////	For what farm activity did you use this machine? (Fill one card per activity machine was used for. Record in order of occurrence (own farm use and custom work is recorded in separate cards per activity). See code list below for list of farm activities.
20	//	//	Was this machine used for activities on your own farm or for custom work on other farms? 1 = own farm; 2 = custom work; 3 = custom work at special reduced price; 4 = lent for free
21	//	//	What unit do you use to measure the amount of work accomplished? 1 = per hectare; 2 = per day; 3 = per hour; 4 = per parcel or contract; 5 = per ton of paddy; 6 = per ton of milled rice
22	////	////	How many units were accomplished by this machine for this activity?
25	////	////	<u>If custom work:</u> How much do you charge per unit?
28	////	////	<u>If custom work:</u> What was the total amount you received for the work accomplished by this machine for this activity?
32-37	skip	skip	
38	////	////	What was the total number of liters of fuel you consumed for this activity?
41	////	////	What was the total cost of fuel you used for this activity?
44	///	///	What was the total number of liters of oil you used for this activity?
46	///	///	What was the total cost of oil you used for this activity?
48	//	//	<u>If filters were changed:</u> How many filters did you use for this activity?
49	///	///	<u>If filters were changed:</u> What was the cost of the filters you used for this activity?
51	///	///	<u>If any tire repair:</u> How many times did you have to repair your tires for this activity?
53	////	////	<u>If any tire repair:</u> What was the total cost of tire repairs for this activity?
			<u>MACHINE OPERATORS:</u>
56	////	////	How many hours of family labor were used for this activity?
59	////	////	How many hours of hired labor were used for this activity?
62	////	////	How much did you pay your hired labor for this activity?
66	////	////	Date machine was used (week + day)
69	//	//	Cropping season: 1 = wet season; 2 = 2nd cropping season; 3 = 3rd cropping s.
			<u>ACCIDENTS WITH MACHINES</u>
70	// //	// //	Type(s) of accident with this machine <sup>3/</sup>
72	// //	// //	Seriousness of accident <sup>4/</sup>
74	//	//	Card no.
75	////	////	FARM CODE
78	////	////	PROJECT CODE

1/Implement regularly attached to machine:

- 21 = mouldboard plough
- 22 = disc plough
- 23 = chisel plough
- 24 = rectorator
- 31 = harrow disc or comb
- 33 = cultivator
- 34 = sub-soiler
- 41 = seed driller
- 42 = planter
- 45 = winnower
- 72 = irrigation pipes

4/Seriousness

- 1=minor injury (self med.)
- 2=injury requires attn. of doctor or nurse
- 3=injury requires hospitalization
- 4 = death

2/Activity:

- 010 = land preparation
- 011 = ploughing
- 017 = harrowing
- 060 = irrigation
- 080 = transporting
- 078 = threshing
- 084 = milling

3/Accidents

- 1=operator fell off machine
- 2=machine turned over operator
- 3=hand/foot was caught in machine
- 7=others (specify)

112

MACHINE BREAKDOWN (one card per machine breakdown)

Punch card column			
01	/9/3/8/	/9/3/8/	(Mandatory code)
04	//	//	NOTE TO INTERVIEWER: Duplicate information for columns 04-14 from Form 915, 936 or 937.
07	///	///	Machine ID
09	////	////	Type of machine: 11=2-wheel t (w/PE); 12=4-wheel t (w/PE); 13 = crawler tractor; 14=2-wheel t (w/o E); 15=4-wheel t (w/o E); 16 = engine; 64=thresher (w/PE); 65=thresher (w/o E); 67 = rice mill; 71 = irrigation pump (w/PE); 73=irrigation pump (w/o E); 77 = others (specify).
12	//	//	Machine specification (no. of HP)
13	///	///	Fuel/power used: 1 = gasoline; 2 = diesel; 3 = kerosene; 4 = electricity
15	///	///	Implement regularly attached to machine <sup>1/</sup>
17	//	//	What kind of breakdown did this machine have? (Write type of breakdown on space provided and code during editing)
18	//	//	How serious was the breakdown of this machine? 1 = machine still runs but has defect; 2 = machine not operable or endangers life; 7 = machine can no longer be used.
19	////	////	Did you repair this machine? 0 = no; 1 = yes
22	//	//	If machine repaired: How many days was the machine inoperable? (If machine not repaired cross out columns).
23	//	//	If machine broke down during field activity: How many days was the field activity delayed?
24	// //	// //	Was there any delay in the repair of this machine? 0 = no; 1 = yes
26	//	//	If machine repair was delayed: What caused the delay in the repair of this machine? (Rank up to 2 answers). 1 = no time to fix; 2 = no time to bring to mechanic; 3 = no mechanic available; 4 = no space parts available; 5 = no money for repair; 7 = others (specify in space below blanks).
27	////	////	If lack of spare parts was cause of delay: What action did you take to facilitate to acquire the necessary spare parts? 1 = substitute for spare part was manufactured; 2 = spare part was ordered; 3 = just waited
31	////	////	What was the total value of the spare parts used for this repair?
34	////	////	How many hours of family labor was used to repair this machine?
37	////	////	How many hours of hired labor (mechanic) was used to repair this machine?
41	//	//	What was the total amount you paid to your hired labor? (excluding spare parts if mentioned earlier).
42	///	///	Where was this machine repaired? 1 = on farm; 2 = local repair shop; 3 = local dealer's shop; 4 = on farm and local repair shop; 5 = on farm and local dealer's shop; 6 = local repair shop and local dealer's shop; 7 = others (specify in space below blanks); 8 = respondent's house
44	////	////	How far (in km) is the place where you had your machine repaired? (If repaired on farm, cross out columns).
47	//	//	How much did you spend to transport your machine to and from the place of repair?
48	//	//	Were you satisfied with the repair of this machine? 0 = no; 1 = yes
49	//	//	How many times have you had the same type of breakdown with this machine since you acquired it?
50	////	////	How old (in years) is this machine?
53-68	skip	skip	When did this machine break down? (Specify full date on blank; convert to week and day code during editing).
69	//	//	Cropping season: 1=wet season; 2=2nd cropping season; 3=3rd cropping season
70-73	skip	skip	
74	//	//	Card no.
75	////	////	HOUSEHOLD CODE
78	////	////	PROJECT CODE

<sup>1/</sup>Implement regularly attached to machine: 21 = mouldboard plough; 22 = disc plough; 23 = chisel plough; 24 = rotovator; 25 = plough and harrow; 31 = harrow (disc or comb); 33 = cultivator; 34 = sub-soiler; 41 = seed driller; 42 = planter; 45 = winnower; 72 = irrigation pipes

Punch card column	FRK	ANIMAL DISEASES/ACCIDENTS WITH ANIMALS
01	/9/4/5/	(Mandatory code)
		<u>ANIMAL DISEASES</u>
		<u>Animal disease 1</u>
07	/_/_/	What type of draft animal contracted disease? 01 = cattle; 02 = water buffalo; 03 = horse; 07 = others (specify) _____
09	/_/_/	How many of this type of animal contracted a disease?
11	/_/_/	What disease did these animal(s) contract? 1 = hoof and mouth disease; 2 = cold; 3 = anthrax (high fever due to infection); 4 = brucellosis (disease related to miscarriage or abortion); 5 = rinder pest (cattle disease); 7 = others (specify) _____
12	/_/_/	Did this animal contract this disease during a period of field activity? 0 = No; 1 = Yes
13	/_/_/_/	How many days was this field activity delayed?
16	/_/_/	How many days were you unable to use this animal for field work? <sup>1/</sup>
18-39	skip	
		<u>ACCIDENTS WITH ANIMALS</u>
		<u>Accident 1</u>
40	/_/_/	With what type of draft animal did you have an accident? 01 = cattle; 02 = water buffalo; 03 = horse; 07 = others (specify) _____
42	/_/_/	What type of accident occurred? 1 = animal stepped on farmer; 2 = animal pushed farmer; 3 = animal bit farmer; 7 = others (specify) _____
43	/_/_/	How serious was the accident? 1 = minor injury (self medication only) 2 = injury required attention of doctor/nurse; 3 = injury required hospitalization; 4 = death
44-65	skip	
66	/_/_/_/	Date disease/accident occurred (week + day)
69	/_/_/	Cropping season: 1 = wet season; 2 = second season; 3 = third season
70-73	skip	
74	/_/_/	Card no.
75	/_/_/_/	Farm code
78	/_/_/_/	Project code

<sup>1/</sup>If animal can no longer be used for field work (e.g., permanently incapacitated), record /7/7/.