Afrint farm household survey
Household information

Household demographic and socio-economic characteristics

M = see manual for explanation
Questions are addressed to the farm manager/farm decision maker who should preferably be the respondent.

c001	Country _	*Ethiopia=1, Ghana=2, Kenya=3, Malawi=4, Nigeria=5, Tanzania=6, Uganda=7, Zambia=8*
c002 M	Region _ _	*Codes 11-19 reserved for Ethiopia, 21-29 for Ghana 21-29, 31-39 for Kenya, etc.*
c003 M	Village _ _ _	*Codes 111-199 reserved for Ethiopia, 201-299 for Ghana, 301-399 for Kenya, etc.*
c004	Full name of village _____	

Variables c005-c105 refer to the Village Diagnostics questionnaire

c107 M	Household no _ _ _ _	*1001-, the first digit is the country code (see c001), Codes 1001-1999 reserved for Ethiopia, 2001-2999 for Ghana, 3001-3999 for Kenya, etc.*
c108	Name of head of household _____	
c109	Name of farm manager _____	
c110	Respondent? _	*1=Farm manager, 2= wife of farm manager, 3=grown up child, 4= relative, 5=parent of farm manager, 6= other, 9= do not know*
c111 M	Household type _	*1=Nuclear, 2=Extended, 3= Polygamous, 4=De jure female headed (widow, never married, divorced), 5=De facto female headed (husband absent), 6= not yet married males; 9= do not know, missing*
c112	Sex of head of household _	*Male=1, female=2, missing =9*
c113	Sex of farm manager _	*Male=1, female=2, , missing=9*
c114	Age of head of household _ _ _ years	*do not know, missing =999*
c115	Age of farm manager _ _ _ years	*do not know, missing =999*

c116 M	Reference year: year when farm household was formed, farm unit established etc. _ _ _ _	*Interviewer is to select reference year, for example year of marriage of household head, when respondent became the farm manager etc..* *do not know, missing =9999*
c117	Educational level of farm manager? _ _ years	*total years in school*

3. Farm and crop management

Which crops did you grow last season (consider all your plots)?

c118 M	Maize _	*yes=1, no =0*
c119 M	Cassava _	*yes=1, no =0*
c120 M	Sorghum _	*yes=1, no =0*
c121 M	Rice _	*yes=1, no =0*
c122 M	Other food crops and vegetables _	*yes=1, no =0*
c123 M	Cash crops, non-food crops _	*yes=1, no =0*

Which crops did you grow at the time when this household was formed (reference year) (consider all your plots)?

c124 M	Maize _	*yes=1, no =0*
c125 M	Cassava _	*yes=1, no =0*
c126 M	Sorghum _	*yes=1, no =0*
c127 M	Rice _	*yes=1, no =0*
c128 M	Other food crops and vegetables _	*yes=1, no =0*
c129 M	Cash crops, non-food crops _	*yes=1, no =0*

*For each of the crops **PRESENTLY** grown (c118-c123), fill in the following relevant information. Skip the sections for non-applicable crops. When completed, continue to section 4.*

3.1 Maize

Maize, area

c130	During the most recent season, did you grow maize in pure stand only or was your maize mixed with other crops? _	*pure stand only=1, intercropped=2, do not know, missing=9*
c131	How would you describe the quality of the land on which you grow maize compared to the average quality of the land in this village? _	*average=1, my land is better=2, my land is worse=3, do not know, missing=9*
c132	Was any portion of the land under maize irrigated? _	*yes=1, no=0; do not know, missing=9 If no, skip to c134*
c133	If irrigated, did you take more than one maize crop per season/year? _	*yes=1, no=0; do not know, missing=9*
c134	In addition to maize, what was the land used for? _	*0=no specific use 1=for other crops, 2=for grazing 9=do not know, missing*

If maize is mixed with other crops (c130), ask respondent to estimate the size of the land under which maize would occur as pure stand.

M c135	What was the area under maize (pure stand equivalent) leading up to your most recent harvest? _ _ _, _ acres (or other local unit) _ _ _, _ ha	*Express in local unit, recalculate into hectares after the interview/survey;* *do not know,missing=999,9*
M c136	What was the area under maize (pure stand equivalent) during the season before the most recent one? _ _ _, _ acres (or other local unit) _ _ _, _ ha	*Express in local unit, recalculate into hectares after the interview/survey;* *do not know,missing=999,9*
M c137	What was the area under maize (pure stand equivalent) two seasons before the most recent one? _ _ _, _ acres (or other local unit) _ _ _, _ ha	*Express in local unit, recalculate into hectares after the interview/survey;* *do not know,missing=999,9*
c138	When the household was formed (reference year c116), what was the size of the land under maize compared to the most recent season? _	*same=1, larger then=2, smaller then=3, did not farm maize at that time =0; do not know, missing=9*

Maize, production (grain)

M c139	What was the total production of maize (grain) after your most recent harvest? _ _ _ bags (or other local unit) _ _ _ _ _ _ kg	*Express in bags or other local unit, then recalculate into kg after the interview/survey.* *Include the amount of green or premature maize harvested; grain equivalent;* *if double cropping due to irrigation include total production over the last year;* *do not know,missing=999999*
M c140	What was the total production of maize during the harvest before the most recent one? _ _ _ bags (or other local unit) _ _ _ _ _ _ kg	*Express in bags or other local unit, then recalculate into kg.* *do not know,missing=999999*
M c141	What was the total production of maize two seasons ago? _ _ _ bags (or other local unit) _ _ _ _ _ _ kg	*Express in bags or other local unit, then recalculate into kg.* *do not know,missing=999999*
c142	At the time when your household was formed, did you get more or less maize from a given size of land (e.g. one acre) compared to now? _	*1=No difference, 2=more then,* *3=less then, 9= do not know, missing*
M c143	How much of the total output of maize (c139) following the most recent season was used for: 1.Home consumption _ _ _ bags _ _ _ _ kg c144 2.Payment for hired labour _ _ _ bags _ _ _ _ kg c145 3.Sale _ _ _ bags _ _ _ _ kg c146 4.Other uses (seed, animal feed, _ _ _ bags brewing, gifts, storage losses etc.) _ _ _ _ kg Total (c139) _ _ _ bags _ _ _ _ kg	*Express in local units (bags etc.), calculate into kg after the survey; include the amount of green or premature maize harvested; grain equivalent;* *do not know,missing=999999*

Maize, technology & inputs – most recent season

c147	During the most recent season, what portion of the total land planted with maize was irrigated? _	0=none, 1=1/4, 2=1/2, 3=3/4, 4=all or nearly all, 9=do not know
c148	During the most recent season, what was the main variety of maize planted? _	1=traditional, 2= improved variety (OPV, composites), 3=hybrid 4= QPM hybrids; 9=do not know, missing
c149	During the most recent season, what was the total amount of artificial fertiliser you used on fields planted by maize? _ _ _ kg	do not know, missing=999
c150	Were pesticides applied on growing crops? _	yes=1, no=0; do not know, missing=9
c151	During the most recent season, what was your main method of land preparation? _	1= hoe cultivation, 2= oxen ploughing, 3= tractor ploughing, 4= other; 9=do not know, missing
M	Maize fields: During the most recent season, did you use…	yes=1, no=0; do not know, missing=9
c152	Crop rotation _	
c153	Intercropping with nitrogen fixing crops (beans, legumes etc.) _	
c154	Fallowing _	
c155	Animal manure _	
c156	Conservation tillage/breaking the hard pan _	
c157	Green manure/compost/residue incorporation _	
c158	Soil and water conservation (level bunds, grass strips, terracing etc.) _	

Maize, technology & inputs – when the household was formed (reference year)

c159	When your household was formed, did you grow maize? _	yes=1, no=0; do not know, missing=9 If no, skip to c175
c160	At the time when this household was formed, what proportion of the land planted with maize was irrigated? _	0=none, 1=1/4, 2=1/2, 3=3/4, 4=all or nearly all, 9=do not know
c161	At the time when this household was formed, what was the main variety of maize planted? _	1=traditional, 2= improved variety (OPV, composites), 3=hybrid 4= QPM hybrids; 9=do not know, missing

c162	When this household was formed, what was the amount of chemical fertiliser used on maize compared to now? —	*1=no difference,* *2= more then,* *3= less then,* *4= no fertiliser applied at that time;* *9= do not know, missing*
c163	Were pesticides applied at that time? _	*yes=1, no=0; do not know, missing=9*
c164	At the time when your household was formed, what was your main method of land preparation? _	*1= hoe cultivation,* *2= oxen ploughing,* *3= tractor ploughing,* *4= other; 9=do not know, missing*
	Did you at that time use…?	*yes=1, no=0; do not know, missing=9*
c165	Crop rotation _	
c166	Intercropping with nitrogen fixing crops (beans, legumes etc.) _	
c167	Fallowing _	
c168	Animal manure _	
c169	Conservation tillage/breaking the hard pan _	
c170	Green manure/compost/residue incorporation _	
c171	Soil and water conservation (level bunds, grass strips, terracing etc.) _	
c172	Since the time your household was formed, has maize yields increased or decreased? _	*yes=1, no=0; do not know, missing=9*
c173	If increased, what has been the *single* most important technological change improving maize yields in your case? —	*1=Access to new seed varieties,* *2= chemical fertiliser,* *3= mechanised land preparation,* *4= irrigation,* *5= conservation farming, improved tillage,* *6= other; 9= do not know, missing*
c174	If decreased, what has been the *single* most important agro-technical change decreasing maize yields in your case? —	*1=Poor seeds,* *2= declining soil fertility,* *3= increasing pests, weeds etc.* *4= inadequate or untimely land preparation,* *5=untimely planting,* *6=bad weather conditions* *7=other, 9= do not know, missing*

Maize, marketing conditions,
most recent harvest:

c175	Did you sell or do you intend to sell any maize following your most recent harvest? _	*yes=1, no=0; do not know, missing=9* *If no, skip to c182*
M c176	What was the total amount of maize sold (or is planned to be sold) after the most recent harvest? _ _ _ bags _ _ _ _ _ _ kg	*calculate local units (bags etc.) into kg;* *do not know,missing=999999*

M c177	What was (is) the lowest price for maize you received following the most recent harvest? _ _ _ _ _ /100 kg _ _ _ USD/100 kg	*indicate in local currency per 100 kg but recalculate into fixed USD after survey*
M c178	What was (is) the highest price you received following the most recent harvest? _ _ _ _ _ /100 kg _ _ _ USD/100 kg	*indicate in local currency per 100 kg but recalculate into fixed USD after survey*
c179	At present, what is the approximate distance to nearest market outlet/crop depot? _ _ km	
c180	What is your main market outlet/crop depot for maize? _	*1=farmer cooperative/organisation,* *2=private trader,* *3= state company & marketing board,* *4= own piecemeal local marketing,* *9= do not know , missing*
c181	Do you grow maize on the basis of a pre-arranged contract with a private trader? _	*yes=1, no=0; do not know, missing=9*

Maize, marketing, the harvest before the most recent one:

c182	Did you sell any maize after the harvest before the most recent one? _	*yes=1, no=0; do not know, missing=9* *If no, skip to c184*
c183	What was the total amount of maize sold? _ _ _ bags _ _ _ _ _ _ kg	*calculate local units (bags etc.) into kg; do not know,missing=999999*

Maize, marketing, two harvests before the most recent one:

c184	Did you sell any maize after the harvest two seasons before the most recent one? _	*yes=1, no=0; do not know, missing=9* *If no, skip to c186*
c185	What was the total amount of maize sold two seasons ago? _ _ _ bags _ _ _ _ _ _ kg	*calculate local units (bags etc.) into kg; do not know,missing=999999*

Maize, marketing at the time when the household was formed:

c186	Did you sell any maize at the time when this household was formed? _	*yes=1, no=0; do not know, missing=9* *If no, skip to c192*
c187	Since you formed your farm/household, how has the amount of maize you sell changed?	*1=no significant change,* *2= more maize sold now,* *3= less maize sold now,* *9= do not know*

c188	When the household was formed, was the price you received better or worse compared to now? _	*1=no significant change,* *2= worse then,* *3= better then,* *9= do not know*
c189	In your view, how has access to market outlets for maize changed since you formed your household? _	*1=same,* *2= better now,* *3=worse now,* *9=do not know, missing*
c190	In your view, how has the price for modern inputs (fertilisers and seeds) as measured in maize equivalents changed since you formed your household? _	*1=no significant change,* *2= prices have gone up,* *3= prices have gone down,* *9= do not know*
c191	In your view, how has the overall profitability for maize changed since you formed your household? _	*1=same, 2= better now, 3=worse now,* *9=do not know, missing*
c192 M	According to your opinion, which factors constrain at present production of maize for the market in your case? Market factors: 1.Low or fluctuating producer price 2.Untimely payment for crops 3.High transportation costs 4.Unreliable market outlet 5.High price for modern inputs (seeds, fertilisers, pesticides) 6.Modern inputs not available 7.Lack of credit facilities *Indicate the most important of the mentioned market related factors:* Most important constraining factor _	 *Use codes (1-7) supplied.* *If no constraints experienced, write '0'*

c193 M	Which of the following household factors constrain at present production of maize for the market in your case? 1.Household labour shortage 2.Farm labour too expensive to hire 3.Chronic illness in the family 4.Lack of land to grow crops or insecure land tenure 5.Lack of knowledge about yield improving farming techniques 6.Lack of capital to buy inputs etc. 7.Lack of capital for land preparation (draught animals, tractor ploughing etc.) *Indicate the two most important of the mentioned household related factors:* Most important constraining factor ___	
		If no constraints experienced, write '0'
c194	Which of the two groups of factors, market or household conditions, is the most constraining one in your case? ___	*1= market related factors* *2=household factors* *9=do not know, missing*

3.2 Cassava

Cassava, area

c195 M	Do you grow cassava in pure stand or mixed with other crops? ___	*pure stand only=1, intercropped=2 do not know,missing=9*
c196	How would you describe the quality of the land on which you grow cassava compared to the average quality of the land in this village? ___	*Average=1, my land is better=2, my land is worse=3, do not know, missing=9*

If cassava is mixed with other crops, ask respondent to estimate the size of the land under which cassava would occur as pure stand.

M	What has been your average area under cassava (pure stand equivalent) during the past year? _ _ _, _ acres (or other local unit)	*Recalculate into hectares after the interview/survey;* *do not know,missing=999,9* *Sep 01- Sep 02*
c197	_ _ _, _ ha	
M	What was the average area under cassava (pure stand equivalent) the year before last? _ _ _, _ acres (or other local unit)	*Recalculate into hectares after the survey;* *do not know,missing=999,9* *Sep 00 – Sep 01*
c198	_ _ _, _ ha	

M	What was the area under cassava (pure stand equivalent) two years ago?	*Recalculate into hectares after the survey; do not know,missing=999,9*
		Sep 99 – Sep 00
	_ _ _, _ acres (or other local unit)	
c199	_ _ _, _ ha	
c200	When the household was formed, what was the average size of the land under cassava compared to the last season? _	*1=Same as now, 2=larger then, 3= smaller then, 0=did not grow cassava at that time, 9= do not know, missing*

Cassava, production

M	What has been the total amount of unprocessed cassava (tubers) harvested during the past year counting from today?	*calculate local units (bags etc.) into kg; do not know,missing=999999*
		Sep 01 – Sep 02
	_ _ _ bags	
c201	_ _ _ _ _ kg	
M	What was the total amount of unprocessed cassava (tubers) harvested during the year before the past year?	*calculate local units (bags etc.) into kg; do not know,missing=999999*
		Sep 00 – Sep 01
	_ _ _ bags	
c202	_ _ _ _ _ kg	
M	What was the total amount of unprocessed cassava (tubers) harvested two years ago?	*calculate local units (bags etc.) into kg; do not know,missing=999999*
	_ _ _ bags	*Sep 99 – Sep 00*
c203	_ _ _ _ _ kg	

M	How much of the total output of cassava (c201) during last was used for:		*Express in local units (bags etc.), calculate into kg after the survey* *do not know,missing=999999*
c204	1.Home consumption	_ _ _ bags _ _ _ _ _ kg	
c205	2.Payment for hired labour	_ _ _ bags _ _ _ _ _ kg	
c206	3.Sale	_ _ _ bags _ _ _ _ _ kg	
c207	4.Other uses (seed, animal feed, brewing, gifts, storage losses etc.)	_ _ _ bags _ _ _ _ _ kg	
	Total (c201)	_ _ _ bags _ _ _ _ _ kg	
c208	At the time when your household was formed, did you get more or less cassava from a given size of land compared to now? _		*0=did not grow cassava at that time,* *1=No difference, 2=larger crop then,* *3=larger crop now, 9= do not know,* *missing*

Cassava, technology & inputs – most recent season

c209	During the most recent season, what was the main variety of cassava planted? _	*1=traditional, 2= improved variety; 9=do not know, missing*
c210	During the most recent season, what was the total amount of artificial fertiliser you used on fields planted with cassava? _ _ _ kg	*do not know, missing=999*
c211	Were pesticides applied on the crop? _	*yes=1, no=0; do not know, missing=9*

c212	During the most recent season, what was your main method of land preparation? _	1=hoe cultivation, 2=oxen ploughing, 3=tractor ploughing, 4=other; 9=do not know, missing
M	During last year did you use…?	yes=1, no=0; do not know, missing=9
c213	Crop rotation _	
c214	Intercropping with nitrogen fixing crops (beans etc.) _	
c215	Fallowing _	
c216	Animal manure _	
c217	Conservation tillage/breaking the hard pan _	
c218	Green manure/compost _	
c219	Soil and water conservation (level bunds, grass strips, terracing etc.) _	

Cassava, technology & inputs – when the household was formed

c220	When your household was formed, did you grow cassava? _	yes=1, no=0; do not know, missing=9 If no, skip to c235
c221	At the time when this household was formed, what was the main variety of cassava planted? _	traditional=1, improved variety=2, do not know, missing=9
c222	When this household was formed, what was the amount of artificial fertiliser used on cassava compared to now? _	No difference =1, more then =2, less then =3, no use at that time =0, do not know, missing=9
c223	Were pesticides applied at that time? _	yes=1, no=0; do not know, missing=9
c224	At the time when your household was formed, what was your main method of land preparation? _	hoe cultivation=1, oxen ploughing=2, tractor ploughing=3, other=4; do not know, missing=9
	Did you at that time apply…?	yes=1, no=0; do not know, missing=9
c225	Crop rotation _	
c226	Intercropping with nitrogen fixing crops (beans etc.) _	
c227	Fallowing _	
c228	Animal manure _	
c229	Conservation tillage/breaking the hard pan _	
c230	Green manure/compost/residue incorporation _	
c231	Soil and water conservation (level bunds, grass strips, terracing etc.) _	
c232	Since the time your household was formed, has cassava yields increased or decreased? _	yes=1, no=0; do not know, missing=9

c233	If *increased*, what has been the *single* most important technological change improving cassava yields in your case? —	1=Access to new seed varieties, 2= chemical fertiliser, 3= mechanised land preparation, 4= irrigation, 5= conservation farming, improved tillage, 6= other; 9= do not know, missing
c234	If *decreased*, what has been the *single* most important agro-technical change decreasing cassava yields in your case? —	1=Poor seedlings, 2= declining soil fertility, 3= increasing pests, weeds etc. 4= inadequate or untimely land preparation, 5=untimely planting, 6=bad wheather conditions 7=other, 9= do not know, missing

Cassava, marketing conditions, the most recent year:

c235	Did you sell any cassava in the course of the past year counting? —	yes=1, no=0; do not know, missing=9 Sep 01 – Sep 02 If no, skip to c243
c236 M	Was cassava mainly sold as tubers or in processed form (e.g. flour, gari, chips etc.)? —	tubers=1, processed=2, 9= do not know, missing
M c237	What was the total amount of cassava (tubers equivalents) sold during this period? _ _ _ bags _ _ _ _ _ kg	calculate local units (bags etc.) into kg; do not know,missing=999999 Recalculate processed cassava into raw equivalents.
M c238	What was (is) the lowest price you received during this period? _ _ _ _ /100 kg _ _ _ USD/100 kg	indicate in local currency per 100 kg but recalculate into fixed USD after interview
M c239	What was (is) the highest price you received during this period? _ _ _ _ /100 kg _ _ _ USD/100 kg	indicate in local currency per 100 kg but recalculate into fixed USD after survey
c240	At present, what is the approximate distance to the nearest market outlet/crop depot for cassava tubers? _ _ km	
c241	What is your main market outlet for cassava? _	Farmer cooperative/organisation=1, private trader=2, state company & marketing board=3, own piecemeal local marketing=4, do not know , missing=9
c242	Do you grow cassava on the basis of a pre-arranged contract with a private trader? _	yes=1, no=0; do not know, missing=9

Marketing conditions, the year before last:

c243	Did you sell any cassava during the period Sep 2000 to Sep 2001? —	yes=1, no=0; do not know, missing=9 Sep 00 – Sep 01 If no, skip to c245

c244	What was the total amount of unprocessed cassava (tubers) sold during this period? _ _ _ bags _ _ _ _ _ _ kg	*calculate local units (bags etc.) into kg; do not know,missing=999999*

Marketing conditions, two years ago:

c245	Did you sell any cassava during the period Sep 1999 to 2000? _	*yes=1, no=0; do not know, missing=9 Sep 99 – Sep 00 If no, skip to c247*
c246	What was the total amount of unprocessed cassava (tubers) sold during this period? _ _ _ bags _ _ _ _ _ _ kg	*calculate local units (bags etc.) into kg; do not know,missing=999999*

Marketing conditions, when the household was formed:

c247	Did you sell cassava at the time when the household was formed? _	*yes=1, no=0; do not know, missing=9* *If no, skip to c253*
c248	Since you formed your farm/household, how has your marketing of cassava changed? _	*1=no significant change, 2= more cassava sold now, 3= less cassava sold now, 9= do not know*
c249	What was the price you received for unprocessed cassava (tubers) when the household was formed? _	*1=no significant change, 2= price worse then, 3= price better then, 9= do not know*
c250	In your view, how has access to market outlets for cassava changed since you formed your household? _	*1=same, 2= better now, 3=worse now, 9=do not know, missing*
c251	In your view, how has the price for modern inputs (fertilisers and seeds) as measured in cassava equivalents changed since you formed your household? _	*1=no significant change, 2= prices have gone up, 3= prices have gone down, 9= do not know*
c252	In your view, how has profitability for cassava changed since you formed your household? _	*1=no significant change, 2= better now, 3= worse now, 9= do not know*

c253 M	According to your opinion, which factors constrain at present production of cassava for the market in your case? Market factors: 1.Low or fluctuating producer price 2.Untimely payment for crops 3.High transportation costs 4.Unreliable market outlet 5.High price for modern inputs (seeds, fertilisers, pesticides) 6.Modern inputs not available 7.Lack of credit facilities *Indicate the most important of the mentioned market related factors:* Most important constraining factor ___	
		If no constraints experienced, write '0'
c254 M	Household factors: Which of the following household factors constrain at present production of cassava for the market in your case? 1.Household labour shortage 2.Farm labour too expensive to hire 3.Chronic illness in the family 4.Lack of land or insecure access to land 5.Lack of knowledge about yield improving farming techniques 6.Lack of capital to buy inputs etc. 7.Lack of capital for land preparation *Indicate the most important of the mentioned household related factors:* Most important constraining factor ___	*If no constraints experienced, write '0'*
c255	Which of the two groups of factors, market or household conditions, is the most constraining one in your case? ___	*1= market related factors* *2=household factors* *9=do not know, missing*

3.3 Sorghum

Sorghum, area

c256 M	During the most recent season, did you grow sorghum in pure stand only or do you have sorghum fields mixed with other crops? _	*pure stand only=1, intercropped=2 do not know,missing=9*
c257	How would you describe the quality of the land on which you had sorghum compared to the average quality of the land in this village? _	*Average=1, my land is better=2, my land is worse=3, do not know, missing=9*
c258	During the most recent season, was the land under sorghum irrigated? _	*yes=1, no=0; do not know, missing=9 If no, skip to c262*
c259	If yes, did you take more than one crop of sorghum per season/year? _	*yes=1, no=0; do not know, missing=9*
c260	If only one sorghum crop was taken, what was the land used for after the sorghum? _	*1=for other crops, 2=for grazing 3=no specific use, other uses 9=do not know, missing*
c261	If the land was used for other crops after harvest, which crops? _	*1=other food crops, 2=vegetables 3=other, 9=do not know, missing*

If sorghum is mixed with other crops, ask respondent to estimate the size of the land under which sorghum would occur as pure stand.

M c262	What was the area under sorghum (pure stand equivalent) leading up to your most recent harvest? _ _ _, _ acres (or other local unit) _ _ _, _ ha	*Express in local unit, recalculate into hectares after the survey; do not know,missing=999,9*
M c263	What was the area under sorghum (pure stand equivalent) during the season before the most recent one? _ _ _, _ acres (or other local unit) _ _ _, _ ha	*Express in local unit, recalculate into hectares after the survey; do not know,missing=999,9*
M c264	What was the area under sorghum (pure stand equivalent) two seasons before the most recent one? _ _ _, _ acres (or other local unit) _ _ _, _ ha	*Express in local unit, recalculate into hectares after the survey; do not know,missing=999,9*
c265	When the household was formed, what was the size of the land under sorghum compared to the most recent season? _	*0=Did not grow sorghum at that time, 1=Same as now, 2=larger then, 3= smaller then, 9= do not know, missing*

Sorghum, production (grain)

M c266	What was the total production of sorghum (grain) after your most recent harvest? _ _ _ bags (or other local unit) _ _ _ _ _ _ kg	*calculate local units (bags etc.) into kg;* *Express in bags or other local unit, then recalculate into kg after the survey.* *do not know,missing=999999*
M c267	What was the total production of sorghum during the harvest before the most recent one? _ _ _ bags (or other local unit) _ _ _ _ _ _ kg	*Express in bags or other local unit, then recalculate into kg after the survey.* *do not know,missing=999999*
M c268	What was the total production of sorghum two seasons ago? _ _ _ bags (or other local unit) _ _ _ _ _ _ kg	*Express in bags or other local unit, then recalculate into kg after the survey.* *do not know,missing=999999*
c269	At the time when your household was formed, how much sorghum did you get from a given size of land compared to now? _	*0=did not grow sorghum at that time,* *1=No difference,* *2=more then, 3=more now,* *9=do not know, missing*

M
 	
c270
 	
c271
 	
c272
 	
c273
	How much of the total output of sorghum (c266) following the most recent season was used for:
	
	1.Home consumption _ _ _ bags
	
	      _ _ _ _ _ kg
	
	2.Payment for hired labour _ _ _ bags
	
	      _ _ _ _ _ kg
	
	3.Sale _ _ _ bags
	
	      _ _ _ _ _ kg
	
	4.Other uses (seed, animal feed, brewing, gifts, storage losses etc.) _ _ _ bags
	
	      _ _ _ _ _ kg
	
	Total (c266) _ _ _ bags
	
	      _ _ _ _ _ kg
		Express in local units (bags etc.), calculate into kg after the survey
		do not know,missing=999999

Sorghum, technology & inputs – most recent season

c274	During the most recent season, what portion of the total land planted with sorghum was irrigated? _	*0=none,* *1=1/4,* *2=1/2,* *3=3/4,* *4=all or nearly all, 9=do not know*

c275	During the most recent season, what was the main variety of sorghum planted? _	*1=traditional, 2= improved variety 3=hybrid 9=do not know, missing*
c276	During the most recent season, what was the total amount of artificial fertiliser you used on fields planted with sorghum? _ _ _ kg	*do not know, missing=999*
c277	Were pesticides applied? _	*yes=1, no=0; do not know, missing=9*
c278	During the most recent season, what was your main method of land preparation? _	*1= hoe cultivation, 2= oxen ploughing, 3= tractor ploughing, 4= other; 9=do not know, missing*
M	Did you use…?	*yes=1, no=0; do not know, missing=9*
c279	Crop rotation _	
c280	Intercropping with nitrogen fixing crops (beans etc.) _	
c281	Fallowing _	
c282	Animal manure _	
c283	Conservation tillage/breaking the hard pan _	
c284	Green manure/compost _	
c285	Soil and water conservation (level bunds, grass strips, terracing etc.) _	

Sorghum, technology & inputs – when the household was formed

c286	When your household was formed, did you grow sorghum? _	*yes=1, no=0; do not know, missing=9 If no, skip to c302*
c287	At the time when this household was formed, what proportion of the land planted with sorghum was irrigated? _	*0=none, 1=1/4, 2=1/2, 3=3/4, 4=all or nearly all, 9=do not know*
c288	At the time when this household was formed, what was the main variety of sorghum planted? _	*1=traditional, 2= improved variety 3=hybrid 9=do not know, missing*
c289	When this household was formed, what was the amount of artificial fertiliser used on sorghum compared to now? _	*1=no difference, 2= more then, 3= less then, 4= no fertiliser applied at that time; 9= do not know, missing*
c290	Were pesticides applied at that time? _	*yes=1, no=0; do not know, missing=9*
c291	At the time when your household was formed, what was your main method of land preparation? _	*1= hoe cultivation, 2= oxen ploughing, 3= tractor ploughing, 4= other; 9=do not know, missing*

	Did you at that time apply…?	yes=1, no=0; do not know, missing=9
c292	Crop rotation _	
c293	Intercropping with nitrogen fixing crops (beans etc.) _	
c294	Fallowing _	
c295	Animal manure _	
c296	Conservation tillage/breaking the hard pan _	
c297	Green manure/compost/residue incorporation _	
c298	Soil and water conservation (level bunds, grass strips, terracing etc.) _	
c299	Since the time your household was formed, has sorghum yields increased or decreased? _	yes=1, no=0; do not know, missing=9
c300	If increased, what has been the *single* most important technological change improving sorghum yields in your case? _	1=Access to new seed varieties, 2= chemical fertiliser, 3= mechanised land preparation, 4= irrigation, 5= conservation farming, improved tillage, 6= other; 9= do not know, missing
c301	If decreased, what has been the *single* most important agro-technical change decreasing sorghum yields in your case? _	1=Poor seeds, 2= declining soil fertility, 3= increasing pests, weeds etc. 4= inadequate or untimely land preparation, 5=untimely planting, 6=bad weather conditions 7=other, 9= do not know, missing

**Sorghum, marketing conditions,
most recent harvest:**

c302	Did you sell or do you intend to sell any sorghum following your most recent harvest? _	yes=1, no=0; do not know, missing=9 If no, skip to c309
	What was the total amount of sorghum sold (or is planned to be sold) after the most recent harvest? _ _ _ bags	calculate local units (bags etc.) into kg; do not know,missing=999999
c303	_ _ _ _ _ _ kg	
M	What was (is) the lowest price for sorghum you received following the most recent harvest? _ _ _ _/100 kg	indicate in local currency per 100 kg but recalculate into fixed USD after survey
c304	_ _ _ USD/100 kg	
M	What was (is) the highest price you received following the most recent harvest? _ _ _ _/100 kg	indicate in local currency per 100 kg but recalculate into fixed USD after survey
c305	_ _ _ USD/100 kg	
c306	At present, what is the approximate distance to nearest market outlet/crop depot? _ _ km	

c307	What is your main market outlet/crop depot for sorghum? _	*1=farmer cooperative/organisation,* *2=private trader,* *3= state company & marketing board,* *4= own piecemeal local marketing,* *9= do not know , missing*
c308	Do you grow sorghum on the basis of a pre-arranged contract with a private trader? _	*yes=1, no=0; do not know, missing=9*

Marketing, the harvest before the most recent one:

c309	Did you sell any sorghum after the harvest before the most recent one? _	*yes=1, no=0; do not know, missing=9* *If no, skip to c311*
c310	What was the total amount of sorghum sold? _ _ _ bags _ _ _ _ _ _ kg	*calculate local units (bags etc.) into kg; do not know,missing=999999*

Marketing, two harvests before the most recent one:

c311	Did you sell any sorghum after the harvest two seasons before the most recent one? _	*yes=1, no=0; do not know, missing=9* *If no, skip to c313*
c312	What was the total amount of sorghum sold two seasons ago? _ _ _ bags _ _ _ _ _ _ kg	*calculate local units (bags etc.) into kg; do not know,missing=999999*

Marketing at the time when the household was formed:

c313	Did you sell any sorghum at the time when this household was formed? _	*yes=1, no=0; do not know, missing=9* *If no, skip to c319*
c314	Since you formed your farm/household, how has your marketing of sorghum changed? _	*1=no significant change,* *2= more maize sold now,* *3= less maize sold now,* *9= do not know*
c315	What was producer price when the household was formed? _	*1=no significant change,* *2= worse then,* *3= better then,* *9= do not know*
c316	In your view, how has access to market outlets for sorghum changed since you formed your household? _	*1= no significant change,* *2= better now,* *3=worse now,* *9=do not know, missing*
c317	In your view, how has the price for modern inputs (fertilisers and seeds) as measured in sorghum equivalents changed since you formed your household? _	*1=no significant change,* *2= prices have gone up,* *3= prices have gone down,* *9= do not know*
c318	In your view, how has profitability for sorghum changed since you formed your household? _	*1=no significant change,* *2=better now,* *3= worse now,* *9= do not know*

c319 M	According to your opinion, which factors constrain at present production of sorghum for the market in your case? Market factors: 1.Low or fluctuating producer price 2.Untimely payment for crops 3.High transportation costs 4.Unreliable market outlet 5.High price for modern inputs (seeds, fertilisers, pesticides) 6.Modern inputs not available 7.Lack of credit facilities *Indicate the most important of the mentioned market related factors:* Most important constraining factor _	*If no constraints experienced, write '0'*
c320 M	Which of the following household factors constrain at present production of sorghum for the market in your case? 1.Household labour shortage 2.Farm labour too expensive to hire 3.Chronic illness in the family 4.Lack of land or insecure access to land 5.Lack of knowledge about yield improving farming techniques 6.Lack of capital to buy inputs etc. 7.Lack of capital for land preparation *Indicate the most important of the mentioned household related factors:* Most important constraining factor _	*If no constraints experienced, write '0'*
c321 M	Which of the two groups of factors, market or household conditions, is the most constraining one in your case? _	*1= market related factors* *2=household factors* *9=do not know, missing*

3.4 Rice

Rice, area

c322	How would you describe the quality of the land on which you grow rice compared to the average quality of the land in this village? _	*Average=1, my land is better=2, my land is worse=3, do not know, missing=9*
c323	During the most recent season, was any of the land planted with rice irrigated? _	*yes=1, no=0; do not know, missing=9* *If no, skip to c327*
c324	If yes, did you take more than one rice crop per season/year? _	*yes=1, no=0; do not know, missing=9*
c325	In addition to rice, what was the land used for? _	*1=for other crops,* *2=for grazing* *3=no specific use, other uses* *9=do not know, missing*
c326	If the irrigated land was used for other crops after harvest, which crops? _	*1=other food crops,* *2=vegetables* *3=other, 9=do not know, missing*
M c327	What was the area under rice leading up to your most recent harvest? _ _ _, _ acres (or other local unit) _ _ _, _ ha	*Express in local unit, recalculate into hectares after the survey; do not know,missing=999,9*
M c328	What was the area under rice during the season before the most recent one? _ _ _, _ acres (or other local unit) _ _ _, _ ha	*Express in local unit, recalculate into hectares after the survey; do not know,missing=999,9*
M c329	What was the area under rice two seasons before the most recent one? _ _ _, _ acres (or other local unit) _ _ _, _ ha	*Express in local unit, recalculate into hectares after the survey; do not know,missing=999,9*
c330	When the household was formed, what was the size of the land under rice compared to the last season? _	*0=Did not grow rice at that time,* *1= same as now, 2= larger then,* *3= smaller then; 9= do not know, missing*

Rice (paddy), production

M c331	What was the total production of paddy (grain) after your most recent harvest/last year? _ _ _ bags (or other local unit) _ _ _ _ _ _ kg	*calculate local units (bags etc.) into kg;* *Express in bags or other local unit, then recalculate into kg after the interview/survey.* *do not know,missing=999999*

M	What was the total production of paddy during the harvest before the most recent one? _ _ _ bags (or other local unit)	*Express in bags or other local unit, then recalculate into kg after the survey.* *do not know,missing=999999*
c332	_ _ _ _ _ _ kg	
M	What was the total production of paddy two seasons ago? _ _ _ bags (or other local unit)	*Express in bags or other local unit, then recalculate into kg after the survey.* *do not know,missing=999999*
c333	_ _ _ _ _ _ kg	
M	How much of the total output of paddy (c331) following the most recent season was used for:	*Express in local units (bags etc.), calculate into kg after the survey*
c334	1.Home consumption _ _ _ bags _ _ _ _ _ kg	*do not know,missing=999999*
c335	2.Payment for hired labour _ _ _ bags _ _ _ _ _ kg	
c336	3.Sale _ _ _ bags _ _ _ _ _ kg	

c337	4.Other uses (seed, animal feed, brewing, gifts, storage losses etc.) _ _ _ bags
	
	         _ _ _ _ _ kg
	
	Total (c331) _ _ _ bags
	
	         _ _ _ _ _ kg	

c338 M	At the time when your household was formed, did you get more or less paddy from a given size of land compared to now? _	*0=did not grow rice at that time, 1=No difference, 2=more then, 3=more now, 9= do not know, missing*

Rice, technology & inputs – most recent season

	During the most recent season, what types of rice were grown? Indicate the proportions:	*yes=1, no=0; do not know, missing=9*
c339	1.Upland rice (rainfed) _ _ _	
c340	2.Lowland rainfed rice _ _ _	
c341	3.Lowland irrigated rice _ _ _	
	Total 100 %	
c342	During the most recent season, what was the *main* variety of rice planted? _	*1=traditional, 2=improved, 9= do not know, missing*

c343 M	During the most recent season, what was the total amount of artificial fertiliser you used on fields planted by rice? _ _ _ kg	*do not know, missing=999*
c344	Were pesticides applied? _	*yes=1, no=0; do not know, missing=9*
c345	During the most recent season, what was your main method of land preparation? _	*1=hoe cultivation, 2=oxen ploughing, 3= tractor ploughing, 4=other; 9= do not know, missing*
M	Did you use…?	*yes=1, no=0; do not know, missing=9*
c346	Crop rotation _	
c347	Intercropping with nitrogen fixing crops (beans etc.) _	
c348	Fallowing _	
c349	Animal manure _	
c350	Conservation tillage/breaking the hard pan _	
c351	Green manure/compost/residue incorporation _	
c352	Soil and water conservation (level bunds, grass strips, terracing etc.) _	

Rice, technology & inputs – when the household was formed

c353	When your household was formed, did you grow rice? _	*yes=1, no=0; do not know, missing=9 If no, skip to c371*
	When your household was formed, what types of rice were grown? Indicate the proportions:	*yes=1, no=0; do not know, missing=9*
c354	1.Upland rice (rainfed) _ _ _	
c355	2.Lowland rainfed rice _ _ _	
c356	3.Lowland irrigated rice _ _ _	
	Total 100 %	
c357	At that time, what was the *main* variety of rice planted? _	*1=traditional, 2=improved, 9= do not know, missing*
c358	What was the amount of artificial fertiliser used on rice compared to now? _	*1=no difference, 2=more then, 3=less then, 4=no fertiliser applied at that time, 9=do not know, missing*
c359	Were pesticides applied at that time? _	*yes=1, no=0; do not know, missing=9*
c360	At the time when your household was formed, what was your main method of land preparation? _	*1=hoe cultivation, 2=oxen ploughing, 3= tractor ploughing, 4=other; 9= do not know, missing*

	Did you at that time apply…?	yes=1, no=0; do not know, missing=9
c361	Crop rotation _	
c362	Intercropping with nitrogen fixing crops (beans etc.) _	
c363	Fallowing _	
c364	Animal manure _	
c365	Conservation tillage/breaking the hard pan _	
c366	Green manure/compost/residue incorporation _	
c367	Soil and water conservation (level bunds, grass strips, terracing etc.) _	
c368	Since the time your household was formed, has paddy yields increased or decreased? _	yes=1, no=0; do not know, missing=9
c369	If increased, what has been the *single* most important technological change improving paddy yields in your case? _	1=Access to new seed varieties, 2= chemical fertiliser, 3= mechanised land preparation, 4= irrigation, 5= conservation farming, improved tillage, 6= other; 9= do not know, missing
c370	If decreased, what has been the *single* most important agro-technical change decreasing paddy yields in your case? _	1=Poor seeds, 2= declining soil fertility/inadequate fertilisation, 3= increasing pests, weeds etc. 4= inadequate or untimely land preparation, 5=untimely planting, 6=inadequate water access/availability 7=other, 9= do not know, missing

**Rice, marketing conditions,
most recent harvest:**

c371	Did you sell or do you intend to sell any paddy following your most recent harvest? _	yes=1, no=0; do not know, missing=9 *If no, skip to c378*
M c372	What was the total amount of paddy sold (or is planned to be sold) after the most recent harvest? _ _ _ bags _ _ _ _ _ _ kg	calculate local units (bags etc.) into kg; do not know,missing=999999
M c373	What was (is) the lowest price for paddy you received following the most recent harvest? _ _ _ _/100 kg _ _ _ USD/100 kg	indicate in local currency per 100 kg but recalculate into fixed USD after survey
M c374	What was (is) the highest price you received following the most recent harvest? _ _ _ _/100 kg _ _ _ USD/100 kg	indicate in local currency per 100 kg but recalculate into fixed USD after survey

c375	At present, what is the approximate distance to nearest market outlet/crop depot? _ _ km	
c376	What is your main market outlet/crop depot for rice? _	*1=farmer cooperative/organisation, 2=private trader, 3= state company & marketing board, 4= own piecemeal local marketing, 9= do not know , missing*
c377	Do you grow rice on the basis of a pre-arranged contract with a private trader? _	*yes=1, no=0; do not know, missing=9*

Marketing, the harvest before the most recent one:

c378	Did you sell any paddy after the harvest before the most recent one? _	*yes=1, no=0; do not know, missing=9 If no, skip to c380*
c379	What was the total amount of paddy sold? _ _ _ bags _ _ _ _ _ _ kg	*calculate local units (bags etc.) into kg; do not know,missing=999999*

Marketing, two harvests before the most recent one:

c380	Did you sell any paddy after the harvest two seasons before the most recent one? _	*yes=1, no=0; do not know, missing=9 If no, skip to c382*
c381	What was the total amount of paddy sold two seasons ago? _ _ _ bags _ _ _ _ _ _ kg	*calculate local units (bags etc.) into kg; do not know,missing=999999*

Marketing at the time when the household was formed:

c382	Did you sell any paddy at the time when this household was formed? _	*yes=1, no=0; do not know, missing=9 If no, skip to c388*
c383	Since you formed your farm/household, how has your marketing of paddy changed? _	*No significant change=1, more rice sold now=2, less rice sold now=3, do not know=9*
c384	What was producer price when the household was formed? _	*1=same as now, 2=better then, 3=worse then, 9=do not know, missing*
c385	In your view, how has access to market outlets for paddy changed since you formed your household? _	*1=same, 2= better now, 3=worse now, 9=do not know, missing*
c386	In your view, how has the price for modern inputs (fertilisers and seeds) as measured in paddy equivalents changed since you formed your household? _	*1=no significant change, 2= prices have gone up, 3= prices have gone down, 9= do not know*
c387	In your view, how has profitability for paddy changed since you formed your household? _	*1=same, 2= better now, 3=worse now, 9=do not know, missing*

c388 M	According to your opinion, which factors constrain at present production of rice for the market in your case? Market factors: 1.Low or fluctuating producer price 2.Untimely payment for crops 3.High transportation costs 4.Unreliable market outlet 5.High price for modern inputs (seeds, fertilisers, pesticides) 6.Modern inputs not available 7.Lack of credit facilities *Indicate the most important of the mentioned market related factors:* Most important constraining factor ___	*If no constraints experienced, write '0'*
c389 M	Which of the following household factors constrain at present production of rice for the market in your case? 1.Household labour shortage 2.Farm labour too expensive to hire 3.Chronic illness in the family 4.Lack of land or insecure access to land 5.Lack of knowledge about yield improving farming techniques 6.Lack of capital to buy inputs etc. 7.Lack of capital for land preparation *Indicate the most important of the mentioned household related factors:* Most important constraining factor ___	*If no constraints experienced, write '0'*
c390	Which of the two groups of factors, market or household conditions, is the most constraining one in your case? ___	*1= market related factors* *2=household factors* *9=do not know, missing*

3.5 Other food crops and vegetables

	What other food crops and/or vegetables do you grow or did grow in the most recent season? And which of these do/did you sell?			
	Grow?		Sell?	*yes=1, no=0; do not know, missing=9*
c391	1.Bananas _	c400	1.Bananas _	*If none of these crops are grown,*
c392	2.Beans _	c401	2.Beans _	*skip to c420*
c393	3.Peas _	c402	3.Peas _	
c394	4.Irish potatoes _	c403	4.Irish potatoes _	
c395	5.Sweet potatoes _	c404	5.Sweet potatoes _	
c396	6.Millet _	c405	6.Millet _	
c397	7.Groundnuts _	c406	7.Groundnuts _	
c398	8.Vegetables _	c407	8.Vegetables _	
c399	9.Other _	c408	9.Other _	

c409	What was the total size of the land you devoted to the crops (pure stand) mentioned in the most recent season? _ _, _ ha	*99,9=do not know, missing*
c410	How much of this land was irrigated? _ _, _ ha	*do not know, missing=99,9*
c411	Did you use chemical fertiliser on any of these crops? _	*do not know, missing=9*
c412	Was animal manure used? _	*yes=1, no=0; do not know, missing=9*
c413	Was green manure used? _	*yes=1, no=0; do not know, missing=9*
c414	Were pesticides applied? _	*yes=1, no=0; do not know, missing=9*
c415	Which one of the crops you sell is most profitable? _	*0=No crops sold, then skip to c420* *use codes given in c391-408: Bananas=1, beans=2 etc.; do not know, missing=9*
c416	When you formed your farm/household, did you sell more or less of this crop compared to now? _	*1=No change,* *2=more is sold now,* *3=less is sold now,* *9=do not know*
c417	In your view, how has the overall market access for this crop changed since you formed your household? _	*1=No change, 2= better now, 3=worse now, 9=do not know, missing*
c418	Do you grow any of the crops mentioned on the basis of a pre-arranged contract with a private trader? _	*yes=1, no=0; do not know, missing=9*
c419	At present, what is the approximate distance to the nearest market outlet for the most profitable of these crops? _ _ km	

3.6 Non-food cash crops

	Which non-food cash crops do you currently grow or did you grow during the most recent season?		*yes=1, no=0; do not know, missing=9*
c420	1.Cotton? _		
c421	2.Sugar cane? _		
c422	3.Cashew nuts? _		
c423	4.Cocoa? _		
c424	5. Tobacco? _		
c425	6.Coffee? _		
c426	7.Tea? _		
c427	8.Sisal? _		
c428	9. Pyrethrum? _		*If none of these crops are grown, skip to c441.*
c429	10.Other? _		
c430	What is the total size of your farm devoted to the cash crops mentioned? _ _, _ ha		*99,9=do not know, missing*
c431	How much of this land was irrigated? _ _, _ ha		*do not know, missing=99,9*
c432	Did you use chemical fertiliser on any of these crops? _		*do not know, missing=9*
c433	Was animal manure used? _		*yes=1, no=0; do not know, missing=9*
c434	Was green manure used? _		*yes=1, no=0; do not know, missing=9*
c435	Were pesticides applied? _		*yes=1, no=0; do not know, missing=9*
c436	Which one of the crops you sell is most profitable? _		*0=No crops sold, then skip to c* *use codes given in c-c: Cotton=1, sugar cane=2 etc.; do not know, missing=9*
c437	In your view, how has profitability for your most profitable non-food cash crop changed since you formed your household? _		*1=no significant change, 2= better now, 3=worse now, 9=do not know, missing*
c438	Do you grow any of the mentioned cash crops on the basis of a pre-arranged contract with a private trader? _		*yes=1, no=0; do not know, missing=9*
c439	At present, what is the approximate distance to the nearest market outlet for this non-food cash crop? _ _ km		
c440	Since you formed your farm/household, has there been any change in the overall amount of land devoted to non-food cash crops? −		*1=No change, 2=more land under cash crops now, 3=less land under cash crops now, 9=do not know*

3.7 Land resources

c441	Summing up the information given, what would you say has been the total cultivated area of this farm during the most recent season/year _ _ _, _ acres (or other local unit) _ _ _, _ ha		*Recalculate into ha after the interview/survey* *hectares, do not know, missing =999,9*
c442	How much extra land would you be able to put under cultivation if you wanted to expand your farm _ _ _, _ acres (or other local unit) _ _ _, _ ha		*taking into account land that presently is under fallow; hectares,* *do not know, missing =999,9*
c443	How much of the total land belonging to this farm was irrigated _ _ _, _ acres (or other local unit) _ _ _, _ ha		*Refers to any type of land with water sources other than rain, like seasonally flooded land, valley-bottom land, riverside land etc.* *If no irrigation, indicate '0'* *do not know, missing =999,9*
c444	If irrigated, what was the source of irrigation?	_	*1=privately owned well,* *2=privately owned river diversion* *3= community owned irrigation system,* *4=government owned scheme* *5=other, 9 =do not know, missing*
c445	Since this household was formed, how has the total size of the land cultivated changed?	_	*1=No change,* *2= more land is cultivated now,* *3= less land is cultivated now,* *9= do not know*
c446	Since this household was formed, how has the total size of the land under irrigation changed?	_	*1=No change,* *2= more land is irrigated now,* *3= less land is irrigated now=3,* *9= do not know*

4. Livestock

	Which types of livestock/animals do you have?	
c447	Cows _ _ _	*indicate number of livestock. If no livestock, write '0'*
c448	Oxen _ _ _	*do not know, missing=999*
c449	Goats/sheep _ _ _	
c450	Camels/donkeys _ _ _	
c451	Pigs _ _ _	
c452	Poultry _ _ _	*If no cows or oxen, skip to c460*

c453	Do you cultivate fodder crops? _	*yes=1, no=0; do not know, missing=9*
c454	Do you stall-feed any cows? _	*yes=1, no=0; do not know, missing=9*
c455	How do you keep most of your cows?	*1=stall feeding (zero grazing), 2=private (own) grazing land, 3=communal (open) grazing land 9=do not know, missing*
c456	At the time when your household was formed, did you stall-feed any cows? _	*yes=1, no=0; do not know, missing=9*
c457	At the time when your household was formed, how did you keep most of your cows?	*1=stall feeding (zero grazing), 2=private (own) grazing land, 3=communal (open) grazing land 9=do not know, missing*
c458	Are any of the cows graded or cross-breed? _	*1 'yes',2 ' no', 9 'do not know, missing'*
c459	At the time your household was formed, were any of your cows graded or cross-breed? _	*1 'yes',2 ' no', 9 'do not know, missing'*

5. Labour resources

M c460	No. of household members who regularly sleep here 16-60 years? _ _	*do not know, missing =99, regularly residing household members*
c461	No. of males _ _	
c462	No. of females _ _	
c463	How many of these adults are able workers? _ _	
c464	No. of household members 15 and below? _ _	*do not know, missing =99*
c465	No. of household members 61 and above? _ _	*do not know, missing =99*
c466 M	Main occupation of head of household? _	*Farming=1, non-farm =2, do not work (retired)=0, do not know, missing =9*
c467 M	Main occupation of farm manager? _	*Farming=1, non-farm =2, do not work=0, do not know, missing =9*
c468 M	How many adult household members (16-60 years) do regularly take on employment outside the farm? _	*do not know, missing=9*
c469 M	How many adult household members (16-60 years) are regularly involved in some kind of micro business? _	*do not know, missing=9*
c470 M	How many adult household members (16-60 years) are regularly involved in large-scale business? _	*do not know, missing=9*

c471 M	Apart from resident household members, how many adult family members do regularly work on this farm unit? _	*do not know, missing=9*
c472	Does your household regularly hire farm labour? _	*yes=1, no =0; do not know, missing=9* *If no, skip to c482*
	If yes, for which tasks?	

c473	Land preparation _	c474	Watching crops _	*yes=1, no =0; do not know=9*
c475	Planting _	c476	Tending livestock _	
c477	Weeding _	c478	Transporting crops _	
c479	Fertilising _	c480	Harvesting _	
c481	Other _			

6. Institutional conditions

c482	Average distance to extension agency/service _ _ km	
c483	Have you received advice from extension staff at any time during the last year? _	*0=Never, 1=rarely, 2=regularly;* *9=do not know, missing*
c484	Are you (farm manager) a member of any local farmer organisation dealing with agriculture? _	*yes=1, no =0; do not know,missing=9*
c485	Do you at present obtain any form of agricultural input credit? _	*yes=1, no =0; do not know,missing=9*
c486 M	How did you first obtain land in this village when your household was formed? _	*1=I was allocated virgin land/pasture ,* *2=I was allocated family land under fallow,* *3=I inherited land already under cultivation,* *4=I purchased land,* *5=I borrowed/rented land,* *9=do not know, missing*
c487 M	What is the status of most of the land that you now cultivate? _	*1=individually owned by farm household* *2=use rights allocated by communal/clan/government authority* *3= rented/borrowed from other individuals/families* *9=do not know, missing*
c488 M	Do you have full control of all the land you now cultivate or do you need to consult any other person in order to obtain permission for cultivation, change crops/land use, for some or all of your land? _	*1=full control,* *2=need permission* *9=do not know, missing*

c489 M	If you had the means to expand your farm size, what would be the most appropriate measure in your case? _	*1=Clearing virgin land,* *2= turning grazing land into cultivation,* *3= bringing fallow land into permanent cultivation,* *4= renting/borrowing land,* *5=buying land, 9= do not know*
c490 M	How will your children mainly obtain land in this village? _	*1=They will be allocated land not previously cultivated (virgin land or pasture)* *2=They will be allocated family land now under fallow* *3=They will inherit land already under cultivation* *4=They will rent/borrow land* *5=They will purchase land* *9=do not know, missing*

7. Incomes and expenditures

Incomes

M	What have been the sources of cash income of this household in the course of the past year?	*yes=1, no =0; do not know,missing=99*
c491	01.Sale of food staples _	
c492	02.Sale of other food crops_	
c493	03.Sale of non-food cash crops _	
c494	04.Sale of animals/animal produce _	
c495	05.Non-farm salaried employment _	
c496	06.Micro business _	
c497	07.Large-scale business _	
c498	08.Rent, interest _	
c499	09.Pensions _	
c500	10.Remittances from absent household members, children etc. _	
c501	Which of the mentioned income sources generated most cash during last year? _ _	*Use codes listed in previous question.* *01=Sale of food staples, 02=sale of other food crops, and so on.* *99=do not know, missing*
c502	Which of the mentioned *farm income sources* (01-04) generated most cash during last year? _ _	*Use codes listed in previous question.* *01=Sale of food staples, 02=sale of other food crops, and so on.* *99=do not know, missing*

M	Consumer durables: which of the following assets do you possess?	*yes=1, no =0; do not know,missing=9*
c503	Wired electricity/power _	
c504	Mobile or stationary telephone _	
c505	Diesel power generator or similar _	
c506	Water pipe to house _	
c507	TV-set _	
c508	Radio _	
c509	Tape recorder _	
c510	Bicycle _	
c511	Sewing machine _	
c512	Kerosene stove or other modern stove _	
c513	Battery torch _	
c514 M	Means of transport: which is your most advanced means of own transport? _	*1=foot, 2=bicycle, 3=donkey/horse, 4=motor bike, 5=car, tractor, truck, 9=do not know, missing*
c515 M	Housing standard: what kind of house do you have? _	*Interviewer may ask or observe housing standard.* *1=mud house with thatched roof; 2=mud house with corrugated iron roof; 3=block/brick house with corrugated iron roof or other more advanced housing types.*
c516	*For interviewer:* *looking at this household by way of its capital assets and appearance, how would you rank its wealth in comparison with other households in this village?* _	*1=Very poor, 2= below average wealth, 3= average wealth, 4= above average, 5=very wealthy; 9=does not know, missing.* *Consider land and livestock assets, non-farm incomes, capital assets, consumer durables etc.*

Expenditures

M	Looking at the costs for purchased inputs in farm production, how would you rank the following expenditures in order of the amount of cash required?	*0=no cash outlay,* *1=a low/little cost,* *2=a moderate cost* *3=a most significant cost;* *9=do not know, missing*
c517	Seeds? _	
c518	Chemical fertilisers? _	
c519	Pesticides? _	
c520	Hired labour? _	
c521	Land rented? _	
c522	Machinery/implements for land preparation? _	
c523	Transport? _	
c524	Land improvement measures (conservation structures, irrigation etc.) _	
	Which food crops did you purchase during the past year?	*yes=1, no =0; do not know,missing=9*
c525	Maize _	
c526	Cassava _	
c527	Sorghum _	
c528	Rice _	
c529	Bananas _	
c530	Beans _	
c531	Peas _	
c532	Irish potatoes _	
c533	Sweet potatoes _	
c534	Millet _	
c535	Groundnuts? _	
c536	Vegetables _	
	Which animal produce/food did you purchase during the past year?	*yes=1, no =0; do not know,missing=9*
c537	Milk _	
c538	Meat _	
c539	Fish _	

c540	Which one is the single most costly expenditure you have in this household? _	1=farm inputs & implements 2=food items 3=school fees 4=medicals 5=housing costs 6=transport 7=other 9=do not know, missing
c541	In the past year, have you borrowed money to be able to cover your expenditures? _	yes=1, no =0; do not know,missing=9
C542	Are you normally able to save some money every year for future needs? _	yes=1, no =0; do not know,missing=9

THANK YOU