

Questionnaire on farm households prepared by FES, Yale University (USA) and CEEPA, University of Pretoria (South Africa) for the GEF Regional Climate, Water and Agriculture Project: Impacts on and Adaptation of Agro-Ecological Systems in Africa, May 2004

An agricultural survey for more than 9,500 African households
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Introductory Statement:

"Scientific evidence have confirmed that the climate will likely change in the future with implications for agriculture. The information provided by you in this interview about your farm activities in the last 12 months farming season will contribute to understanding the likely impacts of climate on agriculture in _____[**COUNTRY TEAM: insert name of country**] and in Africa as a whole. Your responses to these questions will be anonymous.

This country study is being conducted by _____
(**COUNTRY TEAM: please write the name of your institution in the space provided**).

Thank you for your kind co-operation."

NOTE: Variable giving information about country teams is not in dataset.

TS: Time Interview Began: _____ **TIB** _

1.0.1 Type of Farm Entity: 1.0.1 (**KEY for 1.0.1:** 1: small-scale; 2: medium scale; 3: large-scale) (Interviewer: *Please complete this question following the*
farmtype *classification of farm types in the country's sample design*)

1.0.2 Please state the relationship of the respondent to the head of the household of the farm: 1.0.2 **relhead**

KEY for 1.0.2

1. Head of household; 2. Husband;
3. Wife; 4. Child; 5. Grandchild; 6. Parents; 7. Siblings;
8. Other family members (includes household helpers)
9. Manager/other proxy for owner

Section 1: Household Roster--Members of Households and Education

1.1 Household size (of owner of the farm): 1.1 **hhsiz**

District Code: _____; Household ID: _____

1.2 Household Characteristics.

| | 1.2.1 | 1.2.2 | 1.2.3 | 1.2.4 | 1.2.5 | 1.2.6 |
|---|---|-----------------|---|-----------------------------------|---|---|
| | Gender | Age | Marital status | Education (in Number of Years) | Work on Farm Activities? | Work on Non-Farm Activities |
| 1 | 1.2.1.1 gender1 | 1.2.2.1 age1 | 1.2.3.1 married1 | 1.2.4.1 educ1 | 1.2.5.1 farmwork1 | 1.2.6.1 nfarmwork1 |
| 2 | 1.2.1.2 gender2 | 1.2.2.2 age2 | 1.2.3.2 married2 | 1.2.4.2 educ2 | 1.2.5.2 farmwork2 | 1.2.6.2 nfarmwork2 |
| 3 | 1.2.1.3 gender3 | 1.2.2.3 age3 | 1.2.3.3 married3 | 1.2.4.3 educ3 | 1.2.5.3 farmwork3 | 1.2.6.3 nfarmwork3 |
| 4 | 1.2.1.4 gender4 | 1.2.2.4 age4 | 1.2.3.4 married4 | 1.2.4.4 educ4 | 1.2.5.4 farmwork4 | 1.2.6.4 nfarmwork4 |
| 5 | 1.2.1.5 gender5 | 1.2.2.5 age5 | 1.2.3.5 married5 | 1.2.4.5 educ4 | 1.2.5.5 farmwork5 | 1.2.6.5 nfarmwork5 |
| 6 | 1.2.1.6 gender6 | 1.2.2.6 age6 | 1.2.3.6 married6 | 1.2.4.6 educ6 | 1.2.5.6 farmwork6 | 1.2.6.6 nfarmwork6 |
| 7 | 1.2.1.7 gender7 | 1.2.2.7 age7 | 1.2.3.7 married7 | 1.2.4.7 educ7 | 1.2.5.7 farmwork7 | 1.2.6.7 nfarmwork7 |
| 8 | 1.2.1.8 gender8 | 1.2.2.8 age8 | 1.2.3.8 married8 | 1.2.4.8 educ8 | 1.2.5.8 farmwork8 | 1.2.6.8 nfarmwork8 |
| | KEY for 1.2.1: 1: Male 2: Female | | KEY for 1.2.3 1: Married or living together under local custom 2: Never married 3: Previously married (currently divorced, separated, widowed). 4: Not applicable (child < 16 years) | | KEY for 1.2.5 1: yes 2: no | KEY for 1.2.6 1: yes 2: no |

Please use additional space on back of page if necessary.

This section has variables upto more than 30 household members. **NOTE: Highest number of hh member in the dataset is 39 (i.e. gender39, age39...nfarmwork39)**

1.3 Which tribe does the household head belong to? 1.3 **hhtribe**

1.4 What religion does the head of the household practice? 1.4 **KEY for 1.4:** 1. Nonreligious; 2: Christianity; 3: Islam; 4: African Traditional Religion; 5: Other (pls. specify_____) **hhrelig**

1.5 Does the household have electricity? 1.5 (**KEY for 1.5:** 1: yes; 2: no) **hhelectric**

Section 2: Employment

All questions pertain to the last 12 months

| | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|
| 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 | 2.7 |
|-----|-----|-----|-----|-----|-----|-----|

District Code: _____; Household ID: _____

| What is the Primary Occupation of the head of the household | What is the Secondary Occupation of the head of the household | Number of Days (per week) spent on Primary Occupation | Number of weeks over the last 12 months spent on Primary Occupation | Number of Days (per week) spent on Secondary Occupation | Number of weeks over the last 12 months spent on Secondary Occupation | Number of work days lost due to illness over the last 12 months? |
|--|---|--|--|--|--|---|
| 2.1 hhhdocc1 | 2.2 hhhdocc2 | 2.3 occ1days | 2.4 occ1wks | 2.5 occ2days | 2.6 occ2wks | 2.7 sickdays |
| KEY for 2.1 and 2.2: 1. Farmer 3. Artisan 5. Civil Servant 7. Health worker 9. Student 11. Not in labor force 2. Agriculture (farm) laborer 4. Office worker 6. Teacher 8. Trader 10. Unemployed 12. Other non-agriculture worker | | (By definition, one day of work= 6-8 hours of work.) | | (By definition, one day of work= 6-8 hours of work.) | | |

Section 3: Tenure Issues and Labor Composition

All questions pertain to the last 12 months.

3.1 How many **separated** land areas are used as farmland? **3.1**
(KEY for 3.1:

(Interviewer: If response is "1", respond to 3.1a.1 and 3.1a.4 only)

fplots

- 1: only 1 single area is farmed
 2: 2 separate areas are farmed;
 3: 3 separate areas are farmed;
 4: > 3 separate areas are farmed)

3.1a Please denote the size of the **following** separated farmed land areas used over the last 12 months: (Interviewer: Please denote the unit in which the quantity of land is measured locally during interview)

3.1a.1 Largest single Area: **3.1a.1 fplotarea1** } (NB: Interviewer: this area is what is referred to as **PLOT 1** in the ensuing questions that make reference to a "Plot".)

3.1a.2 2nd largest single Area: **3.1a.2 fplotarea2**

3.1a.3 Cumulative size of all remaining areas:
 Area 3: (Sum ALL Remaining areas): **3.1a.3 fplotarea3**

} (NB: Interviewer: this cumulative area is referred to as **PLOT 2** in the ensuing questions)

3.1a.4 Unit of measurement of land areas in 3.1a.1-3.1a.3: **3.1a.4 plotunits** (Ha, acres, etc. Please specify)

Please answer the following land use questions with respect to total amount and type of land **operated** by members of household:

| 3.1.1 | 3.2 | 3.3 | 3.4 | 3.5 |
|--------------|-----------------------|----------------------|---|---|
| Plot Numbers | System of Farming | Tenure type | How many (average) number of years have you used these plots? | Total rent paid (per month) if plot is leased |
| 1 | 3.2.1 fsystem1 | 3.3.1 tenure1 | 3.4.1 yearsuse1 | 3.5.1 rentplot1 |
| 2 | 3.2.2 fsystem2 | 3.3.2 tenure2 | 3.4.2 yearsuse2 | 3.5.2 rentplot2 |

District Code: _____; Household ID: _____

KEY for 3.2:

- 1: Shifting cultivation (With long fallow period)
- 2: Continuous cropping (no fallow period)
- 3: Continuous cropping with multiple rotations (includes short fallow period)
- 4: Livestock grazing land
- 5: Other (pls. specify . . .)
- 6: Combination of above

(Interviewer: Please allow for multiple response)

KEY for 3.3:

- 1: Own land and own use
- 2: Own land and rent to others
- 3: Sharecropped land
- 4: Communal land (traditional ownership)
- 5: Rented land
- 6: Borrowed land (Do not pay for usage)
- 7: Other (pls. specify . . .) incl. combinations of above

(Interviewer: Please allow for multiple responses)

See also **fsystem3-4; tenure 3-4; yearsuse3-4; rentplot3-4**

NOTE: For Egypt, there are also values fsystem3-12, tenure3-12, yearsuse3-12, rentplot3-12

3.6. If this farm (including land, buildings, equipment and livestock) were for sale, what is its approximate value? 3.6 farmsalev

(Interviewer: If response to above is difficult, go to question 3.6.1. Otherwise, go to 3.7.1)

3.6.1 If you were to purchase a farm identical to yours (including land, buildings, equipment and livestock), what would you have to pay for it? 3.6.1 farmbuyv

3.7.1-3.7.3 TO BE COMPLETED BY TEAM LEADER PRIOR TO COMMENCING INTERVIEWS.

| | | | |
|------------------------------|------------------------------|----------------------------|--|
| 3.7.1. Agriculture season 1: | 3.7.1a: Start: <u>3.7.1a</u> | 3.7.1b: End: <u>3.7.1b</u> | 3.7.1c: Season: <u>3.7.1c seas1nam</u> |
| | <u>season1s</u> | <u>season1e</u> | |
| 3.7.2 Agriculture season 2: | 3.7.2a: Start: <u>3.7.2a</u> | 3.7.2b: End: <u>3.7.2b</u> | 3.7.2c: Season: <u>3.7.2c seas2nam</u> |
| | <u>season1s</u> | <u>season1e</u> | |
| 3.7.3 Agriculture season 3: | 3.7.3a: Start: <u>3.7.3a</u> | 3.7.3b: End: <u>3.7.3b</u> | 3.7.3c: Season: <u>3.7.3c seas2nam</u> |
| | <u>season1s</u> | <u>season1e</u> | |

KEY for 3.7.1c, 3.7.2c and 3.7.3c

- 1: winter season
- 2: summer season
- 3: Other season (Please specify:_____)

District Code: _____; Household ID: _____

| 3.8 Division of Labor information by Activity for each season | | 3.8.2 Total Estimated Number of Farm Workers and Days Worked (per activity for each season) (1 day=6-8 hours of work completed by 1 individual). | | | | | | | | | | | |
|---|--|--|-----------------------------|----------------------------|-----------------------------|----------------------------|-----------------------------|----------------------------|-----------------------------|----------------------------|-----------------------------|----------------------------|-----------------------------|
| | | Household Labor | | | | | | Hired Labor | | | | | |
| 3.8.1 Season and Type of Activity | | 3.8.2.1 Adult Male | | 3.8.2.2 Adult Female | | 3.8.2.3 Child (< 16 years) | | 3.8.3.1 Adult Male | | 3.8.3.2 Adult Female | | 3.8.3.3 Child (< 16 years) | |
| | | a. No. | b. Days | a. No. | b. Days | a. No. | b. Days | a. No. | b. Days | a. No. | b. Days | a. No. | b. Days |
| Season 1 | 11. Land preparation | 3.8.2.1.1.11a landhhm1 | 3.8.2.1.1.11b landhhmd1 | 3.8.2.2.1.11a landhhf1 | 3.8.2.2.1.11b landhhfd1 | 3.8.2.3.1.11a landhhc1 | 3.8.2.3.1.11b landhhcd1 | 3.8.3.1.1.11a landhrm1 | 3.8.3.1.1.11b landhrmd1 | 3.8.3.2.1.11a landhrf1 | 3.8.3.2.1.11b landhrfd1 | 3.8.3.3.1.11a landhrc1 | 3.8.3.3.1.11b landhrcd1 |
| | 12. Planting | 3.8.2.1.1.12a plnthhm1 | 3.8.2.1.1.12b plnthhmd1 | 3.8.2.2.1.12a plnthhf1 | 3.8.2.2.1.12b plnthhfd1 | 3.8.2.3.1.12a plnthhc1 | 3.8.2.3.1.12b plnthhcd1 | 3.8.3.1.1.12a plnthrm1 | 3.8.3.1.1.12b plnthrmd1 | 3.8.3.2.1.12a plnthrf1 | 3.8.3.2.1.12b plnthrfd1 | 3.8.3.3.1.12a plnthrc1 | 3.8.3.3.1.12b plnthrcd1 |
| | 13. Weeding | 3.8.2.1.1.13a weedhhm1 | 3.8.2.1.1.13b weedhhmd1 | 3.8.2.2.1.13a weedhhf1 | 3.8.2.2.1.13b weedhhfd1 | 3.8.2.3.1.13a weedhhc1 | 3.8.2.3.1.13b weedhhcd1 | 3.8.3.1.1.13a weedhrm1 | 3.8.3.1.1.13b weedhrmd1 | 3.8.3.2.1.13a weedhrf1 | 3.8.3.2.1.13b weedhrfd1 | 3.8.3.3.1.13a weedhrc1 | 3.8.3.3.1.13b weedhrcd1 |
| | 14. Pesticide, Fertilizer, Irrigation, etc | 3.8.2.1.1.14a pfihhm1 | 3.8.2.1.1.14b pfihhmd1 | 3.8.2.2.1.14a pfihhf1 | 3.8.2.2.1.14b pfihhfd1 | 3.8.2.3.1.14a pfihhc1 | 3.8.2.3.1.14b pfihhcd1 | 3.8.3.1.1.14a pfihrm1 | 3.8.3.1.1.14b pfihrmd1 | 3.8.3.2.1.14a pfihrf1 | 3.8.3.2.1.14b pfihrfd1 | 3.8.3.3.1.14a pfihrc1 | 3.8.3.3.1.14b pfihrcd1 |
| | 15. Harvesting | 3.8.2.1.1.15a harvhhm1 | 3.8.2.1.1.15b harvhmd1 | 3.8.2.2.1.15a harvhf1 | 3.8.2.2.1.15b harvhfd1 | 3.8.2.3.1.15a harvhc1 | 3.8.2.3.1.15b harvhcd1 | 3.8.3.1.1.15a harvhrm1 | 3.8.3.1.1.15b harvhrmd1 | 3.8.3.2.1.15a harvhf1 | 3.8.3.2.1.15b harvhfd1 | 3.8.3.3.1.15a harvhrc1 | 3.8.3.3.1.15b harvhrcd1 |
| | 16. Post-harvest processing | 3.8.2.1.1.16a pharvhhm1 | 3.8.2.1.1.16b pharvhmd1 | 3.8.2.2.1.16a pharvhf1 | 3.8.2.2.1.16b pharvhfd1 | 3.8.2.3.1.16a pharvhc1 | 3.8.2.3.1.16b pharvhcd1 | 3.8.3.1.1.16a pharvhrm1 | 3.8.3.1.1.16b pharvhrmd1 | 3.8.3.2.1.16a pharvhf1 | 3.8.3.2.1.16b pharvhfd1 | 3.8.3.3.1.16a pharvhrc1 | 3.8.3.3.1.16b pharvhrcd1 |
| | 17. Other Activities (farm management, maintenance, etc) | 3.8.2.1.1.17a othrhhm1 | 3.8.2.1.1.17b othrhmd1 | 3.8.2.2.1.17a othrhf1 | 3.8.2.2.1.17b othrhfd1 | 3.8.2.3.1.17a othrhc1 | 3.8.2.3.1.17b othrhcd1 | 3.8.3.1.1.17a othrhrm1 | 3.8.3.1.1.17b othrhrmd1 | 3.8.3.2.1.17a othrhf1 | 3.8.3.2.1.17b othrhfd1 | 3.8.3.3.1.17a othrhrc1 | 3.8.3.3.1.17b othrhrcd1 |
| Season 2 | 21. Land preparation | 3.8.2.1.2.21a landhhm2 | 3.8.2.1.2.21b landhhmd2 | 3.8.2.2.2.21a landhhf2 | 3.8.2.2.2.21b landhhfd2 | 3.8.2.3.2.21a landhhc2 | 3.8.2.3.2.21b landhhcd2 | 3.8.3.1.2.21a landhrm2 | 3.8.3.1.2.21b landhrmd2 | 3.8.3.2.2.21a landhrf2 | 3.8.3.2.2.21b landhrfd2 | 3.8.3.3.2.21a landhrc2 | 3.8.3.3.2.21b landhrcd2 |
| | 22. Planting | 3.8.2.1.2.22a planthhm2 | 3.8.2.1.2.22b planthhmd2 | 3.8.2.2.2.22a planthhf2 | 3.8.2.2.2.22b planthhfd2 | 3.8.2.3.2.22a planthhc2 | 3.8.2.3.2.22b planthhcd2 | 3.8.3.1.2.22a planthrm2 | 3.8.3.1.2.22b planthrmd2 | 3.8.3.2.2.22a planthrf2 | 3.8.3.2.2.22b planthrfd2 | 3.8.3.3.2.22a planthrc2 | 3.8.3.3.2.22b planthrcd2 |
| | 23. Weeding | 3.8.2.1.2.23a weedhhm2 | 3.8.2.1.2.23b weedhhmd2 | 3.8.2.2.2.23a weedhhf2 | 3.8.2.2.2.23b weedhhfd2 | 3.8.2.3.2.23a weedhhc2 | 3.8.2.3.2.23b weedhhcd2 | 3.8.3.1.2.23a weedhrm2 | 3.8.3.1.2.23b weedhrmd2 | 3.8.3.2.2.23a weedhrf2 | 3.8.3.2.2.23b weedhrfd2 | 3.8.3.3.2.23a weedhrc2 | 3.8.3.3.2.23b weedhrcd2 |
| | 24. Pesticide, Fertilizer, Irrigation, etc | 3.8.2.1.2.24a pfihhm2 | 3.8.2.1.2.24b pfihhmd2 | 3.8.2.2.2.24a pfihhf2 | 3.8.2.2.2.24b pfihhfd2 | 3.8.2.3.2.24a pfihhc2 | 3.8.2.3.2.24b pfihhcd2 | 3.8.3.1.2.24a pfihrm2 | 3.8.3.1.2.24b pfihrmd2 | 3.8.3.2.2.24a pfihrf2 | 3.8.3.2.2.24b pfihrfd2 | 3.8.3.3.2.24a pfihrc2 | 3.8.3.3.2.24b pfihrcd2 |
| | 25. Harvesting | 3.8.2.1.2.25a harvhhm2 | 3.8.2.1.2.25b harvhmd2 | 3.8.2.2.2.25a harvhf2 | 3.8.2.2.2.25b harvhfd2 | 3.8.2.3.2.25a harvhc2 | 3.8.2.3.2.25b harvhcd2 | 3.8.3.1.2.25a harvhrm2 | 3.8.3.1.2.25b harvhrmd2 | 3.8.3.2.2.25a harvhf2 | 3.8.3.2.2.25b harvhfd2 | 3.8.3.3.2.25a harvhrc2 | 3.8.3.3.2.25b harvhrcd2 |
| | 26. Post-harvest processing | 3.8.2.1.2.26a pharvhhm2 | 3.8.2.1.2.26b pharvhmd2 | 3.8.2.2.2.26a pharvhf2 | 3.8.2.2.2.26b pharvhfd2 | 3.8.2.3.2.26a pharvhc2 | 3.8.2.3.2.26b pharvhcd2 | 3.8.3.1.2.26a pharvhrm2 | 3.8.3.1.2.26b pharvhrmd2 | 3.8.3.2.2.26a pharvhf2 | 3.8.3.2.2.26b pharvhfd2 | 3.8.3.3.2.26a pharvhrc2 | 3.8.3.3.2.26b pharvhrcd2 |
| | 27. Other Activities (farm management, maintenance, etc) | 3.8.2.1.2.27a othrhhm2 | 3.8.2.1.2.27b othrhmd2 | 3.8.2.2.2.27a othrhf2 | 3.8.2.2.2.27b othrhfd2 | 3.8.2.3.2.27a othrhc2 | 3.8.2.3.2.27b othrhcd2 | 3.8.3.1.2.27a othrhrm2 | 3.8.3.1.2.27b othrhrmd2 | 3.8.3.2.2.27a othrhf2 | 3.8.3.2.2.27b othrhfd2 | 3.8.3.3.2.27a othrhrc2 | 3.8.3.3.2.27b othrhrcd2 |
| Season 3 | 31. Land preparation | 3.8.2.1.3.31a landhhm3 | 3.8.2.1.3.31b landhhmd3 | 3.8.2.2.3.31a landhhf3 | 3.8.2.2.3.31b landhhfd3 | 3.8.2.3.3.31a landhhc3 | 3.8.2.3.3.31b landhhcd3 | 3.8.3.1.3.31a landhrm3 | 3.8.3.1.3.31b landhrmd3 | 3.8.3.2.3.31a landhrf3 | 3.8.3.2.3.31b landhrfd3 | 3.8.3.3.3.31a landhrc3 | 3.8.3.3.3.31b landhrcd3 |
| | 32. Planting | 3.8.2.1.3.32a planthhm3 | 3.8.2.1.3.32b planthhmd3 | 3.8.2.2.3.32a planthhf3 | 3.8.2.2.3.32b planthhfd3 | 3.8.2.3.3.32a planthhc3 | 3.8.2.3.3.32b planthhcd3 | 3.8.3.1.3.32a planthrm3 | 3.8.3.1.3.32b planthrmd3 | 3.8.3.2.3.32a planthrf3 | 3.8.3.2.3.32b planthrfd3 | 3.8.3.3.3.32a planthrc3 | 3.8.3.3.3.32b planthrcd3 |
| | 33. Weeding | 3.8.2.1.3.33a weedhhm3 | 3.8.2.1.3.33b weedhhmd3 | 3.8.2.2.3.33a weedhhf3 | 3.8.2.2.3.33b weedhhfd3 | 3.8.2.3.3.33a weedhhc3 | 3.8.2.3.3.33b weedhhcd3 | 3.8.3.1.3.33a weedhrm3 | 3.8.3.1.3.33b weedhrmd3 | 3.8.3.2.3.33a weedhrf3 | 3.8.3.2.3.33b weedhrfd3 | 3.8.3.3.3.33a weedhrc3 | 3.8.3.3.3.33b weedhrcd3 |
| | 34. Pesticide, Fertilizer, Irrigation, etc | 3.8.2.1.3.34a pfihhm3 | 3.8.2.1.3.34b pfihhmd3 | 3.8.2.2.3.34a pfihhf3 | 3.8.2.2.3.34b pfihhfd3 | 3.8.2.3.3.34a pfihhc3 | 3.8.2.3.3.34b pfihhcd3 | 3.8.3.1.3.34a pfihrm3 | 3.8.3.1.3.34b pfihrmd3 | 3.8.3.2.3.34a pfihrf3 | 3.8.3.2.3.34b pfihrfd3 | 3.8.3.3.3.34a pfihrc3 | 3.8.3.3.3.34b pfihrcd3 |
| | 35. Harvesting | 3.8.2.1.3.35a harvhhm3 | 3.8.2.1.3.35b harvhmd3 | 3.8.2.2.3.35a harvhf3 | 3.8.2.2.3.35b harvhfd3 | 3.8.2.3.3.35a harvhc3 | 3.8.2.3.3.35b harvhcd3 | 3.8.3.1.3.35a harvhrm3 | 3.8.3.1.3.35b harvhrmd3 | 3.8.3.2.3.35a harvhf3 | 3.8.3.2.3.35b harvhfd3 | 3.8.3.3.3.35a harvhrc3 | 3.8.3.3.3.35b harvhrcd3 |
| | 36. Post-harvest processing | 3.8.2.1.3.36a pharvhhm3 | 3.8.2.1.3.36b pharvhmd3 | 3.8.2.2.3.36a pharvhf3 | 3.8.2.2.3.36b pharvhfd3 | 3.8.2.3.3.36a pharvhc3 | 3.8.2.3.3.36b pharvhcd3 | 3.8.3.1.3.36a pharvhrm3 | 3.8.3.1.3.36b pharvhrmd3 | 3.8.3.2.3.36a pharvhf3 | 3.8.3.2.3.36b pharvhfd3 | 3.8.3.3.3.36a pharvhrc3 | 3.8.3.3.3.36b pharvhrcd3 |
| | 37. Other Activities (farm management, maintenance, etc) | 3.8.2.1.3.37a othrhhm3 | 3.8.2.1.3.37b othrhmd3 | 3.8.2.2.3.37a othrhf3 | 3.8.2.2.3.37b othrhfd3 | 3.8.2.3.3.37a othrhc3 | 3.8.2.3.3.37b othrhcd3 | 3.8.3.1.3.37a othrhrm3 | 3.8.3.1.3.37b othrhrmd3 | 3.8.3.2.3.37a othrhf3 | 3.8.3.2.3.37b othrhfd3 | 3.8.3.3.3.37a othrhrc3 | 3.8.3.3.3.37b othrhrcd3 |
| 3.8 | Livestock-animal management (annual estimate) | 3.8.4.2.1a livshhm | 3.8.4.2.1b livshhmd | 3.8.4.2.2a livshhf | 3.8.4.2.2b livshhfd | 3.8.4.2.3a livshhc | 3.8.4.2.3b livshhcd | 3.8.4.3.1a livshrm | 3.8.4.3.1b livshrmd | 3.8.4.3.2a livshrf | 3.8.4.3.2b livshrfd | 3.8.4.3.3a livshrc | 3.8.4.3.3b livshrcd |

District Code:

Household ID:

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| 3.9 | Farm Wage Rates | Household Labor | | | Hired Labor | | |
|-------|---|--|--|--|--|--|--|
| | | Adult male | Adult female | Child | Adult Male | Adult female | Child |
| 3.9.1 | Average wage/day (across various activities) for each type of worker | 3.9.1a | 3.9.1b | 3.9.1c | 3.9.1e | 3.9.1e | 3.9.1f |
| | | 3.9.1a wageh_{hm} | 3.9.1b wageh_{hf} | 3.9.1c wageh_{hc} | 3.9.1d wageh_{rm} | 3.9.1e wageh_{rf} | 3.9.1f wageh_{rc} |
| 3.9.2 | Total In kind payments per day (across various activities) | 3.9.2a | 3.9.2b | 3.9.2c | 3.9.2d | 3.9.2e | 3.9.2f |
| | | 3.9.2a inkindh_{hm} | 3.9.2b inkindh_{hf} | 3.9.2c inkindh_{hc} | 3.9.2d inkindh_{rm} | 3.9.2e inkindh_{rf} | 3.9.2f inkindh_{rc} |

Section 4: Details on Farming Activities

Part 1: Food and Tree crops

All questions pertain to the last 12 months.

4.1. Information on the primary crops grown in your farm over the last 12 months.

Please use the following **KEY for 4.1.2:** (If a crop is not listed below, please denote as 'other' and specify).

| | | | | | |
|-----------------|-----------------|---------------|----------------|---------------|---------------------|
| 1. alfalfa | 11. cocoyam | 21. grape | 31. palm dates | 41. sesame | 51. tef |
| 2. banana | 12. cowpea | 22. groundnut | 32. paprika | 42. shallots | 52. tobacco |
| 3. barley | 13. coffee | 23. kola | 33. peanuts | 43. sheanut | 53. tomato |
| 4. beans | 14. cotton | 24. lentil | 34. pepper | 44. sorghum | 54. wheat |
| 5. cashew | 15. cucumber | 25. mango | 35. pigeon pea | 45. soybean | 55. yam |
| 6. cassava | 16. enset | 26. maize | 36. pineapple | 46. spinach | 56. other (specify) |
| 7. citrus fruit | 17. field pea | 27. millet | 37. plantain | 47. squash | |
| 8. chickpeas | 18. flax | 28. oil palm | 38. potato | 48. sugarcane | |
| 9. clover | 19. garden-eggs | 29. okra | 39. rice | 49. sunflower | |
| 10. cocoa | 20. garlic | 30. onion | 40. safflower | 50. tea | |

Please use additional space if there are more than 6 crops per Plot.

| | 4.1.1 | 4.1.2 | 4.2 | 4.3 | 4.4 | 4.5 | 4.6 | 4.7 | 4.8 | 4.9 | 4.9a | 4.10 | 4.11a | 4.11b |
|---------|----------|--|---------------|--------------|--|---|--------------------------------------|--------------------------------------|--|-----------------------|-------------------------|--|------------------------------|-----------------|
| Season | Plot No. | Crop Type (Use key for 4.1.2 above) | Planting date | Harvest date | Proportion of Plot area cultivated with crop (%) | Quantity Harvested (kg) (Includes all harvests) | Amount consumed by household (kg) | Amount consumed by livestock (kg) | Amount lost due to disease and pests (kg) | Quantity sold (kg) | To whom is output sold? | Total Value of crops sold (Farm-gate value) | Amount of Seeds used (kg) | Cost/kg of Seed |
| | | c1-c6 | Plant | Harv | area | qharv | cons | lives | lost | sold | mkt | cval | seed | sval |
| 1 s1 | 1 p1 | 4.1.2.1.1a | 4.2.1.1a | 4.3.1.1a | 4.4.1.1a | 4.5.1.1a | 4.6.1.1a | 4.7.1.1a | 4.8.1.1a | 4.9.1.1a | 4.9a.1.1a | 4.10.1.1a | 4.11a.1.1a | 4.11b.1.1a |
| | | 4.1.2.1.1b | 4.2.1.1b | 4.3.1.1b | 4.4.1.1b | 4.5.1.1b | 4.6.1.1b | 4.7.1.1b | 4.8.1.1b | 4.9.1.1b | 4.9a.1.1b | 4.10.1.1b | 4.11a.1.1b | 4.11b.1.1b |
| | | 4.1.2.1.1c | 4.2.1.1c | 4.3.1.1c | 4.4.1.1c | 4.5.1.1c | 4.6.1.1c | 4.7.1.1c | 4.8.1.1c | 4.9.1.1c | 4.9a.1.1c | 4.10.1.1c | 4.11a.1.1c | 4.11b.1.1c |
| | | 4.1.2.1.1d | 4.2.1.1d | 4.3.1.1d | 4.4.1.1d | 4.5.1.1d | 4.6.1.1d | 4.7.1.1d | 4.8.1.1d | 4.9.1.1d | 4.9a.1.1d | 4.10.1.1d | 4.11a.1.1d | 4.11b.1.1d |
| | | 4.1.2.1.1e | 4.2.1.1e | 4.3.1.1e | 4.4.1.1e | 4.5.1.1e | 4.6.1.1e | 4.7.1.1e | 4.8.1.1e | 4.9.1.1e | 4.9a.1.1e | 4.10.1.1e | 4.11a.1.1e | 4.11b.1.1e |
| | | 4.1.2.1.1f | 4.2.1.1f | 4.3.1.1f | 4.4.1.1f | 4.5.1.1f | 4.6.1.1f | 4.7.1.1f | 4.8.1.1f | 4.9.1.1f | 4.9a.1.1f | 4.10.1.1f | 4.11a.1.1f | 4.11b.1.1f |
| | 2 | 4.1.2.1.2a | 4.2.1.2a | 4.3.1.2a | 4.4.1.2a | 4.5.1.2a | 4.6.1.2a | 4.7.1.2a | 4.8.1.2a | 4.9.1.2a | 4.9a.1.2a | 4.10.1.2a | 4.11a.1.2a | 4.11b.1.2a |
| | | 4.1.2.1.2b | 4.2.1.2b | 4.3.1.2b | 4.4.1.2b | 4.5.1.2b | 4.6.1.2b | 4.7.1.2b | 4.8.1.2b | 4.9.1.2b | 4.9a.1.2b | 4.10.1.2b | 4.11a.1.2b | 4.11b.1.2b |

District Code: _____; Household ID: _____

| | 4.1.1 | 4.1.2 | 4.2 | 4.3 | 4.4 | 4.5 | 4.6 | 4.7 | 4.8 | 4.9 | 4.9a | 4.10 | 4.11a | 4.11b |
|---------|----------|---|---------------|--------------|--|---|--------------------------------------|--------------------------------------|--|-----------------------|---|--|------------------------------|-----------------|
| Season | Plot No. | Crop Type (Use key for 4.1.2 above) | Planting date | Harvest date | Proportion of Plot area cultivated with crop (%) | Quantity Harvested (kg) (Includes all harvests) | Amount consumed by household (kg) | Amount consumed by livestock (kg) | Amount lost due to disease and pests (kg) | Quantity sold (kg) | To whom is output sold? | Total Value of crops sold (Farm-gate value) | Amount of Seeds used (kg) | Cost/kg of Seed |
| | | c1-c6 | Plant | Harv | area | qharv | cons | lives | lost | sold | mkt | cval | seed | sval |
| | p2 | 4.1.2.1.2c | 4.2.1.2c | 4.3.1.2c | 4.4.1.2c | 4.5.1.2c | 4.6.1.2c | 4.7.1.2c | 4.8.1.2c | 4.9.1.2c | 4.9a.1.2c | 4.10.1.2c | 4.11a.1.2c | 4.11b.1.2c |
| | | 4.1.2.1.2d | 4.2.1.2d | 4.3.1.2d | 4.4.1.2d | 4.5.1.2d | 4.6.1.2d | 4.7.1.2d | 4.8.1.2d | 4.9.1.2d | 4.9a.1.2d | 4.10.1.2d | 4.11a.1.2d | 4.11b.1.2d |
| 2 s2 | 1 p1 | 4.1.2.2.1a | 4.2.2.1a | 4.3.2.1a | 4.4.2.1a | 4.5.2.1a | 4.6.2.1a | 4.7.2.1a | 4.8.2.1a | 4.9.2.1a | 4.9a.2.1a | 4.10.2.1a | 4.11a.2.1a | 4.11b.2.1a |
| | | 4.1.2.2.1b | 4.2.2.1b | 4.3.2.1b | 4.4.2.1b | 4.5.2.1b | 4.6.2.1b | 4.7.2.1b | 4.8.2.1b | 4.9.2.1b | 4.9a.2.1b | 4.10.2.1b | 4.11a.2.1b | 4.11b.2.1b |
| | | 4.1.2.2.1c | 4.2.2.1c | 4.3.2.1c | 4.4.2.1c | 4.5.2.1c | 4.6.2.1c | 4.7.2.1c | 4.8.2.1c | 4.9.2.1c | 4.9a.2.1c | 4.10.2.1c | 4.11a.2.1c | 4.11b.2.1c |
| | | 4.1.2.2.1d | 4.2.2.1d | 4.3.2.1d | 4.4.2.1d | 4.5.2.1d | 4.6.2.1d | 4.7.2.1d | 4.8.2.1d | 4.9.2.1d | 4.9a.2.1d | 4.10.2.1d | 4.11a.2.1d | 4.11b.2.1d |
| | | 4.1.2.2.1e | 4.2.2.1e | 4.3.2.1e | 4.4.2.1e | 4.5.2.1e | 4.6.2.1e | 4.7.2.1e | 4.8.2.1e | 4.9.2.1e | 4.9a.2.1e | 4.10.2.1e | 4.11a.2.1e | 4.11b.2.1e |
| | | 4.1.2.2.1f | 4.2.2.1f | 4.3.2.1f | 4.4.2.1f | 4.5.2.1f | 4.6.2.1f | 4.7.2.1f | 4.8.2.1f | 4.9.2.1f | 4.9a.2.1f | 4.10.2.1f | 4.11a.2.1f | 4.11b.2.1f |
| | 2 p2 | 4.1.2.2.2a | 4.2.2.2a | 4.3.2.2a | 4.4.2.2a | 4.5.2.2a | 4.6.2.2a | 4.7.2.2a | 4.8.2.2a | 4.9.2.2a | 4.9a.2.2a | 4.10.2.2a | 4.11a.2.2a | 4.11b.2.2a |
| | | 4.1.2.2.2b | 4.2.2.2b | 4.3.2.2b | 4.4.2.2b | 4.5.2.2b | 4.6.2.2b | 4.7.2.2b | 4.8.2.2b | 4.9.2.2b | 4.9a.2.2b | 4.10.2.2b | 4.11a.2.2b | 4.11b.2.2b |
| | | 4.1.2.2.2c | 4.2.2.2c | 4.3.2.2c | 4.4.2.2c | 4.5.2.2c | 4.6.2.2c | 4.7.2.2c | 4.8.2.2c | 4.9.2.2c | 4.9a.2.2c | 4.10.2.2c | 4.11a.2.2c | 4.11b.2.2c |
| | | 4.1.2.2.2d | 4.2.2.2d | 4.3.2.2d | 4.4.2.2d | 4.5.2.2d | 4.6.2.2d | 4.7.2.2d | 4.8.2.2d | 4.9.2.2d | 4.9a.2.2d | 4.10.2.2d | 4.11a.2.2d | 4.11b.2.2d |
| | | 4.1.2.2.2e | 4.2.2.2e | 4.3.2.2e | 4.4.2.2e | 4.5.2.2e | 4.6.2.2e | 4.7.2.2e | 4.8.2.2e | 4.9.2.2e | 4.9a.2.2e | 4.10.2.2e | 4.11a.2.2e | 4.11b.2.2e |
| | | 4.1.2.2.2f | 4.2.2.2f | 4.3.2.2f | 4.4.2.2f | 4.5.2.2f | 4.6.2.2f | 4.7.2.2f | 4.8.2.2f | 4.9.2.2f | 4.9a.2.2f | 4.10.2.2f | 4.11a.2.2f | 4.11b.2.2f |
| | | 4.1.2.3.1a | 4.2.3.1a | 4.3.3.1a | 4.4.3.1a | 4.5.3.1a | 4.6.3.1a | 4.7.3.1a | 4.8.3.1a | 4.9.3.1a | 4.9a.3.1a | 4.10.3.1a | 4.11a.3.1a | 4.11b.3.1a |
| | | 4.1.2.3.1b | 4.2.3.1b | 4.3.3.1b | 4.4.3.1b | 4.5.3.1b | 4.6.3.1b | 4.7.3.1b | 4.8.3.1b | 4.9.3.1b | 4.9a.3.1b | 4.10.3.1b | 4.11a.3.1b | 4.11b.3.1b |
| 3 s3 | 1 p1 | 4.1.2.3.1c | 4.2.3.1c | 4.3.3.1c | 4.4.3.1c | 4.5.3.1c | 4.6.3.1c | 4.7.3.1c | 4.8.3.1c | 4.9.3.1c | 4.9a.3.1c | 4.10.3.1c | 4.11a.3.1c | 4.11b.3.1c |
| | | 4.1.2.3.1d | 4.2.3.1d | 4.3.3.1d | 4.4.3.1d | 4.5.3.1d | 4.6.3.1d | 4.7.3.1d | 4.8.3.1d | 4.9.3.1d | 4.9a.3.1d | 4.10.3.1d | 4.11a.3.1d | 4.11b.3.1d |
| | | 4.1.2.3.1e | 4.2.3.1e | 4.3.3.1e | 4.4.3.1e | 4.5.3.1e | 4.6.3.1e | 4.7.3.1e | 4.8.3.1e | 4.9.3.1e | 4.9a.3.1e | 4.10.3.1e | 4.11a.3.1e | 4.11b.3.1e |
| | | 4.1.2.3.1f | 4.2.3.1f | 4.3.3.1f | 4.4.3.1f | 4.5.3.1f | 4.6.3.1f | 4.7.3.1f | 4.8.3.1f | 4.9.3.1f | 4.9a.3.1f | 4.10.3.1f | 4.11a.3.1f | 4.11b.3.1f |
| | 2 p2 | 4.1.2.3.2a | 4.2.3.2a | 4.3.3.2a | 4.4.3.2a | 4.5.3.2a | 4.6.3.2a | 4.7.3.2a | 4.8.3.2a | 4.9.3.2a | 4.9a.3.2a | 4.10.3.2a | 4.11a.3.2a | 4.11b.3.2a |
| | | 4.1.2.3.2b | 4.2.3.2b | 4.3.3.2b | 4.4.3.2b | 4.5.3.2b | 4.6.3.2b | 4.7.3.2b | 4.8.3.2b | 4.9.3.2b | 4.9a.3.2b | 4.10.3.2b | 4.11a.3.2b | 4.11b.3.2b |
| | | 4.1.2.3.2c | 4.2.3.2c | 4.3.3.2c | 4.4.3.2c | 4.5.3.2c | 4.6.3.2c | 4.7.3.2c | 4.8.3.2c | 4.9.3.2c | 4.9a.3.2c | 4.10.3.2c | 4.11a.3.2c | 4.11b.3.2c |
| | | 4.1.2.3.2d | 4.2.3.2d | 4.3.3.2d | 4.4.3.2d | 4.5.3.2d | 4.6.3.2d | 4.7.3.2d | 4.8.3.2d | 4.9.3.2d | 4.9a.3.2d | 4.10.3.2d | 4.11a.3.2d | 4.11b.3.2d |
| | | 4.1.2.3.2e | 4.2.3.2e | 4.3.3.2e | 4.4.3.2e | 4.5.3.2e | 4.6.3.2e | 4.7.3.2e | 4.8.3.2e | 4.9.3.2e | 4.9a.3.2e | 4.10.3.2e | 4.11a.3.2e | 4.11b.3.2e |
| | | 4.1.2.3.2f | 4.2.3.2f | 4.3.3.2f | 4.4.3.2f | 4.5.3.2f | 4.6.3.2f | 4.7.3.2f | 4.8.3.2f | 4.9.3.2f | 4.9a.3.2f | 4.10.3.2f | 4.11a.3.2f | 4.11b.3.2f |
| | | Interviewer: Please use additional space if necessary | | | | | | | | | KEY for 4.9a: 1. Directly to consumers 2. Middleman /wholesale establishment 3. Other 4: combination of above | | | |

NOTE: Variable name for above is: s1p1c1, s1p1c2,..... s1p1c1plant,.... s1p1c1area.... S3p2c1lives....etc

NOTE: For Burkina Faso information is also given in season 1 for plot 3 (i.e. s1p3c1-s1p3sval6)

District Code: _____; Household ID: _____

4.12 Please state the average yield of your 5 principal crops in a **normal** year.

| 4.12.0 Crop Type (use code specified in 4.1) | 4.12.1 Normal Year Average Yield (in terms of kg/HA) |
|--|--|
| Crop 1: 4.12.0.1 pc1 | 4.12.1.1 nyieldc1 |
| Crop 2: 4.12.0.2 pc2 | 4.12.1.2 nyieldc2 |
| Crop 3: 4.12.0.3 pc3 | 4.12.1.3 nyieldc3 |
| Crop 4: 4.12.0.4 pc4 | 4.12.1.4 nyieldc4 |
| Crop 5: 4.12.0.5 pc5 | 4.12.1.5 nyieldc5 |

KEY for 4.12.0 (If a crop is not listed below, please denote as 'other' and specify).

| | | | | | |
|-----------------|-----------------|---------------|----------------|---------------|---------------------|
| 1. alfalfa | 11. cocoyam | 21. grape | 31. palm dates | 41. sesame | 51. tef |
| 2. banana | 12. cowpea | 22. groundnut | 32. paprika | 42. shallots | 52. tobacco |
| 3. barley | 13. coffee | 23. kola | 33. peanuts | 43. sheanut | 53. tomato |
| 4. beans | 14. cotton | 24. lentil | 34. pepper | 44. sorghum | 54. wheat |
| 5. cashew | 15. cucumber | 25. mango | 35. pigeon pea | 45. soybean | 55. yam |
| 6. cassava | 16. enset | 26. maize | 36. pineapple | 46. spinach | 56. other (specify) |
| 7. citrus fruit | 17. field pea | 27. millet | 37. plantain | 47. squash | |
| 8. chickpeas | 18. flax | 28. oil palm | 38. potato | 48. sugarcane | |
| 9. clover | 19. garden-eggs | 29. okra | 39. rice | 49. sunflower | |
| 10. cocoa | 20. garlic | 30. onion | 40. safflower | 50. tea | |

| 4.13.0 | 4.13.1 | 4.13.2 | 4.13.3 | 4.13.4 | 4.13.5 |
|--------|---------|--|--|-------------------------------------|------------------------------------|
| Season | Plot No | Water Source (Interviewer: Please allow for multiple sources. If response is 4 only, please skip to 4.13.4; otherwise, go to 4.13.3) wat1 wat2 wat3 wat4 wat5 | If you use irrigation, which system do you use? (Interviewer: Please allow for multiple responses) irrig1 irrig2 irrig3 irrig4 | Fertilizer use (kg/year) fert | Pesticide use (kg/year) pest |
| 1 s1 | 1 p1 | 4.13.2.1.1.1, 4.13.2.1.1.2, 4.13.2.1.1.3, 4.13.2.1.1.4, 4.13.2.1.1.5 | 4.13.3.1.1.1, 4.13.3.1.1.2, 4.13.3.1.1.3, 4.13.3.1.1.4 | 4.13.4.1.1 | 4.13.5.1.1 |
| | 2 p2 | 4.13.2.1.2.1, 4.13.2.1.2.2, 4.13.2.1.2.3, 4.13.2.1.2.4, 4.13.2.1.2.5 | 4.13.3.1.2.1, 4.13.3.1.2.2, 4.13.3.1.2.3, 4.13.3.1.2.4 | 4.13.4.1.2 | 4.13.5.1.2 |
| 2 s2 | 1 p1 | 4.13.2.2.1.1, 4.13.2.2.1.2, 4.13.2.2.1.3, 4.13.2.2.1.4, 4.13.2.2.1.5 | 4.13.3.2.1.1, 4.13.3.2.1.2, 4.13.3.2.1.3, 4.13.3.2.1.4 | 4.13.4.2.1 | 4.13.5.2.1 |
| | 2 p2 | 4.13.2.2.2.1, 4.13.2.2.2.2, 4.13.2.2.2.3, 4.13.2.2.2.4, 4.13.2.2.2.5 | 4.13.3.2.2.1, 4.13.3.2.2.2, 4.13.3.2.2.3, 4.13.3.2.2.4 | 4.13.4.2.2 | 4.13.5.2.2 |
| 3 s3 | 1 p1 | 4.13.2.3.1.1, 4.13.2.3.1.2, 4.13.2.3.1.3, 4.13.2.3.1.4, 4.13.2.3.1.5 | 4.13.3.3.1.1, 4.13.3.3.1.2, 4.13.3.3.1.3, 4.13.3.3.1.4 | 4.13.4.3.1 | 4.13.5.3.1 |
| | 2 p2 | 4.13.2.3.2.1, 4.13.2.3.2.2, 4.13.2.3.2.3, 4.13.2.3.2.4, 4.13.2.3.2.5 | 4.13.3.3.2.1, 4.13.3.3.2.2, 4.13.3.3.2.3, 4.13.3.3.2.4 | 4.13.4.3.2 | 4.13.5.3.2 |
| | | KEY for 4.13.2: 1: irrigated- major scheme (public); 2: irrigated minor scheme (private); 3: irrigated - groundwater; 4: rain-fed 5: Other (pls. specify ...) | KEY for 4.13.3: 1: gravity; 2: sprinklers; 3: drip systems; 4: other (pls. specify. ...) | | |

NOTE: Variable name for above is: s1p1wat1, s1p1wat2,...s2p1wat1, s2p3wat2,...etc

NOTE: For some countries exist also the variables s1p3wat1-s1p4pest and s2p3wat1-s2p4pest.

4.14 Cost/kg of Fertilizer: 4.14 costkgfert

4.15 Cost/kg of Pesticide : 4.15 costkgpest

District Code: _____; Household ID: _____

4.16: Information on Farm Machinery and Inputs and Farm Buildings:

| Tool/Machinery/ Implements | 4.16.1 Number | 4.16.2 Who owns the equipments? | 4.16.3 Price (or value)/unit | 4.16.3a Average lifespan of item |
|---|-----------------------|--|------------------------------|----------------------------------|
| <i>Light machinery:</i> | | | | |
| 1. Cutlass, machete | 4.16.1.1 lm1 | 4.16.2.1 lm1owner | 4.16.3.1 lm1price | 4.16.3a.1 lm1life |
| 2. Hoe | 4.16.1.2 lm2 | 4.16.2.2 lm2owner | 4.16.3.2 lm2price | 4.16.3a.2 lm2life |
| 3. File | 4.16.1.3 lm3 | 4.16.2.3 lm3owner | 4.16.3.3 lm3price | 4.16.3a.3 lm3life |
| 4. Axe | 4.16.1.4 lm4 | 4.16.2.4 lm4owner | 4.16.3.4 lm4price | 4.16.3a.4 lm4life |
| 6. Baskets | 4.16.1.5 lm5 | 4.16.2.5 lm5owner | 4.16.3.5 lm5price | 4.16.3a.5 lm5life |
| 6. Weeder | 4.16.1.6 lm6 | 4.16.2.6 lm6owner | 4.16.3.6 lm6price | 4.16.3a.6 lm6life |
| 7. Other Light Machinery (please specify_____) | 4.16.1.7 lm7 | 4.16.2.7 lm7owner | 4.16.3.7 lm7price | 4.16.3a.7 lm7life |
| <i>Heavy Machinery</i> | | | | |
| 8. Tractor | 4.16.1.8 hm8 | 4.16.2.8 hm8owner | 4.16.3.8 hm8price | 4.16.3a.8 hm8life |
| 9. Plough | 4.16.1.9 hm9 | 4.16.2.9 hm9owner | 4.16.3.9 hm9price | 4.16.3a.9 hm9life |
| 10. Trolley/Trailers | 4.16.1.10 hm10 | 4.16.2.10 hm10owner | 4.16.3.10 hm10price | 4.16.3a.10 hm10life |
| 11. Thresher | 4.16.1.11 hm11 | 4.16.2.11 hm11owner | 4.16.3.11 hm11price | 4.16.3a.11 hm11life |
| 12. Fodder cutting machine | 4.16.1.12 hm12 | 4.16.2.12 hm12owner | 4.16.3.12 hm12price | 4.16.3a.12 hm12life |
| 13. Generator/Diesel Pumps | 4.16.1.13 hm13 | 4.16.2.13 hm13owner | 4.16.3.13 hm13price | 4.16.3a.13 hm13life |
| 14. Spraying machines (chem./fertilizer) | 4.16.1.14 hm14 | 4.16.2.14 hm14owner | 4.16.3.14 hm14price | 4.16.3a.14 hm14life |
| 15. Other Heavy Machinery (please specify_____) | 4.16.1.15 hm15 | 4.16.2.15 hm15owner | 4.16.3.15 hm15price | 4.16.3a.15 hm15life |
| <i>Farm Animal Power</i> | | | | |
| 16. Bullocks | 4.16.1.16 am16 | 4.16.2.16 am16owner | 4.16.3.16 am16price | 4.16.3a.16 am16life |
| 17. Mules | 4.16.1.17 am17 | 4.16.2.17 am17owner | 4.16.3.17 am17price | 4.16.3a.17 am17life |
| 18. Other Animal Power (pls. specify_____) | 4.16.1.18 am18 | 4.16.2.18 am18owner | 4.16.3.18 am18price | 4.16.3a.18 am18life |
| NB: for (7), (16) and (18), please specify each item and information requested in 4.16.1-4.16.3a using additional space on back of page | | KEY for 4.16.2: 1: household has ownership; 2: jointly owned with other households/farm entities 3: hired for household or joint use 4: Combination of above | | |

NOTE: For Ethiopia, Kenya, South Africa and Zimbabwe, there are also the variables lm7_1, lm7owner_1...lm7life_6; lm15_1...lm15life_4

4.16.4 Please provide information on the buildings used to support agriculture production activities (table below)

| 4.16.4a Building No. | 4.16.4b Purpose (Interviewer: Please allow for multiple responses) | 4.16.4c Value |
|-------------------------|--|-------------------------------|
| Building 1 | 4.16.4b.1.1, 4.16.4b.1.2, 4.16.4b.1.3, 4.16.4b.1.4, 4.16.4b.1.5 build1use1 build1use2 build1use3 build1use4 build1use5 | 4.16.4c.1 build1val |
| Building 2 | 4.16.4b.2.1, 4.16.4b.2.2, 4.16.4b.2.3, 4.16.4b.2.4, 4.16.4b.2.5 build2use1 build2use2 build2use3 build2use4 build2use5 | 4.16.4c.2 build2val |
| Building 3 | 4.16.4b.3.1, 4.16.4b.3.2, 4.16.4b.3.3, 4.16.4b.3.4, 4.16.4b.3.5 build3use1 build3use2 build3use3 build3use4 build3use5 | 4.16.4c.3 build3val |
| | KEY for 4.16b 1: Space for storage of agriculture products; | |

NOTE: For Ethiopia, Kenya, South Africa and Zimbabwe, there are also the variables build4use1-5; build4val

District Code: _____; Household ID: _____

| | | |
|--|---|--|
| | 2: Space for farm activities (crop and livestock activities); 3: Space for housing of agriculture workers 4: Space for storage of farm equipment 5: Other uses | |
|--|---|--|

4.17.1 How far is it to the nearest market where you **sell** your harvest? (a) In distance: 4.17.1.1 distsmktkm (kms); or (b) 4.17.1.2 distsmkthr In time (hrs)

4.17.2 What transport do you use to get to market? 4.17.2 transport

KEY for 4.17.2:

1. walk; 2. animal; 3. cart/bicycle; 4. truck or other motorized vehicle; 6. Other (Specify) & combination of above

4.17.3 How far is it to the nearest market where you **obtain** your inputs? In distance: (a) 4.17.3.1 distpmktkm (kms); or (b) 4.17.3.2 distpmkthr in time (hrs)

Part 2: Livestock, Poultry and other Farm Animals.

4.18. Does your household own Livestock, Poultry or Other farm animals? **lvsown**

4.18

1: yes; 0: no (If no, please continue to section 4.20)

| 4.18.1 | 4.18.2 | 4.18.3 | 4.18.3.1 | 4.18.4 | 4.18.5 | 4.18.6 | | | 4.18.7 | 4.18.8 |
|--------------------------------------|------------------------|---------------------------------|---|--------------------------------------|-----------------------------|--|-----------------|------------------|---------------------------------|-------------------------|
| Type | Number currently owned | Number born over last 12 months | Number of animals lost, stolen, killed by disease/prey etc. over last 12 months | Number purchased over last 12 months | Purchase price (per animal) | Number of months that animals graze on | | | Number sold over last 12 months | Sale price (per animal) |
| | Num | born | Lost | purch | pprice | Communal land graze1 | own land graze2 | open land graze3 | sold | sprice |
| 1. Cattle (for meat) lvs1 | 4.18.2.1 | 4.18.3.1 | 4.18.3.1.1 | 4.18.4.1 | 4.18.5.1 | 4.18.6.1a | 4.18.6.1b | 4.18.6.1c | 4.18.7.1 | 4.18.8.1 |
| 2. Cattle (for milk) lvs2 | 4.18.2.2 | 4.18.3.2 | 4.18.3.1.2 | 4.18.4.2 | 4.18.5.2 | 4.18.6.2a | 4.18.6.2b | 4.18.6.2c | 4.18.7.2 | 4.18.8.2 |
| 3. Breeding bulls lvs3 | 4.18.2.3 | 4.18.3.3 | 4.18.3.1.3 | 4.18.4.3 | 4.18.5.3 | 4.18.6.3a | 4.18.6.3b | 4.18.6.3c | 4.18.7.3 | 4.18.8.3 |
| 4. Goat lvs4 | 4.18.2.4 | 4.18.3.4 | 4.18.3.1.4 | 4.18.4.4 | 4.18.5.4 | 4.18.6.4a | 4.18.6.4b | 4.18.6.4c | 4.18.7.4 | 4.18.8.4 |
| 5. Sheep lvs5 | 4.18.2.5 | 4.18.3.5 | 4.18.3.1.5 | 4.18.4.5 | 4.18.5.5 | 4.18.6.5a | 4.18.6.5b | 4.18.6.5c | 4.18.7.5 | 4.18.8.5 |
| 6. Pigs for breeding lvs6 | 4.18.2.6 | 4.18.3.6 | 4.18.3.1.6 | 4.18.4.6 | 4.18.5.6 | 4.18.6.6a | 4.18.6.6b | 4.18.6.6c | 4.18.7.6 | 4.18.8.6 |
| 7. Oxen lvs7 | 4.18.2.7 | 4.18.3.7 | 4.18.3.1.7 | 4.18.4.7 | 4.18.5.7 | 4.18.6.7a | 4.18.6.7b | 4.18.6.7c | 4.18.7.7 | 4.18.8.7 |
| 8. Chicken lvs8 | 4.18.2.8 | 4.18.3.8 | 4.18.3.1.8 | 4.18.4.8 | 4.18.5.8 | 4.18.6.8a | 4.18.6.8b | 4.18.6.8c | 4.18.7.8 | 4.18.8.8 |
| 9. Other (specify _____) lvs9 | 4.18.2.9 | 4.18.3.9 | 4.18.5.1.9 | 4.18.4.9 | 4.18.5.9 | 4.18.6.9a | 4.18.6.9b | 4.18.6.9c | 4.18.7.9 | 4.18.8.9 |

NOTE: Variable name for above is: lvs1num, lvs1born,etc

NOTE: For Zimbabwe, there are also the variables lvs10num...lvs12sprice

| 4.19.1 Own livestock products | 4.19.2 Quantity for own use (kg/year) | 4.19.3 Quantity sold(kg/yr) | 4.19.4 Price per unit |
|-------------------------------|---------------------------------------|-----------------------------|----------------------------|
| 1. Milk Products | 4.19.2.1 lvsp1use | 4.19.3.1 lvsp1sell | 4.19.4.1 lvsp1price |
| Meat (slaughtering) | | | |
| 2. Beef | 4.19.2.2 lvsp2use | 4.19.3.2 lvsp2sell | 4.19.4.2 lvsp2price |
| 3. Sheep | 4.19.2.3 lvsp3use | 4.19.3.3 lvsp3sell | 4.19.4.3 lvsp3price |

District Code: _____; Household ID: _____

| | | | |
|--------------------------|--------------------------|---------------------------|----------------------------|
| 4. Goat | 4.19.2.4 lvsp4use | 4.19.3.4 lvsp4sell | 4.19.4.4 lvsp4price |
| 5. Other (specify) | 4.19.2.5 lvsp5use | 4.19.3.5 lvsp5sell | 4.19.4.5 lvsp5price |
| Other products | | | |
| 6. Eggs | 4.19.2.6 lvsp6use | 4.19.3.6 lvsp6sell | 4.19.4.6 lvsp6price |
| 7. Wool | 4.19.2.7 lvsp7use | 4.19.3.7 lvsp7sell | 4.19.4.7 lvsp7price |
| 8. Leather | 4.19.2.8 lvsp8use | 4.19.3.8 lvsp8sell | 4.19.4.8 lvsp8price |
| 9. Other (specify _____) | 4.19.2.9 lvsp9use | 4.19.3.9 lvsp9sell | 4.19.4.9 lvsp9price |

4.20 Can you please tell us the total cost of the following activities:

| Code | Type | 4.20.1. Food and Tree crops Harvested | 4.20.2 Livestock |
|------|------------------------------|--|---|
| 1 | Transport costs | 4.20.1.1 _____ 4.20.1.1 cost1crop | 4.20.2.1 _____ 4.20.2.1 cost1lvs |
| 2 | Packing/marketing | 4.20.1.2 _____ 4.20.1.2 cost2crop | 4.20.2.2 _____ 4.20.2.2 cost2lvs |
| 3 | Storage costs | 4.20.1.3 _____ 4.20.1.3 cost3crop | 4.20.2.3 _____ 4.20.2.3 cost3lvs |
| 4 | Post harvest losses | 4.20.1.4 _____ 4.20.1.4 cost4crop | 4.20.2.4 _____ 4.20.2.4 cost4lvs |
| 5 | Other (please specify) _____ | 4.20.1.5 _____ 4.20.1.5 cost5crop | 4.20.2.5 _____ 4.20.2.5 cost5lvs |

Section 5: Access and Extension Services

All questions concern the last 12 months

| | A. For Crop production | B. For Livestock activities |
|--|--|---|
| 5.1.0 Do you get information and advice from extension workers? KEY for 6.1.0: 1: yes; 2: no | 5.1.0a: 5.1.0a extc | 5.1.0b: 5.1.0b extl |
| 5.1.1 How many times do they visit you per year? | 5.1.0a:: 5.1.1a extcvisit | 5.1.1b: 5.1.1b extlvisit |
| 5.1.2 Do you pay for receiving extension advise? KEY for 6.1.2: 1: yes; 2: no ((if no, go to Q. 5.1.4) | 5.1.2a: 5.1.2a extcpay | 5.1.2b: 5.1.2b extlpay |
| 5.1.3 How much do you pay annually for extension? _____ | 5.1.3a: 5.1.3a extccost | 5.1.3b: 5.1.3b extlcost |
| 5.1.4 The Extension officials who visit/contact you are from which organization? KEY for 6.1.4 | 5.1.4a: 5.1.4a extctype | 5.1.4b: 5.1.4b extltype |
| 1. Government Agency 2. Agriculture research station 3. NGO 4. Other (specify) or combination of above | | |

5.2.1 Have extension officers provided information on expected rainfall and precipitation?

5.2.1 extclim

KEY for 5.2: 1: yes; 2: no

5.3 If you get any technical assistance and advice from other sources apart from official extension workers, from where do you receive the necessary information? **5.3 extother**

KEY for 5.3: 1:Media; 2:Neighboring farmer, 3:Shopkeepers in village; 4: Others (please specify) 5: None; 6: 2 combinations of 1-4; 7: >2 combinations of 1-4

NOTE: For Egypt variables extctype_def, extltype_def and extother-def further specify other extension services or combinations.

District Code: _____; Household ID: _____

Section 6: Other Farming Costs and Farm Subsidies

All questions concern the last 12 months

6.1 What is the **total** household net income from farm activities (own or someone else's farm) in the **last 12-months**? 6.1 (NB: use income table if necessary)
incfarm

6.1.1 Over the **last 12 months**, what **percent** of total household net income is from *non-farm* activities (e.g. income (salary) from non-agriculture activities and other sources such as gifts, pensions, etc)? 6.1.1 **incnfarm**

6.2 What is the **total** net household income from farm activities in a **normal average year**? 6.2 (NB: use income table if necessary) **incfarm_n**

6.2.1 In a **normal average year**, what **percent** of total household net income is from *non-farm* activities (e.g. income (salary) from non-agriculture activities and other sources such as gifts, pensions, etc)? 6.2.1 **incnfarm_n**

6.3 How much has your household paid for the following over the last 12 months?

| | | |
|-------|------------------------------|-------------------------------|
| 6.3.1 | Income Taxes | <u>6.3.1</u> taxincome |
| 6.3.2 | Property Taxes | <u>6.3.2</u> taxprop |
| 6.3.3 | Sales Taxes | <u>6.3.3</u> taxsales |
| 6.3.4 | Other costs (Specify: _____) | <u>6.3.4</u> taxother |

6.4 Did you borrow from any of the following sources for farming over the last 12 months?

| 6.4.0 Source | 6.4.1 Borrowed from: (1: yes; 2: no) | 6.4.2 Amount received | 6.4.3 Interest Rate/year | 6.4.4 Repayment over how many months/years |
|--------------------------------------|--|---|---|--|
| 1.Relatives/Friends | 6.4.1.1: <u>6.4.1.1</u> inc1 | 6.4.2.1: <u>6.4.2.1</u> inc1tot | 6.4.3.1: <u>6.4.3.1</u> inc1r | 6.4.4.1: <u>6.4.4.1</u> inc1years |
| 2.Farmer associations/ co-operatives | 6.4.1.2: <u>6.4.1.2</u> inc2 | 6.4.2.2: <u>6.4.2.2</u> inc2tot | 6.4.3.2: <u>6.4.3.2</u> inc2r | 6.4.4.2: <u>6.4.4.2</u> inc2years |
| 3.Commercial banks | 6.4.1.3: <u>6.4.1.3</u> inc3 | 6.4.2.3: <u>6.4.2.3</u> inc3tot | 6.4.3.3: <u>6.4.3.3</u> inc3r | 6.4.4.3: <u>6.4.4.3</u> inc3years |
| 4.Thrift and loan Society | 6.4.1.4: <u>6.4.1.4</u> inc4 | 6.4.2.4: <u>6.4.2.4</u> inc4tot | 6.4.3.4: <u>6.4.3.4</u> inc4r | 6.4.4.4: <u>6.4.4.4</u> inc4years |
| 5.Others (specify) | 6.4.1.6: <u>6.4.1.5</u> inc5 | 6.4.2.6: <u>6.4.2.5</u> inc5tot | 6.4.3.6: <u>6.4.3.5</u> inc5r | 6.4.4.6: <u>6.4.4.5</u> inc5years |

6.5 Have you received any of the following types of subsidies during the last 12 months?

| | 6.6 .1 (1: yes; 2: no) | 6.6 .2 Source | 6.6 .3 Amount/year |
|------------------|---|--|---|
| 1. Crop subsidy | 6.6 .1.1: <u>6.6.1.1</u> subs1get | 6.6 .2.1: <u>6.6.2.1</u> subs1from | 6.6 .3.1: <u>6.6.3.1</u> subs1tot |
| 2. Input subsidy | 6.6 .1.2: <u>6.6.1.2</u> subs2get | 6.6 .2.2: <u>6.6.2.2</u> subs2from | 6.6 .3.2: <u>6.6.3.2</u> subs2tot |

District Code: _____; Household ID: _____

3. Direct payment

6.6 .1.3: 6.6.1.3

subs3get

6.6 .1.4: 6.6.1.4

subs4get

6.6 .2.3: 6.6.2.3

subs3from

6.6 .2.4: 6.6.2.4

subs4from

Key for 6.6 .2:

- 1 From the government;
2 From NGO;
3 From private sector sources;
4. From other (please specify source)
5. Combination of above

6.6 .3.3: 6.6.3.3

subs3tot

6.6 .3.4: 6.6.3.4

subs4tot

4. Other (please specify type _____)

Section 7: Adaptation Options

7.0 How long have you been a farmer (or farm manager)? **farmingexperience** 7.0 (In number of years)

SHORT TERM CLIMATE EFFECTS

7.1 What are the households' **adaptation strategies to climatic variation** (for example **weather effects** in terms of temperature and rainfall fluctuations, wind, dust storms etc) within and between seasons?

ad711-ad725 7.1

7.2 What are the main primary **constraints for making the necessary adjustments to climatic variation** (for example **weather effects** in terms of temperature and rainfall fluctuations, wind, dust storms etc) within and between seasons?

ad721-ad7212 7.2

LONG TERM CLIMATE CHANGE

7.3 Have you noticed any long term shifts in the mean temperature on your farm? (please explain)

ad731-ad736 7.3

7.4 Have you noticed any long term shifts in the mean rainfall on your farm? (please explain)

ad741-ad747 7.4

7.5 What adjustments in your farming have you made to these long term shifts in temperature? Please list below?

ad751-ad7525 7.5

7.6 What adjustments in your farming have you made to these long term shifts in rainfall? Please list below.

ad761-ad7625 7.6

NOTE: For Zimbabwe, the variables for the questions 7.1 to 7.6 are clmadaptstrategy1-3, constraint1-3, longtermtempshifts1-3, longtermrainfallshifts1-3, adjtempshifts1-3, adjrainfallshifts1-3

District Code: _____; Household ID: _____

This section **must** be completed after the interview is completed. Given the importance of the following data for mapping and tracking purposes, please ensure it is filled out accurately.

Instructions: This section to be filled out by interviewer.

Time Interview Ended: **TIE** _____

Name of interviewer: **interviewer** _____ (this information is important to validate survey responses and will be used to cross check in the event that there are unusual observations during the analysis of the data)

Date of interview (mm/dd/yr)

dateofinterview

Respondent Households' identification number
(Unique Household ID- should be assigned prior to interview)
(1=interview 1, 2=interview 2,.....n=survey n) for each district

hhcode

Location of Farm

Country **adm0/cadm0**

Province/Region **adm1/cadm1**

District **adm2**

District Code
(as provided by YALE) **cadm2**

Subdivision/Division **-**

Village **vname**

Optional: Contact Information of Respondent: _____
(address) _____

District Code: _____; Household ID: _____