

I-G

**Socio-Economic Baseline Survey
& Participatory Development and Organization**

G. Socio-Economic Baseline Survey & Participatory Development and Organization

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Annex G.1 Socio-economic Baseline Survey: Objectives, Methodology and Sample Selection

Objectives

The main objective was to identify the overall socio-economic status of the Study Area (SA), including social structure, infrastructure, agro-sylvo-pastoral and other economic activities, access to resources and community organizations.

Methodology

The baseline survey was conducted through interviews using questionnaire formats (Annex G.2 and G3). Enumerators visited key informants and farm households who were selected at random in the sample villages. Responses were recorded on the spot by the enumerator who had asked the questions. Though simultaneously conducted, the survey consisted of two parts: the Village Profile Survey; and the Household Survey. The information on Village Profile was obtained through key informant interviews, mainly with the village headman/woman, often assisted by his/her advisers and relatives. When possible school teachers, agricultural field assistants, health staff, etc. were also interviewed to establish the Village Profile. Household survey was conducted individually at the respondent's homestead. Principally, the interview was targeted to the household head, though in case of his/her absence the spouse or an adult member of the household was interviewed.

Selection of Sample Villages and Households

The SA comprises of 7 TAs in Blantyre District and 2 TAs in Chiradzulu District. In order to select sample villages, the first task was to list all the villages in the SA¹. 1998 census maps² were used to pick up all the villages in the SA. The village list in each TA is found in Annex G4³.

Based on this village list, the number of sample villages in each TA was determined in proportion to the number of villages in the SA, to make the total of 27 villages (see the following table). Then, sample villages were selected randomly in each TA.

¹ As our SA does not correspond to the administrative boundaries, it was not simple to identify the villages in the SA. District pay roll record to the village headman/woman could be used as a village list if the SA coincided with administrative boundaries such as TAs.

² 1/25000 TA maps were updated prior to the 1998 census. The map identifies villages (without boundaries) and other main features such as schools, churches, clinics, trading centres, etc.. Each TA is divided into several Enumerating Areas (EAs).

³ To date, the result of 1998 census at village level is not yet out. Only the population and the household number at EA level have been published. Thus, the village list in appendix contains only the population from 1977 and 1987.

Number of Sample Villages in each TA

Name of TA	Number of Villages in Study Area	Distribution (%)	Calculated number of Sample Villages	Number of Sample Villages	Number of Sample Households
Chigaru	22	6.5%	1.752	1	6
Kuntaja	66	19.5%	5.257	5	30
Kunthembwe	8	2.4%	0.637	1	6
Kapeni	100	29.5%	7.965	8	48
Lundu	8	2.4%	0.637	1	6
Makata	28	8.3%	2.230	2	12
Machinjili (rural)	47	13.9%	3.743	4	24
Chitera	36	10.6%	2.867	3	18
Mpama	24	7.1%	1.912	2	12
TOTAL	339	100.0%	27	27	162

The name and the location of the sample villages are shown in Annex G.5.

The Household Survey was conducted on 6 households in each sample village regardless of the size of the village. As no household list was available, sample households were selected based on the geographical distribution of households within the village. In total 162 households were surveyed.

Annex G.2 Questionnaire for Socio-economic Baseline Survey: Village Profile

Baseline Survey on the Socio-economic conditions for the JICA Master Plan Study on Watershed Rehabilitation in Middle Shire

Village Profile

Ref No. _____

Survey Date: _____ / _____ / 1999

Enumerator: _____

Village Name: _____

Group Village: _____

TA: _____

1. Kunthembwe 2. Chigaru 3. Lundu 4. Kapenii 5. Makata 6. Machinjili
7. Kuntaja 8. Chitera 9. Mpama

Section A General Information on the village

1. The name of the village headman: _____
2. Sex of the village headman: (male, female)
3. Age of the village headman: _____ years old
4. Lineage of the village headman: (matriarchal, patriarchal)
5. Lineage of the villagers: (matriarchal, patriarchal, both)
6. Population: male _____ female _____ total _____
7. Is the population increasing for the past 5 years? (yes, no, no change)
8. Number of household in the village: _____
9. Ethnic group of the villagers:
 - a. _____ (all, majority, some)
 - b. _____ (some, minority)
 - c. _____ (some, minority)
 - d. _____ (some, minority)
 - e. _____ (some, minority)

11. Origin / history of the village:

- a. primary school (in the village, _____ km from the village)
- b. secondary school (in the village, _____ km from the village)
- c. clinic (in the village, _____ km from the village)
- e. market (in the village, _____ km from the village)
- f. nearest transport (in the village, _____ km from the village)
- g. grinding mill (in the village, _____ km from the village)

14. What is the source of drinking water for the villagers?

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16. How many shallow wells are there in the village? _____

18. If yes, please specify the problems.

19. What are the main problems of the village?

Section B **Land Use, Forestry and Agriculture**

1. Village area
 - a. Total village area _____ ha
 - b. Farmland: _____ ha
 - c. Forest/woodlot _____ ha
 - d. Grazing area: _____ ha
 - e. Non-arable land _____ ha
 - f. Others: _____ ha
2. Does your village have a village/community forest? (yes, no)
3. If yes for Q2, what is the area of the forest? _____ ha
4. If yes for Q2, what kinds of trees are there?

5. If yes for Q2, how is the forest used by the villagers?

6. If yes for Q2, how is the forest managed? (committee, rules, penalty, etc.)

7. If no for Q2, was there a village/community forest before? (yes, no)
8. If yes for Q7, how did the village/community forest disappear?

9. Is land erosion or landslide observed in the village? (yes, no)
10. If yes for Q9, how does it happen?

17. How much did the farmers in the village pay for the following item (1998 wet season)?

The items which the villagers do not buy should be crossed (XXX)

- | | |
|---|----------------|
| a. Fertilizer A.N | _____ Kw/kg |
| b. Compound | _____ Kw/kg |
| c. Urea | _____ Kw/kg |
| d. local corn seed | _____ Kw/kg |
| e. hybrid corn seed | _____ Kw/kg |
| f. insecticide | _____ Kw/litre |
| g. herbicide | _____ Kw/litre |
| h. fungicide | _____ Kw/litre |
| i. Animal manure | _____ Kw/kg |
| j. corn stalk in the field at the time of harvest | _____ Kw/kg |
| k. orange seedling | _____ Kw/piece |
| l. avocado seedling | _____ Kw/piece |
| m. mango seedling | _____ Kw/piece |
| n. lemon seedling | _____ Kw/piece |

18. How much did the farmers in the village receive by selling the following items (1998)?

The items, which the villagers do not sell, should be crossed (XXX)

- | | | | |
|----------------|-------------|--------------|-----------------------|
| a. maize | _____ Kw/kg | orange | _____ Kw/kg |
| b. sorghum | _____ Kw/kg | avocado | _____ Kw/kg |
| c. millet | _____ Kw/kg | mango | _____ Kw/kg |
| d. groundnuts | _____ Kw/kg | lemon | _____ Kw/kg |
| e. cotton | _____ Kw/kg | banana | _____ Kw/kg |
| f. sunflower | _____ Kw/kg | papaw | _____ Kw/kg |
| g. cabbage | _____ Kw/kg | live cow | _____ Kw/head (350kg) |
| h. tomato | _____ Kw/kg | live goat | _____ Kw/head (60kg) |
| i. Cauliflower | _____ Kw/kg | live chicken | _____ Kw/head (1.5kg) |
| j. broccoli | _____ Kw/kg | live pig | _____ Kw/head (60kg) |
| k. lettuce | _____ Kw/kg | live sheep | _____ Kw/head (50kg) |

Section C

Organizations and Community Activities

1. What kind of organizations do you have in your village or in your area? Are they active?
 - a. _____ (active, moderate, not active)
 - b. _____ (active, moderate, not active)
 - c. _____ (active, moderate, not active)
 - d. _____ (active, moderate, not active)
 - e. _____ (active, moderate, not active)
2. Is there (or was there) any project implemented in the village? (yes, no)
3. If yes, what kind of project is it?

4. Do villagers form a group to apply for loans? (yes, no)
5. If yes, which organizations do they receive loans from? What is the main use of loans?
 - a. _____
 - b. _____
 - c. _____
6. What kind of communal activities are (or were) the villagers engaged in?
 - a. _____
 - b. _____
 - c. _____

Annex G.3 Questionnaire for Socio-economic Baseline Survey: Household Survey

Baseline Survey on the Socio-economic conditions for the JICA Master Plan Study on Watershed Rehabilitation in Middle Shire

Household Survey

Ref. No. _____

Survey Date: _____ / _____ / 1999

Survey Time: start _____ end _____

Enumerator: 1 _____

Village Name: 2 _____

TA: 3 _____

1. Kunthembwe 2. Chigaru 3. Lundu 4. Kapeni 5. Makata 6. Machinjili
7. Kuntaja 8. Chitera 9. Mpama

Section A General Information

- | | | | |
|----|---|-----|------------------------------|
| 1 | Name of the respondent | A1 | _____ |
| 2 | Sex
1. male 2. female | A2 | <input type="text"/> |
| 3 | Age | A3 | <input type="text"/> yrs |
| 4 | Ethnic group
1. Yao 2. Ngoni 3. Lomwe 4. Sena
5. Chewa 6. Nyanja 7. Mang'anja
8. others (specify) _____ | A4 | <input type="text"/> |
| 5 | Religion
1. Christian 2. Muslim 3. Indigenous
4. Others (specify) _____ | A5 | <input type="text"/> |
| 6 | Lineage
1. matriarchal 2. patriarchal 3. neither | A6 | <input type="text"/> |
| 7 | Were you born in this village?
1. yes 2. no | A7 | <input type="text"/> |
| 8. | If NO in A7, when did you move to this village? | A8 | <input type="text"/> yrs ago |
| 9 | If NO in A7, why did you settle in this village?
1. by marriage
2. immigrated (reason) _____
3. others (specify) _____ | A9 | <input type="text"/> |
| 10 | Number of household members (including the respondent) | A10 | <input type="text"/> |

11 List of household members (The first row should be the respondent)

	a) Relationship to HH Head (code)	b) Sex M/F	c) Age	d) Main Occupation (code)	e) Side-job (code)	f) Education (code)
1	A11a1 (head)	A11b1	A11b1	A11d1	A11e1	A11e1
2	A11a2	A11b2	A11b2	A11d2	A11e2	A11e2
3	A11a3	A11b3	A11b3	A11d3	A11e3	A11e3
4	A11a4	A11b4	A11b4	A11d4	A11e4	A11e4
5	A11a5	A11b5	A11b5	A11d5	A11e5	A11e5
6	A11a6	A11b6	A11b6	A11d6	A11e6	A11e6
7	A11a7	A11b7	A11b7	A11d7	A11e7	A11e7
8	A11a8	A11b8	A11b8	A11d8	A11e8	A11e8
9	A11a9	A11b9	A11b9	A11d9	A11e9	A11e9
10	A11a10	A11b10	A11b10	A11d10	A11e10	A11e10
11	A11a11	A11b11	A11b11	A11d11	A11e11	A11e11
12	A11a12	A11b12	A11b12	A11d12	A11e12	A11e12

Code for Relationship

1. wife
2. husband
3. mother
4. father
5. daughter
6. son
7. sister
8. brother
9. grandmother
10. grandfather
11. granddaughter
12. grand son
13. aunt
14. uncle
15. cousin
16. others (specify)

Code for Main Occupation and Side-job

1. farmer
2. farm labourer
3. fisherman
4. public officer (specify)
5. salary worker
6. casual labourer (non-farming)
7. private business (specify)
8. no job
9. student
10. child under school age
11. others (specify)

Code for Education

1. no formal education
2. some years in primary school
3. complete primary school
4. some years in secondary school
5. complete secondary school
6. complete vocational school
7. more than secondary school

Section B

Livelihood

- 1 What are the main sources of cash income for your household? Please indicate the order of importance and the amount per year.

- a. selling farm products
- b. selling livestock / poultry
- c. selling fish
- d. selling other products (specify) _____
- e. salary from permanent job
- f. wage from temporary job
- g. private business (specify) _____
- h. remittance from family members
- i. lending money
- j. others (specify) _____

order		amount
B1a1	B1a2	Kw
B1b1	B1b2	Kw
B1c1	B1c2	Kw
B1d1	B1d2	Kw
B1e1	B1e2	Kw
B1f1	B1f2	Kw
B1g1	B1g2	Kw
B1h1	B1h2	Kw
B1i1	B1i2	Kw
B1j1	B1j2	Kw

- 2 What is the total cash income of your household per year?

B2

- 3 How many of your household members have an income source other than farming?

B3

- 4* Which work are you or any of your household members engaged in?

1. fishing 2. apiary 3. livestock / poultry 4. selling wood
5. charcoal production 6. brick production
7. running a shop / depo 8. food production 9. handicraft
10. beer brewing

B4

- 5 What are the main items of cash expenditure of your household? Please indicate the order of importance and the amount per year.

- a. food
- b. clothes
- c. children's education
- d. medical expenses
- e. repayment of debt
- f. agricultural input (fertilizer, seeds, etc.)
- g. transport
- h. others (specify) _____

order		amount
B5a1	B5a2	Kw
B5b1	B5b2	Kw
B5c1	B5c2	Kw
B5d1	B5d2	Kw
B5e1	B5e2	Kw
B5f1	B5f2	Kw
B5g1	B5g2	Kw
B5h1	B5h2	Kw

- 6 What is the total cash expenditure of your household per year?

B6 Kw/year

- 7 Do you (or any of your household members) use any credit scheme?
1. yes 2. no

B7

(If your answer is NO, proceed to B12)

- 8* If YES for B7, what is the credit source?

- 1 SMEF 2. Malawi Rural Finance 3. APIP 4. FINCA
5. private financial company 6. From family or relatives
7. others (specify) _____

B8

- 9* If YES for B7 what is the main use of credit?
 1.fertilizer 2. seeds 3. child's education
 4. clothes 5. medical expenses 6. Repayment of debt
 7. food 8. social entertainment 9. marriage
 10. others (specify) _____ B9
- 10 If YES for B7, how much did you borrow (1998-99 wet season)? B10 Kw
- 11 If YES for B7, how much did you repay for 1998-99 debt? B11 Kw
- 12 If NO for B7, what is the main reason for not borrowing ?
 1. have enough money 2. afraid of borrowing
 3. no collateral 4. no guarantor
 5. bureaucratic red tape against the loan application
 6. not eligible as a defaulter or in arrears
 7. others (specify) _____ B12
- 13 a. What is the main source of drinking water in the rainy season? B13a
- b. What is the main source of drinking water in the dry season? B13b
1. shallow well 2. borehole 3. pond/lake 4. river
 5. tapped water 6. others (specify) _____
- 14 How far is the water source in the rainy season? B14a minutes
 B14b km
- 15 How far is the water source in the dry season? B15a minutes
 B15b km
- 16 How often has water to be fetched per day? B16 times/day
- 17 Is water sufficient for your household?
 1. Sufficient throughout the year
 2. Mostly sufficient, but sometimes not sufficient
 3. Not sufficient most of the time B17
- 18 Who usually fetches water?
 1. man 2. woman 3. boy 4. girl 5. not fixed B18
- 19 Do you boil water before drinking?
 1. yes 2. no B19
- 20 What fuel do you usually use for cooking? (fuel code) B20
- 21 What fuel do you usually use for heating? (fuel code) B21
- 22 What fuel do you usually use for lighting? (fuel code) B22

Fuel Code

1. wood 2. charcoal 3. grass 4. gas 5. electricity
 6. kerosene 7. maize stokes/ pigeon pea stems
 8. generator 9. animal dung 10. animal/plant oil
 11. others (specify) _____

11. others (specify) _____
- 23 If you use wood for cooking, heating or lighting, how do you obtain wood?
 1. own harvest 2. purchase 3. combination of both
 4. others (specify) _____ B23
- 24 If you use wood for cooking, heating or lighting, how many bundles (head load) of wood do you use per week?
 B24
- 25 In case of own harvest in B23, how far is the forest? (one way)
 B25a minutes
 B25b km
- 26 a. In case of own harvest in B23, how much time per week do you spend collecting wood?
 B26a hours/week
- b. How much do you have to pay as fees for using the forest/woodlot?
 B26b Kw/bundle
- 27 In case of own harvest in B23, who collects fuel wood?
 1. man 2. woman 3. boy 4. girl 5. not fixed B27
- 28 In case of purchase in B23, what is the price?
 B28 Kw/bundle
- 29 Is fuel wood easily available?
 1. easily available 2. not so easy, but available
 3. not sufficient 4. not available at all B29
- 30 Do you have a toilet in your household compound?
 1. yes 2. no B30
- 31 If yes for B30, what type of toilet do you have?
 1. pit latrine 2. san plat 3. ventilated pit latrine
 4. flush toilet
 5. others (specify) _____ B31
- 32 How do you mainly obtain following food items? (code)
- | | | |
|---------------------------|------|----------------------|
| a. maize | B32a | <input type="text"/> |
| b. cassava/sweet potatoes | B32b | <input type="text"/> |
| c. rice | B32c | <input type="text"/> |
| d. vegetables | B32d | <input type="text"/> |
| e. fruit | B32e | <input type="text"/> |
| f. meat | B32f | <input type="text"/> |
| g. fish | B32g | <input type="text"/> |
| h. eggs | B32h | <input type="text"/> |
- Code**
 1. own product 2. purchase 3. Exchange 4. gifts from relatives
 5. others (specify) _____
- 33 From the following items, which are most frequently eaten at home? (choose 3 in order of frequency)
- | | | |
|------------------------------------|------|----------------------|
| 1. chicken 2. eggs 3. pork 4. beef | B33a | <input type="text"/> |
| 5. goat meat 6. fish 7. milk | B33b | <input type="text"/> |
| 8. others (specify) _____ | B33c | <input type="text"/> |

- 34 How often do you eat any of the above items? B34 times/week
- 35* Which diseases have you or your household members suffered for the last one year.?
 1. malaria 2. diarrhea 3. typhoid 4. cold 5. AIDS
 6. eye disease 7. skin disease 8. tuberculosis
 9. pneumonia 10. leprosy 11. hepatitis 12. coughing
 13. others (specify) _____
 14. no disease B35
- 36 How far is the nearest clinic? B36 km
- 37 How far is the nearest bus stop? B37 km
- 38 Where did the most recent child birth of your family take place?
 1. hospital / clinic 2. home 3. no recent child birth
 4. others (specify) _____ B38
- 39 Did the mother have any medical assistance?
 1. none 2. by traditional midwife 3. by trained midwife
 4. others (specify) _____ B39
- 40 Does any of your household member practice family planning?
 1. yes 2. no B40
- 41* If YES for B40, what are the contraceptive methods you or your household members are using?
 1. pills 2. loop/coil 3. condoms 4. traditional method
 5. surgical method (men) 6. surgical method (women)
 7. others (specify) _____
 8. don't know B41
- 42 Do you know a ceramic improved cooking stove (*mbaula*)?
 1. yes 2. no B42
- 43 Do you use a ceramic improved cooking stove (*mbaula*)?
 1. yes 2. no B43
- 44 If no for B43, what is the reason of not using it?
 1. not available 2. expensive 3. no need
 4. others (specify) _____ B44

Section C Community Activity

- 1* Which organizations are important in your village?
 1. village committee 2. farmers' club 3. religious group
 4. women's group
 5. others (specify) _____ C1
- 2 Do you belong to any organization?
 1. yes 2. no C2
- 3 If YES for C2, of which organization are you a member?
 1. village committee 2. farmers' club 3. religious group
 4. women's group
 5. others (specify) _____ C3
- 4 If NO for C2, what is the reason?
 C4 _____

- 5 What items need to be improved in your community? (Choose 3 in order of importance).
 1. drinking water supply
 2. roads
 3. transportation
 4. irrigation water
 5. drainage/sewage facilities
 6. education facilities
 7. health/medical facilities
 8. food shortage
 9. credit systems
 10. agricultural technology
 11. forestation C5a
 12. security C5b
 13. others (specify) _____ C5c
- 6* Which organizations do you know as assistance organizations?
 1. MASAF 2. World Vision 3. FINCA 4. CURE
 5. OXFAM 6. APIP 7. Concern Universal 8. GTZ
 9. Government 10. Malawi Rural Finance Company
 11. Others (specify) _____ C6

Section D

Landholding and Land Tenure

- 1 What are the areas of your land?

a. farm land	D1a	Acres
b. dimba	D1b	Acres
c. grass field	D1c	Acres
d. woodlot	D1d	Acres
e. homestead	D1e	Acres
f. non-arable land	D1f	Acres
g. others	D1g	Acres

- 2 What is the total landholding area of your household (including cultivated and non-cultivated farmland, grass fields, forest, homestead, etc.)?

D2	Acres
----	-------

- 3 Do you have enough land to feed your family?

1. yes 2. no	D3	
----------------	----	--

- 4 Do you rent (in) land for production such as farming, pasture, forestry?

1. yes 2. no	D4	
----------------	----	--

- 5 If YES in D4, how much is the rental charge of land? Or specify the payment in kind.

In case payment in kind (specify) _____	D5a	Kw/ha/year
	D5b	

- 6 If YES in D4, who do you rent the land from?

1. family or relatives 2. villagers 3. owner who lives in town 4. others (specify)	D6	
---	----	--

- 7 Have you ever sold your land?

1. yes 2. no	D7	
----------------	----	--

- 8 From whom did you inherit your land?

1. mother 2. father 3. mother in law 4. father-in-law 5. others (specify) _____	D8	
--	----	--

- 9 How do you know your land boundaries?

1. history/custom 2. document 3. mark 4. others (specify) _____	D9	
--	----	--

Section E Agriculture

1. Cropping in the wet season

	Plot 1	Plot 2	Plot 3	Plot 4	Plot 5
a. plot size (ha)	E1a1	E1a2	E1a3	E1a4	E1a5
b. crop (code)	E1b1	E1b2	E1b3	E1b4	E1b5
c. planted area (ha)	E1c1	E1c2	E1c3	E1c4	E1c5
d. irrigation (code)	E1d1	E1d2	E1d3	E1d4	E1d5
e. chemical fertilizer (kg)	E1e1	E1e2	E1e3	E1e4	E1e5
f. organic fertilizer (kg)	E1f1	E1f2	E1f3	E1f4	E1f5
g. insecticide (litre)	E1g1	E1g2	E1g3	E1g4	E1g5
h. herbicide (litre)	E1h1	E1h2	E1h3	E1h4	E1h5
i. output (kg)	E1i1	E1i2	E1i3	E1i4	E1i5
j. how much is sold (%)	E1j1	E1j2	E1j3	E1j4	E1j5

2. Cropping in the dry season.

	Plot 1	Plot 2	Plot 3	Plot 4	Plot 5
a. plot size (ha)	E2a1	E2a2	E2a3	E2a4	E2a5
b. crop (code)	E2b1	E2b2	E2b3	E2b4	E2b5
c. planted area (ha)	E2c1	E2c2	E2c3	E2c4	E2c5
d. irrigation (code)	E2d1	E2d2	E2d3	E2d4	E2d5
e. chemical fertilizer (kg)	E2e1	E2e2	E2e3	E2e4	E2e5
f. organic fertilizer (kg)	E2f1	E2f2	E2f3	E2f4	E2f5
g. insecticide (litre)	E2g1	E2g2	E2g3	E2g4	E2g5
h. herbicide (litre)	E2h1	E2h2	E2h3	E2h4	E2h5
i. output (kg)	E2i1	E2i2	E2i3	E2i4	E2i5
j. how much is sold (%)	E2j1	E2j2	E2j3	E2j4	E2j5

Irrigation Code

1. no irrigation
2. well
3. pond
4. river
5. canal
6. others

Crop Code

1. maize, hybrid
2. maize, inbred
3. maize, local
4. sorghum
5. millet
6. groundnuts
7. barley
8. paddy

17. sweet potatoes
18. Irish potatoes
19. tomato
20. cabbage
21. chilli
22. onion
23. garlic
24. string beans

25. orange
26. banana
27. mango
28. papaw
29. wheat
- 30.
- 31.
- 32.

- 33.
- 34.
- 35.
- 36.
- 37.
- 38.
- 39.
- 40.

3. Livestock

	Number of animals owned at present	During one year (1998)				
		Number of animals bred	Number of animals bought	Number of animals sold	Number of animals eaten/dead	Number of animals stolen
a. cattle	E3a1	E3a2	E3a3	E3a4	E3a5	E3a6
b. goats	E3b1	E3b2	E3b3	E3b4	E3b5	E3b6
c. pigs	E3c1	E3c2	E3c3	E3c4	E3c5	E3c6
d. turkey	E3d1	E3d2	E3d3	E3d4	E3d5	E3d6
e. pigeon	E3e1	E3e2	E3e3	E3e4	E3e5	E3e6
f. chicken	E3f1	E3f2	E3f3	E3f4	E3f5	E3f6
g.	E3g1	E3g2	E3g3	E3g4	E3g5	E3g6
h.	E3h1	E3h2	E3h3	E3h4	E3h5	E3h6
i.	E3i1	E3i2	E3i3	E3i4	E3i5	E3i6

4* How do you cultivate your field before sowing maize or other cereals?

1. making high ridges with hoe
2. making low ridges with hoe
3. cultivate with hoe but without ridges
4. plough by a draught animal
5. first burn the field
6. others (specify) _____

E4

5. Do you plant river beans (*jelejele*) or pigeon peas (*nandolo*) on your field?

1. yes, all of my field
2. Yes, but not all of my field
3. no

E5

(If YES, proceed to E7)

6. If NO in E5, what is the main reason?

1. seeds are expensive
2. no effect is expected
3. others (specify) _____

E6

7 Do you practice the following cultivation techniques in the field?

1. yes
2. no

a. apply farm yard manure

E7a

b. apply cut residue of previous year's crops

E7b

c. apply straw mulch or grass mulch to cover field

E7c

d. incorporate woodlot litter, green leaves (*jelejele*, etc.) into the soil

E7d

e. plant (vetiver) grass on the hedge of the field

E7e

8 Have you ever seen soil of your field washed away by rain?

1. yes, often in the rainy season
2. yes, but seldom
3. no, because my field is flat
4. no, because of high ridging
5. no, because of grass cover
6. no, because of box ridges
7. no, because of other reason (specify) _____

E8

9* Where is your crop field?

1. on steep slope
2. on gentle slope
3. on flat land

E9

- 10 Is the harvest from your field constant or variable from year to year?
 1. fairly constant
 2. changing but little
 3. variable by weather
 4. tendency to decrease year by year
 5. others (specify) E10
- 11 What is your most important source of agricultural technology? (choose one)
 1. parents 2. neighbor farmers 3. extension worker
 4. farm input supplier 5. own experience
 6. others (specify) _____ E11
- 12 Do you use chemical fertilizer?
 1. yes 2. no E12
- 13 If YES in E12, for what crop do you use?
 1. maize 2. vegetables 3. cotton 5. Tobacco
 5. others (specify) _____ E13
- 14 If NO in E12, what is the reason?
 1. too expensive 2. not good for the soil 3. not effective
 4. no means of transportation 5. Others (specify) _____ E14
- 15 Do you use organic fertilizer?
 1. yes 2. no E15
- 16 If YES in E15, for what crop do you use?
 1. maize 2. vegetables 3. cotton 4. tobacco
 5. others (specify) _____ E16
- 17 If NO in E15, what is the reason?
 1. not available 2. not effective 3. no knowledge
 4. too expensive 5. . others (specify) _____ E17
- 18 How do you shell maize?
 1. by machine 2. by hand 3. by threshing sticks E18
- 19* Who does the shelling of maize?
 1. male family member 2. female family member
 3. hired male labourer 4. hired female labourer E19
- 20 How do you grind maize?
 1. by engine mill 2. pound manually by pestle
 3. both 4. others (specify) _____ E20
- 21 Do you hire any farm labor?
 1. yes, only men 2. yes, only women
 3. Yes, both men and women 4. no E21
- 22 If YES in E21, how much do you pay as wage (without meals)?
- | | | |
|----------------|------|------------|
| a. men | E22a | Kw/day |
| b. women | E22b | Kw/day |
| c. by contract | E22c | Kw/___acre |

- 23* If YES in E21, what work is done by hired labourers?
 1. land preparation 2. sowing 3. weeding
 4. harvesting 5. post harvest 6. pest control
 7. others (specify) _____ E23
- 24* Where do you sell your crops?
 1. at the farm/home 2. at the market
 3. at ADMARC 4. do not sell E24
- 25 How far is the market? a. local market E25a km
 b. ADMARC E25b km
- 26* Who buys your crops?
 1. local people 2. private traders 3. ADMARC
 4. others (specify) _____ E26
- 27 How do you transport your crops to the market?
 1. own transport 2. hired transport 3. do not transport
 E27
- 28 If you use transport, what is the main type of transport?
 1. tractor 2. pick-up 3. truck 4. bus 5. tiller
 6. bicycle 7. ox-cart 8. hand-cart
 9. Hand/ head carry 10. others (specify) _____ E28
- 29 If you use hired transport, how much do you pay from the farm to the market?
 E29 Kw

Section F**Agroforestry**

Definition: Farmland management system which combines tree planting, farm cultivation, compost, livestock, etc.

1 Do you know agroforestry?
1. yes 2. no F1

2 Do you practice agroforestry?
1. yes 2. no F2

(If your answer is NO, proceed to F10)

3* If yes for Q2, what type of agroforestry are you practising?
1. alley cropping 2. planting of farmland hedge trees 3. river, valley hedge
planting 4. wind bread 5. compost mulching 6. others (specify) _____
F3

4* If yes for Q2, what trees or grasses do you plant? (choose from the list) F4

5* If yes for Q2, what benefit do you obtain from those trees or plants?
1. fruits 2. livestock feeding 3. fuelwood
4. grasses for mulching 5. protection from land erosion
6. preserve soil humidity
7. others (specify) _____ F5

6* If yes for Q2, how much income does your agroforestry earn?
a. fruits F6a Kw
b. livestock feeding F6b Kw
c. fuelwood F6c Kw
others (specify)
d _____ F6d Kw
e _____ F6e Kw

7* If yes for Q2, what organization do you have for developing agroforestry?
1. village group 2. TA 3. committee 4. RDP
5. EPA 6. none 7. others (specify) _____ F7

8* If yes for Q2, how do you maintain agroforestry?
1. lower story cutting 2. fertilizing 3. agri-chemical 4. complement planting
5. others (specify) _____ F8

9 If yes for Q2, how do you use plant or grasses compost after harvest?
1. fire start 2. livestock feeding 3. cultivation
4. others (specify) _____ F9

10 If no for Q2, do you have intention to start agroforestry?
1. yes 2. no F10

11 If no for Q10, what are the reasons?
1. no seedling 2. no land space for agroforestry
3. no effect 4. no reasons 5. no knowledge
6. others (specify) _____ F11

Section G Forestry

- 1 Do you have a forest/woodlot that you have a right to use?
1. yes 2. no G1
- (If NO, proceed to G11)
- 2 If yes in G1, what type of forest is it?
1. community forest 2. customary land 3. own forest
4. reserved forest 5. Others (specify) _____ G2
- 3* If yes in G1, how do you benefit from the forest other than fuelwood?
1. poles 2. bee hives 3. medical plants 4. Hunting 5. collecting fallen leaves
6. keeping guinea fowls 7. Others (specify) _____ G3
- 4 If yes in G1, how big is the forest? G4 ha
- 5 If yes in G1, how many trees in the forest? G5 trees
- 6* If yes in G1, what kind of species of trees are there in the forest? G6
- 7 If yes in G1, how many households share the forest and forest products? G7 households
- 8 If yes in G1, how do you share the forest and forest products?
1. organization (specify) _____ 2. rules (specify) _____ 3. random
4. others (specify) _____ G8
- 9 If yes in G1, who manages the forest? G9
- 10* If yes in G1, what kind of maintenance of the forest are undergoing?
1. lower story cutting 2. thinning 3. clear cutting 4. agri-chemical 5. complement
planting 6. replanting 7. nothing special 8. others (specify) _____ G10
- 11 Do you want to plant (more) trees?
1. yes 2. no G11
- 12* If YES in G11, what are the purpose of planting trees?
1. fuelwood for cooking (at home)
2. fuelwood for heating (at home)
3. fuelwood for selling 4. production of wood poles
5. production of fruits 6. improvement of soil condition
and environment 7. production of charcoal
8. production of handicraft or carving
9. others (specify) _____ G12
- 13 If NO in G11, what are the reasons?
1. no seeds 2. no seedlings 3. no space for trees 4. no effect 5. trees will be
lost by stealing, fire, etc. 6. no reason
7. others (specify) _____ G13
- 14 In your opinion what is the main cause of forest fire?
1. accidental fire 2. intentional fire 3. slash and burn
4. others (specify) _____ G14