



## Innovations in Technology, Institutional and Extension Approaches towards Sustainable Agriculture and Enhanced Food and Nutritional Security in Africa (InnovAfrica) Household Questionnaire 2017

### Introduction

*(Before commencement of the survey introduce the household to the survey to make them understand the purpose of the survey)*

Thank you for the opportunity to speak with you. We are a research team from (*insert institute and country*). We are conducting this survey to gather information on biophysical, socio-economic conditions, gender-related issues and identify promising Sustainable Agricultural Innovation (SAI) Systems, Extension and Advisory Services (EASs) and Innovative Institutional Approaches (IIAs) in this area. You have been selected to participate in the interview. Each interview will take approximately 2 hours. Your participation is entirely voluntary, and we will be glad if you will provide answer to the questions. Complete confidentiality of your answers will be maintained.

Table 1: Contents of the questionnaire survey and InnovAfrica impact areas addressed

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Date of interview ...../...../2017; Enumerator's name: .....

Questionnaire Number: .....

Start time: ..... hrs; End time: .....hrs. Duration of the surveys (hours and min) .....

### Section A: General information

- A/1 Country: [ ] 1= Ethiopia 2=Kenya 3=Malawi 4=Rwanda 5=South Africa 6=Tanzania  
A/2 Province/State/Region: A/3. District/County: .....  
A/4 County/Division/TA: A/5. Sub-county/sub-location/Ward/EPA: .....  
A/6 Village: .....  
A/7 GPS Reading: Latitude-(N/S): Longitude (E): A/8 . Altitude: ( metres above sea level)  
A/9 Agro-ecological zone (*use country classification*): [ ] 1=Arid 2=Semi-arid 3=Sub-humid 4=Humid  
A/10 Approximate distance to the nearest trading market/urban centre (Km) [ ]  
A/11 Approximate distance to the nearest paved road (Km) [ ]

### Section B: Demographic characteristics

- B/1 Name of **respondent** (*must be >18 years*): .....  
B/2 Phone number of **respondent**: .....  
B/3 Sex of respondent: [ ] (1= Female; 2= Male)  
B/4 Age of the respondent: (years)  
B/5 Relationship of respondent to **household head**: [ ] 1=**Head of household** 2=Spouse 3 =Son 4= Daughter 5=Parent  
6= Sibling (Brother/Sister) 7=Extended family e.g. cousin  
B/6 Name of **household head**: .....  
B/7 Sex of the household head: [ ] 1= Female; 2= Male  
B/8 **Age** of household head: ( ) years  
B/9 Educational level of the household head: [ ] (1= No formal education 2= Primary 3= Secondary 4= Tertiary 5=Adult education  
6=Vocational Education  
B/10 **Number of years** spent in school by **household head** [ ]  
B/11 **Major occupation** of the household head: [ ] 1=Farming (own farm/family) 2= Employed for farm work (public/private sector/NGO)  
3=Employed in other sector (public/private/NGO) 4= Self-employed (business) 5=School 6= Others (please specify) .....  
B/12 What is the monthly income of household head from **on-farm** source (local currency) [ ]  
B/13 What is the monthly income of household head from **off-farm** sources (local currency) [ ]  
B/14 On a scale of 1 to 10 how important is livestock keeping for the food security of your household? [ ] (*1=least important, 10=most important*)  
B/15 On a scale of 1 to 10 how important is crop production for the food security of your household? [ ](*1=least important, 10=most important*)  
B/16 On a scale of 1 to 10 how important is off-farm income for the food security of your household? [ ](*1=least important, 10=most important*)

B/17. List all household members living permanently on the compound other than household head (HH). (*A person is resident if they sleep in the house a majority of night per month and contribute and or consumes output*)

Name	Sex ( <i>See CODE-B1 below</i> )	Age (years)	Relationship to HH ( <i>see CODE-B2 below</i> )	Highest level of education and year spent in school		Major occupation ( <i>See CODE-B4 below</i> )	Monthly income	
				Highest level completed ( <i>See CODE B3 below</i> )	Years spent in school		Off-farm (local currency)	On-farm (local currency)
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
11.								
12.								
13.								
14.								
<b>CODE B1: Sex</b>	<b>CODE B2: Relationship to HH</b>		<b>CODE B3: Highest level of education completed</b>		<b>CODE B4: Major Occupation</b>			
1= Male 2= Female	1=Spouse 2=Son 3=Daughter 4=Parents 5=Manger/Workers (Not related by family) 6=Sibling (Brother/sister) 7=Extended family e.g. cousin		1=No formal education 2= Primary 3= Secondary 4= Tertiary (college, university, etc.) 5=Adult education 6=Vocational training 7=informal education		1=Farming (own farm/family) 2= Employed for farm work (public/private sector/NGO) 3=Employed in other sector (public/private/NGO) 4= Self-employed (business) 5=School 6=None 7= Others (please specify)			

### Section C: Assets

C/1. What are your monthly average expenses for cost of living (food, clothes etc)? [\_\_\_\_\_]

C/2. What are your monthly average expenses for education? [\_\_\_\_\_]

C/3. What are your monthly average expenses for health [\_\_\_\_\_]

C/4. Now I would like to ask you about your household ownership of a number of items that could be used to generate income

Assets (tick appropriately)	Current Quantity	Owner (See Code C1 below)	Assets (tick appropriately)	Current Quantity	Owner (See Code C1 below)*
1. Greenhouse			25. Chaff cutter		
2. Stores/granary			26. Milking equipment		
3. Poultry houses			27. Posho/maize mill		
4. Piggery sty			28. Maize sheller		
5. Bore hole			29. Spray pump		
6. Well			30. Boom sprayer		
7. Water pan			31. Weighing scale		
8. Fence			32. Irrigation equipment		
9. Dam			33. Water tanks		
10. Water trough			34. Water pump		
11. Zero-grazing unit			35. Stove		
12. Silage pit			36. Animal traction plough		
13. Biogas			37. Ploughs for tractor		
14. Motor cycle			38. Planter		
15. Car			39. Ridger/weeder		
16. Bicycle			40. Tractor trailer		
17. Truck/lorry			41. Harrow/tiller		
18. Tractor			42. Computer		
19. Wheelbarrow			43. Radio		
20. Ox cart			44. TV		
21. Hoes/Jembe			45. Telephone/mobile		
22. Machetes/panga					
23. Sickle					
24. Spade/Shovel					

**Code C1: Owner** 1=Self 2=Husband 3=Wife 4=Children 5=Joint husband and wife 6=Family owned 7=Others (please specify)

C/5. How many parcels/plots of land do your household own/use? [\_\_\_\_\_]

C/6. Please provide details of **up to 4 land parcels/plots** owned and or/cultivated by the household during the period of survey/previous season

Detail of owner, tenure and allocation	Land parcel/plot 1	Land parcel/plot 2	Land parcel/plot 3	Land parcel/plot 4
Owner <i>(See Code C2 below)</i>				
Distance from household (km)				
Land tenure <i>(See Code C3 below)</i>				
Type of landscape (1=Plain; 2=Gentle slope; 3=Steep slope)				
Year the land was acquired (if unknown, please estimate)				
Size of the land parcel/plot (ha)				
Area occupied by homestead (ha)				
What area is under food crop production (ha)?				
What area is under cash crop production (ha)?				
What area is under natural pastures/bushes (ha)?				
What area is under cultivated fodders and pastures (ha)?				
If irrigated indicate the source of water <i>(See Code C4: below)</i>				
<p><b>Code C2: Owner</b>, 1= Self 2=Husband 3=Wife 4=Joint Husband and wife 5=Family owned 6=Elder generation: father 7=Elder generation: mother 8=Children: daughter 9=Children: Son 10=Sibling: Sister 11=Sibling: Brother 12=In laws: Daughter 13=In-laws : Son 14=Not applicable</p> <p><b>Code C3: Land tenure</b>, 1=Traditional/communal 2= Freehold (with or without title deed) 3=Leased 4=Share tenant 5=Owner cultivator 6=Rented in 7=Other (Please specify)]_____</p> <p><b>Code C4: Source of water for irrigation</b>; 1=Natural source (Spring/river/creek); 2=Well; 2=Borehole; 4=Dam; 5=Water pan 6=Others (please specify)_____</p>				

*\*\*Adopt commonly used unit and convert into ha. \*\*Food crops are mainly grown for food but the extra is sold to generate cash while cash crops are mainly grown to generate cash.*

## Section D: Fodder/pasture production and management

D/1. Do you have planted pastures/fodders on your farm currently? [\_\_\_\_\_] 1=Yes 2= No. **If no, proceed to D/3.**

D/2. If **yes**, what are the **four** most important **grasses** and **four** forage **legumes** you have grown on your farm and acreage? Please provide also information on yield, utilisation and sales of herbage in the last one year (January –December 2017). *Use farmer's measurement to arrive at weight in kg. e.g. bundles, oxen cart, wheel barrow etc.*

Pasture/fodder types	Area cultivated (ha or number of trees)	What determine the area planted or number of trees (see <b>CODE D1: below</b> )	Choose <b>three</b> reasons for choice of pasture/fodder types in order of importance (See <b>CODE D2: below</b> )			Variety grown	How did you know about pasture or fodder (See <b>CODE D3: below</b> )	Yield (kg/year)	Quantity fed to livestock (kg/year)	Quantity sold (kg/year)	Price per kg	Buyers (See <b>CODE D4: below</b> )
Grasses†			1	2	3							
1.												
2.												
3.												
4.												
<b>Legumes ‡</b>												
1.												
2.												
3.												
4.												
<b>CODE D1: What determine the area planted or number of trees?</b>		<b>CODE D2: Reasons for choice of pasture/fodder species</b>				<b>CODE D3: How did you know about pasture or fodder?</b>			<b>CODE D4: Buyers</b>			
1=Land size 2=Labour availability 3=Number of livestock 4=Amount of seeds available 5=Others (specify)____		1=High yielding 2=Drought tolerant 3=Grow fast 4=Animals likes it 5=Animals produce more milk when fed the forages 6=No disease and pest 7=Easy to harvest 8=Others (specify)____				1=Training 2=Field day 3=Demonstrations 4=From neighbours 5=Others farmers 6=Research 7=Agricultural communication (TV, radio, meeting) 8=Others (specify)____			1=Individual farmers 2=Traders 3=Institutions (e.g. school) 4=Government 5=Non- Government Organization (NGO) 6=Others (specify)____			
†Examples of grasses; Brachiaria, Napier, Guatemala, Rhodes, Setaria, Rhodes, Panicum (Guinea grass) etc. ‡Examples of legumes; Lucerne, Desmodium, Leucaena, Clover, Calliandra, Vetch, Lablab, Clitoria, Sesbania etc.												

D/3. For farmers who have not planted Brachiaria grasses. Have you heard of Brachiaria grasses [ ] 1=Yes; 2=No.

D/4. If yes, why have you not planted it? [ ] 1=Lack of seeds 2=Seed is expensive 3=Don't know where to get seeds 4=My land is small/limited.

D/5. Please indicate who carry out the following farm activities for pasture/fodder production in current or previous seasons?

Activities related to pastures/ fodder production	Who is involved					Labour cost	
	Family members	Hired labour				Wage rate/day	
	1=Self; 2=Husband; 3=Wife; 4=Children; 5=Others (please indicate)	Male	Female	Number of days/season	Numbers of hours/day	In cash	In kind
1. Land preparation							
2. Sources/buy the seeds/planting material							
3. Planting of pastures/fodders							
4. Weeding pastures/fodders							
5. Application of manure/fertilizer to pastures/fodders							
6. Cutting pastures/fodder from farm							
7. Transport pastures/fodder							
8. Feed conservation (making hay and silage)							

D/6. Please provide information on type of fertilizer (**inorganic and organic**) use in the last one year in your pastures/fodders (January - December 2017) or the reason **why you do not** apply fertilizer.

Grasses	If you apply fertilizer indicate the type and how much you apply per year				If you do not apply fertilizer why not? (See CODE D6: below)
	Inorganic fertilizer		Organic fertilizer*		
	Composition e.g CAN, DAP, NPK, Urea,	Quantity (kg)	Type (See CODE D5: below)	Quantity (kg)	
1.					
2.					
3.					
4					
Forages legumes					
1					
2					
3					
4.					
<b>CODE D5: Type of organic fertilizer</b>		<b>CODE D6: Why don't you apply fertilizer</b>			
1=Crop residue compost 2=Animal manure 3=Crop residue and animal manure mix 4=Bokash 5=Others (specify)_____		1=Lack of money 2=High cost of fertilizer 3=Do not know whether pastures/fodders need fertilizer 4= My land is fertile 5=Fertilizer is not available 6=Others (specify)_____			

\*For organic manure, use farmer's measurement to arrive at weight in kg. e.g. oxen cart, wheel barrow etc.

D/7. In the last 12 months were there months in which you experienced feed shortage for livestock in your farm? [\_\_\_\_\_] 1=Yes 2=No.

D/8. Provide information on general availability of livestock feeds in a year (**Indicate relativity where;** 1=Excess; 2=Adequate; 3=Scarce; 4=Very scarce)

Months	Months											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Months with feed shortage												

D/9. Indicate **all** the strategies you apply during period of feed shortage and **rank four (4) most important** strategies.

Tick <u>all</u> the strategies you apply	Strategies applied	Rank (1-4) in order of importance. (1= Most important; 4=Least important)
[ ]	Use conserved feeds (hay, silage, crop residues)	<input type="checkbox"/>
[ ]	Feed less to all animals	<input type="checkbox"/>
[ ]	Feed less to certain categories of animals	<input type="checkbox"/>
[ ]	Rent grazing land	<input type="checkbox"/>
[ ]	Reduce herd size	<input type="checkbox"/>
[ ]	Purchase fodder/hay from neighbours	<input type="checkbox"/>
[ ]	Purchase fodder/hay from markets	<input type="checkbox"/>
[ ]	Purchase concentrate feed	<input type="checkbox"/>
[ ]	Feed forages not normally used	<input type="checkbox"/>
[ ]	Others (specify)____	<input type="checkbox"/>

### Section E: Milk production, processing and marketing

E/1. Do you produce/process milk on the farm? 1=Yes 2=No. If **No**, go to section F

E/2. If you produce/process milk, please provide information on milk production, consumption and processing for each ruminant type.

Ruminant type	No of animals or heads being milked	Total amount of milk produced (kg/day)	Household consumption (kg/day)	Quantity of fresh milk processed (kg/day)		Products	Quantity of product processed (kg/day)	Amount consumed by household (kg/day)
Local Zebu					1	Sour milk (fermented)		
Crosses cattle					2	Yoghurt		
Exotic cattle					3	Butter		
Local goats					4	Ghee		
Crosses goat					5	Cheese		
Exotic goat								

E/3. Please provide information on current milk and milk products marketing (daily sales).

Milk and milk products	Quantity and price sold to different buyers												Rank up to <u>four</u> marketing constraints in order of importance ( <u>See CODE E1 below</u> )			
	Cooperatives/processors		Public Institutions eg schools, hospitals		Traders (Brokers, hawkers)		Individual consumers		Hotels and catering services		Super markets and milk shops					
	Quantity (kg)	Price/kg	Quantity (kg)	Price/kg	Quantity (kg)	Price/kg	Quantity (kg)	Price/kg	Quantity (kg)	Price/kg	Quantity (kg)	Price/kg	1	2	3	4
Fresh milk																
Sour milk (fermented)																
Yoghurt																
Butter																
Ghee																
Cheese																

**CODE E1: Rank up to four marketing constraints in order of importance**

1=Delay in payment; 2=Irregular payment; 3=Poor road infrastructure ;4=Not able to sell always; 5=Low price; 6=Unstable prices; 7=Long distance to market; 8= Others (specify) \_\_\_\_\_

**Section F: Livestock**

F/1. Please provide information on type, number of livestock kept and their values in the last **12 months**. (January –December 2017)

Livestock raised	How many livestock is the HH raising now?  (Enter 0 if none)	Breed type 1= Local 2 = Exotic 3 = Cross (Allow for ≥1 option)	How many livestock were purchased in/bartered/ received as gifts in 2017? (Enter 0 if none)	How many livestock were bartered out /exchanged live/given away as gifts in 2017? (Enter 0 if none)	How many livestock were lost due to <b>death</b> by disease/accident etc or <b>theft</b> in 2017 (Enter ‘0’ of none died)		How many were born dead in 2017	Value of <b>live</b> livestock in the HH (local currency)	Total value of sales in 2017 (local currency)
				Death/other losses	Theft				
<b>Cattle</b>									
Mature bulls									
Young bulls									
New born calves (male)									
Cows									
Heifers/weaners (females)									
New born calves (female)									
New born calves (males)									
<b>Goats</b>									
Does (female)									
Bucks/buckling (male)									
<b>Sheep</b>									
<b>Poultry</b>									
<b>Pigs</b>									
<b>Others (specify)</b>									

F/2. Please provide information on livestock buyers and market price in the last **12 months**. (January –December 2017)

Livestock species	No. of animals or heads sold in the last 12 months	Number and average price sold to different buyers								Rank up to <u>four</u> marketing constraints in order of importance (See <u>CODE F1 below</u> )			
		Institutions (schools, hospitals etc.)		Butchers		Traders (Brokers and hawkers)		Individuals					
		Number	Average price per animal or head (unit)	Number	Average price per animal or head (unit)	Number	Average price per animal or head (unit)	Number	Average price per animal or head (unit)	1	2	3	4
1. Cows													
2. Bulls													
3. Sheep													
4. Goats													
5. Pigs													
6. Poultry													
<b>CODE F1: Rank <u>four</u> marketing constraints in order of importance</b>													
1=Delay in payment; 2=Irregular payment; 3=Poor road infrastructure ;4=Not able to sell always; 5=Low price; 6=Unstable prices; 7=Long distance to market; 8= Others (specify) _____													

## Section G: Crop production/ Seed System

G/1. What are the crops grown on your farm in last two season (short rains/winter [Oct-Dec] 2016 longs rains [Mar-May] 2017) (please fill the table)

Crops (species)	Variety name	Type of variety (CODE G1)	If you don't grow certified /hybrid why? (CODE G2)	Reason for growing the variety (CODE G3)	Source of seeds (CODE G4)	Amount of seed (kg)	Price of seed per kg	Year fresh seed last obtained	Maturity period (days) (CODE G5)	Quality problems (CODE G6)	Availability problems (CODE G7)	Access problems (CODE G8)
CODE G1: Type of variety	CODE G2: Reasons for not growing	CODE G3: Reasons for growing		CODE G4: Sources of seeds		CODE G5: Maturity period		CODE G6: Quality problems		CODE G7: Availability problems		CODE G8: Access problems
1=Local 2 Improved (Certified/ Hybrid 3= Unkwown	1=Not aware about hybrid 2=Seed not available 3=Expensive seeds 4=Others (specify)	1=Easy and stable access to seeds 2=Drought tolerant 3=High yielding 4=Early maturing 5=Taste 6=Tolerant to pest and diseases 7=High income potential 8=Multiple purpose e.g. grain and fodder 9=Government subsidy		1=Government 2=Cooperatives 3=Private traders (e.g. agro-dealers) 4=Own farm 5= Other farmers 6=Research institution 7=NGO 8= Others (specify)_		1= Less than 90 days, 2=91-120 days 3=Greater than 120 days		1=No problem 2=Low germination rate 3=Unclean seed (low physical seed purity) 4=Unhealthy seeds (carry pests and diseases) 5=Not pure variety 6=Fake seeds on sale 7=Other problems		1=No problem 2=Limited number of suppliers 3=Limited quantity available from supplier 4= Unsuitable package size 3= Long distance to supplier 4= Not available at the right time 5= Other problems		1= No problem 2= Limited purchasing power 3= Limited access through social networks 4= Not eligible for support/subsidy (in the case of vouchers or seed distribution) 5=Others

G/2. Please provide information on type of fertilizer use in current or previous season in **crops** (*indicate year and season .....*)

<b>Crops</b>	If you apply fertilizer indicate the type and how much you apply per season				<b>Why don't you apply fertilizer (<u>See CODE G10: below</u>)</b>
	Inorganic fertilizer		Organic fertilizer*		
	Composition e.g. CAN, NPK, Urea, Foliar	Quantity (kg)	Type <i>(<u>See CODE G9: below</u>)</i>	Quantity (kg)	
<b>CODE G9: Type of organic fertilizer</b>		<b>CODE G10: Why don't you apply fertilizer?</b>			
1=Crop residue compost 2=Animal manure 3=Crop residue and animal manure mix 4=Bokash 5=others (specify) _____		1=Lack of money 2=High cost of fertilizer 3=Do not know whether crops need fertilizer 4= My land is fertile 5=Fertilizer is not available 6=Others (specify)_____			

\*For organic manure, use farmer's measurement to arrive at weight in kg. e.g. oxen cart, wheel barrow etc.

G/3. Do you know about and do you practice any of the following innovations in your farm?

Farming practice	Do you know about it? 1= Yes 2 = No	How did you know about it? (See CODE G11: below)	Do you practice on your farm? 1 = Yes, 2= No	When did HH begin practicing	If no, why not (See CODE G12: below)	If yes, why (See CODE G13: below)	Indicate crops (See CODE G14: below)
1. Crop rotation							
2. Intercropping							
3. Minimum tillage ( <i>minimum soil disturbance while preparing land for planting or during weeding</i> )							
4. Mulching							
5. Cover-cropping ( <i>planting crops that cover the soil for reduced soil erosion and increased fertility</i> )							
6. Planting pits ( <i>digging holes, applying manure and planting crops in the holes</i> )							
7. Tied ridging							
8. Others (specify)							
<b>CODE G11: How did you learn the practice?</b>	<b>CODE G12: If no why not?</b>		<b>CODE G13: If yes why?</b>		<b>CODE G14: Crop used in rotation/intercropping</b>		
1=Training 2=Field day 3=Demonstrations 4=From neighbours 5=Others farmers 6=Research 7=Agricultural communication (radio, TV, IEC materials, meetings and campaigns 8=Others (specify)	1=Labour shortage 2=Labour is expensive 3= Lack of farm tools; 4=lack of money to pay for hired labour 5=Limited knowledge 6= Limited land 7=Do not see the need 7=No reason 8=Others (specify)		1=Increase yield 2=Conserve soil and moisture 3=Disease and pest control 4=Improve soil fertility 5=Other (specify)____		1=Maize-legume 2=Millet-legumes 3=Sorghum-legumes 4=Cassava-legume 5=Others (specify) _____		

G/4. Please provide information on area planted and yield of the different crops.

<b>Crop</b>	<b>Variety</b>	<b>Area (ha)</b>		<b>Yield (kg)*</b>	
		<b>Short rains/ winter (Oct-Dec) 2016</b>	<b>Long rains (Mar-May) 2017</b>	<b>Short rains/ winter (Oct-Dec) 2016</b>	<b>Long rains (Mar-May) 2017</b>

*\*Yield = look for evidence; use farmers measurements, e.g. 90 kg bag and then convert this to SI units.*

G/5. Please provide information on post-harvest handling of crops produce, utilisation and losses from all the land parcels/plots

Crops/variety	Quantity consumed (kg)	Quantity sold (kg)	Quantity fed to livestock (kg)	Quantity saved for seeds (kg)	Methods of storage (Indicate all those applicable) (CODE G15)	Quantity lost after harvest (kg)	Main reason for post-harvest loss (Choose only one reason for each crop) (CODE G16)

**CODE G15: Methods of storage**

**CODE G16: Main reason for post-harvest loss**

1=Granary  
2=Silos  
3=Plastic container  
4=Metal bins  
5= Gunny bags  
6=Others (specify) \_\_\_\_\_

1=Lack of storage facilities  
2=Pest attack  
3=Weather  
4=Ineffective chemicals  
5=Distance to market  
6=Poor transport method  
7=Poor road infrastructure  
8= Poor keeping quality of crop varieties  
9=Others (specify) \_\_\_\_\_

G/6. For the crops sold please provide the quantity and average price sold to different **buyers** in the last **12 months**.

Crops	Who set price (See <u>CODE G17</u> )	Kg and average price sold to different buyers														Rank up to <u>four</u> marketing constraints in order of importance (See <u>CODE G18</u> below)
		State agencies (cereal boards)		Institutions (schools, hospitals (etc)		Private agent/Food processors)		Cooperatives		Traders (Brokers, hawkers etc)		Individuals		Others (specify		
		kg	Average price per kg (unit)	kg	Average price per kg (unit)	Kg	Average price per kg (unit)	Kg	Average price per kg (unit)	kg	Average price per kg (unit)	kg	Average price per kg (unit)	kg	Average price per kg (unit)	
CODE G17: Who set price				CODE G18: Rank four marketing constraints in order of importance												
1=Government 2=Buyer 3=Producer 4=Mutual agreement 5=Others (specify) _____				1=Delay in payment 2=Irregular payment 3=Poor road infrastructure 4=Not able to sell always 5=Low price 6=Unstable prices 7=Long distance to market 8=Others (specify) _____												

G/7. Indicate who is involved in carrying out the following crops farming activities for the **current** or **previous** season

Activities related crop production	Who is involved					Labour cost	
	Family members	Hired labour				Wage rate/day	
	1=Self; 2=Husband; 3=Wife, 4=Children 5=Others	Male (Insert X for activity involved)	Female (Insert X for activity involved)	Number of days/season	Number of hours/day	In cash	In kind
1. Land preparation							
2. Planting							
3. Weeding							
4. Applying fertilizer/manure							
5. Spraying against pests/diseases							
6. Harvesting							
7. Transportation of produce to market							
8. Selling of produce							

## Section H: Climate change and variability, adaptation and coping strategies

H/1. Have you experienced any change in weather pattern in the past **five** years? [ ] 1 = Yes 2 = No

H/2. If **yes**, did you experience in your own farm any of the following problems? [ ] 1=Flooding, 2=Drought 3=Erratic rainfall pattern 4=Hailstorms; 5=Increased insect pests 6=Increased disease incidence 7=Others (specify) \_\_\_\_\_

H/3. Did your household experience any of the following impacts of the above? [ ] 1=Loss of assets 2=Loss of entire crop 3=Food price increase 4=Loss of income 5=Death of livestock 6=Food shortage/insecurity 7=Decline in crop yield 8= Not applicable 9=Others (specify) \_\_\_\_\_

H/4. What long term measures (adaptation strategies) have you undertaken to deal with negative effects of climate change on crop production, and pastures/fodder production? (*tick appropriately*)

Adaptation strategies ( <b>crops</b> ) indicate all measure undertaken and rank the four most important ( <i>For Ethiopia, Malawi, Tanzania and S. Africa</i> )		Adaptation strategies ( <b>pastures/fodder</b> ) indicate all measure undertaken and rank the four most important ( <i>For Ethiopia, Kenya, Rwanda and Tanzania</i> )	
<i>Tick all measures undertaken</i>	Rank 4 most important	<i>Tick all measures undertaken</i>	Rank 4 most important
[ ] No strategy used	<input type="checkbox"/>	[ ] No strategy used	<input type="checkbox"/>
[ ] Drought tolerant species	<input type="checkbox"/>	[ ] Drought tolerant species	<input type="checkbox"/>
[ ] Change crop variety	<input type="checkbox"/>	[ ] Change forage variety	<input type="checkbox"/>
[ ] Change from crop to livestock production	<input type="checkbox"/>	[ ] Change pasture type	<input type="checkbox"/>
[ ] Change crop/pasture type	<input type="checkbox"/>	[ ] Water harvesting	<input type="checkbox"/>
[ ] Water harvesting	<input type="checkbox"/>	[ ] Soil conservation	<input type="checkbox"/>
[ ] Soil conservation	<input type="checkbox"/>	[ ] Increase land under production	<input type="checkbox"/>
[ ] Increase land under production	<input type="checkbox"/>	[ ] Improve soil fertility	<input type="checkbox"/>
[ ] Improve soil fertility	<input type="checkbox"/>	[ ] Buy insurance	<input type="checkbox"/>
[ ] Buy insurance	<input type="checkbox"/>	[ ] Diversified pastures	<input type="checkbox"/>
[ ] Diversified crops	<input type="checkbox"/>	[ ] Others (Specify)	<input type="checkbox"/>
[ ] Others (Specify)	<input type="checkbox"/>		

**Section J: Membership in agricultural associations and access to extension and advisory services**

J/1. Are you or any member of your household a member of an **agricultural** group/association during the last **one year**? [ ] (1=Yes, 2= No)

J/2. If **No** please go to question J/4

J/3. If **yes**, provide the following information.

	<b>Who in your household is a member of an agricultural group; (See CODE J1: below)</b>	<b>Type of group (See CODE J2: below)</b>	<b>Categorise group (See CODE J3: below)</b>	<b>Year group was formed</b>	<b>Current position (See CODE J4: below)</b>	<b>Number of members</b>	<b>What <u>main</u> commodity does the group deal in? (See CODE J5: below)</b>	<b>Give up to <u>four</u> main activity/services of group (See CODE J6: below)</b>	<b>Is the group registered? (1= Yes, 0 = No)</b>	<b>Area coverage (See CODE J7: below)</b>
1										
2										
3										
4										
5										
6										
7										

**CODE J1: Who is a member:** 1=Self 2=Husband 3=Spouse 4=Children 5=Parents 6=Sibling (Bother/Sister) 7=Extended family e.g cousin 8=Manager/worker (not related by family)

<b>CODE J2: Type of group</b>	<b>CODE J3: Group categories</b>	<b>CODE J4: Current position</b>	<b>CODE J5: Commodity the group deal with</b>	<b>CODE J6: Group activity</b>	<b>CODE J7 Coverage</b>
1=Producer 2= Cooperative/society 3= Marketing 4= Producer and marketing 5=Processing 6=Water users associations 7=Labour groups 8=Environmental management group 9=Nutrition support groups	1=Women group 2=Men group 3=Youth group 4=Mixed group	1=Chairperson 2=Vice Chair 3=Treasurer 4=Secretary 5=Vice Secretary 6=Committee member 7=Ordinary member Simultaneously	1=Crops 2=Livestock 3=Poultry 4=Fish 5=Other (specify) _____	1=Produce marketing 2=Input access/ marketing 3=Seed production 4=Farmer research group 5=Savings and credit 6=Tree planting and nurseries 7=Soil & water conservation 8=Input credit 9=Water Resource management 10=Communal labour provision 11=Environmental management e.g. conflict management, grazing land management 12=Utilization of farm produce 13=Processing	1=National 2=Regional 3=Local

**a) Access of extension service for crop production NB for Ethiopia, Malawi, S Africa and Tanzania**

J/4. Did you have access to extension services for crop production in the **last 12 months** (January-December 2017) ? [ ] 1=Yes 2=No

J/5. If **No** proceed to section K

J/6. If **yes** who in your household had access to extension services on **crops production** ? [ ]

1=Self 2=Husband 3=Spouse 4=Children 5=Parents 6=Sibling (Bother/Sister) 7=Extended family e.g cousin 8=Manager/worker (not related by family)

J/7. How often do you see **crops** production extension workers? [ ] 1=At least once a month, 2= At least once every three month; 3= Occasionally

J/8. Please provide information on the type of **crops** related extension and advisory service accessed and delivery approaches.

	Service for crops	Distance to nearest service (km)	Main providers (See CODE J8: below)	Number of providers who visited household in the last 12 months	How was this information disseminated (See CODE J9: below)	Level of satisfaction (See CODE J10: below)
1	Land preparation					
2	Crop selection					
3	Field management					
4	Disease and pest management					
5	Soil fertility management					
6	Storage of crops					
7	Value addition					
8	Marketing of crop produce					
9	Climate early warning					
10	Agricultural credit					
11	Agricultural insurance					
<b>CODE J8: Main providers</b>			<b>CODE J9: How was this information disseminated</b>			<b>CODE J10: Level of satisfaction</b>
1=Agro-vet dealer	8=NGO	1=Media (Radio/TV)	8=Training	1= Very dissatisfied		
2=Research Institute	9=Bank	2=Mobile phones	9=Farmers field schools	2=Dissatisfied		
3=Government extension	10=Insurance company	3=Pamphlets/newspaper	10=Farmer to farmers extension	3=Neutral		
4=Other government institution (e.g. university)	11=Farmer to farmer	4=Workshops	11=Farmers participatory research	4=Satisfied		
5=Cooperative society	12=Community based organizations	5=Common interest group (CIG)	12=Multi actors platform	5=Very satisfied		
6=Private company	13=Faith based organizations	6=Field days	13=Integrated farm plan (PIP)			
7=Private practitioner	14=Not applicable	7=Demonstrations				

**b) Access of extension service for pastures/fodder production (NB for Ethiopia, Kenya Rwanda and Tanzania)**

J/9. Did you have access to extension services for pasture/fodder production in the **last 12 months** (January-December 2017) ? [\_\_\_\_] 1=Yes 2=No

J/10. If **No** proceed to section K.

J/11. If **yes** who in your household had access to extension services on **pasture/fodders** ? [\_\_\_\_]

1=**Self** 2=Husband 3=Spouse 4=Children 5=Parents 6=Sibling (Bother/Sister) 7=Extended family e.g cousin 8=Manager/worker (not related by family)

J/12. How often do you see **pastures/fodders** production extension workers? [\_\_\_\_] 1=At least once a month, 2= At least once every three month; 3= Occasionally

J/13. Provide information on the type of **pasture/fodder** related extension and advisory service accessed and delivery approaches.

	Service for pasture/fodders	Distance to nearest service (km)	Main providers ( <u>See CODE J11: below</u> )	Number of providers who visited household in the last 12 months	How was this information disseminated ( <u>See CODE J12: below</u> )	Level of satisfaction ( <u>See CODE J13: below</u> )
1	Land preparation					
2	Forage/fodder selection					
3	Fodder management					
4	Feed conservation					
5	Feeding management					
6	Milk processing					
7	Climate early warning					
8	Agricultural credit					
9	Agricultural Insurance					
<b>CODE J11: Main providers</b>			<b>CODE J12: How was this information disseminated</b>			<b>CODE J13: Level of Satisfaction</b>
1=Agro-vet dealer 2=Research institute 3=Government extension 4=Other government institution (e.g. university) 5=Cooperative society 6=Private company 7=Private practitioner 8=NGO 9=Bank 10=Insurance company 11=Farmer to farmer 12=Community based organizations 13=Faith based organizations 14=Not applicable			1=Media (radio/TV) 2=Mobile phones 3=Pamphlets/newspaper 4=Workshops 5=Common interest group (CIG) 6=Field days 7=Demonstrations 8=Training 9=Farmers field schools 10=Farmer to farmers extension 11=Farmers Participatory Research 12=Multi actors platform 13=Integrated farm plan (PIP)			1= Very dissatisfied 2=Dissatisfied 3=Neutral 4=Satisfied 5=Very satisfied

## Section K: Food and nutrition security

K/1. In the last 12 months were there months in which you did not have enough food to meet your household's need? [ ] 1=Yes 2=No

K/2. Provide information on availability\* of food for your household needs in the last one year (**January -December 2017**)

Year/months											
2017											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

\*Level of food availability 1=Excess; 2= Adequate; 3=Scarce; 4= Very scarce

K/3. In the months of food shortage how do you cope with the shortage? [ ] 1=Purchase 2=Exchange labour for food 3=Exchange item for food 4=Food aid 5=Borrowed 6= Others (specify) \_\_\_\_\_

K/4. Please provide information on the type of household food consumption

	Food group	Examples	Did you eat any of the following foods in the last 24 hours? 1 = Yes, 2 = No	Number of days eaten this food in the last 7 days	Sources 1= Own production 2 = Purchased 3=Food aid 4=Others (specify) _____	If purchased indicate amount spent on this food in the last 7 days (local currency)
<b>Food rich in carbohydrates and micronutrients</b>						
1	Cereals	maize, rice, wheat, <b>sorghum, millet</b> , finger millet and other locally available grains				
2	Roots and tubers	Potatoes, yams, cassava, Pumpkin, squash or any other foods made from roots or tubers				
<b>Food rich in Vitamin A and micronutrients</b>						
3	Vegetables	Dark green/leafy vegetables, including wild ones, amaranth, carrots, cassava leaves, kale, spinach, brinjals, sweet pepper, cabbage, tomatoes, courgette				
4	Fish and sea food	Any fresh or dried fish, shellfish, canned fish				
<b>Food rich in Vitamin B, protein and micronutrients</b>						
5	Milk, milk products	Any cheese, yogurt, milk, powder milk or other milk products				
6	Eggs	Chicken eggs, turkey egg, duck egg				
7	Meats, poultry, offal	Any beef, pork, lamb, goat, rabbit, chicken, duck, or other birds, liver, kidney, heart, or				

		other organ meats				
8	Pulses, legumes, nuts	Any foods made from beans, peas, lentils, or nuts, green grams, cow peas, pigeon peas, doclichos,				
9	Sugar and honey	Any sugar, honey, sweets, chocolates				
10	Miscellaneous	Any other foods, such as condiments, coffee, tea, sodas, salts				
<b>Food rich in Vitamin C</b>						
11	Fruits	All types of fruits e.g. mangoes, bananas, oranges, avocados				
10						
<b>Fats (also rich in Vitamin E)</b>						
12	Oil/fats	Any foods made with oil, fat, or butter				

## Section L: Access to agricultural inputs and credit

L/1. Provide details for the inputs you purchased/subsidized for **pasture/fodder** in the **last 12 months (Jan-Dec 2017)**, indicate if the cost was subsidised and constraints to forage input use. *(NB for Ethiopia, Kenya, Rwanda and Tanzania)*

Pasture/fodder inputs (excluding labour)	Do you Use 1=Yes 2=No	Quantity used (kg)	Sources of inputs ( <i>See CODE L1: below</i> )	If paid, how much (Price per kg)	Received subsidy 1= Yes 2 = No	Sources of subsidy( <i>See CODE L2: below</i> )	Indicate the <b>three major</b> constraints encountered on pasture/fodder input use in order of importance ( <i>See CODE L3: below</i> ):		
							1	2	3
Seed/planting material									
Planting fertilizer									
Top dressing fertilizer									
Organic manure*									
<b>CODE L1: Sources of inputs</b>			<b>CODE L2: Sources of subsidy</b>		<b>CODE L3: Indicate the three major constraints encountered in order of importance</b>				
1=Government 2= Association/Cooperatives 3=Private traders (e.g. agro-dealers) 4=Own farm 5=Other farmers 6=NGO 7=Research institution 8=Government extension officers 9=Others (specify)_____			1=Government 2=NGO 3=Individuals 4=Faith based organization 5=Out grower scheme 6=Others (specify)_____		1=None 2=High price/insufficient income; 3=Distance to input market is far; 4=Lack of access of input in right packing 5= Lack of access of input in right time; 6=Adulteration 7=Lack of access of desired brand/type of input; 8=Ineffectiveness of input (e.g. pesticides) 9=Limited quantities of manure 10= Drudgery of work/time constraint 11=Others (specify)_____				

\*For organic manure, use farmer's measurement to arrive at weight in kg. e.g. oxen cart, wheel barrow etc.

L/2. Please provide the following information for **crop input** use for **previous** or **current season** and indicate if the cost was subsidised and constraints (**NB for Ethiopia, Malawi, Tanzania and S Africa**).

Input type excluding labour	Do you Use 1= Yes 2 = No	List the crops applied	Quantity used (kg or litres)	Sources of inputs ( <i>See CODE L4: below</i> )	If paid, how much (Price per kg) local currency	Received subsidy? 1= Yes 2 = No	Sources of subsidy ( <i>See CODE L5: below</i> )	Indicate <b>three major</b> constraints encountered on crop input use in order of importance ( <i>See CODE L6: below</i> ):		
								1	2	3
1. Seed/planting material (indicate per crop)										
2. Herbicides										
3. Planting fertilizer										
4. Top dressing fertilizer										
5. Organic manure*										
6. Foliar feed (micro-nutrients e.g. Zn and Fe)										
7. Pre-harvest pesticides (field)										
8. Post-harvest pesticides (storage)										
9. Fungicide										
10. Rodenticide										
11. Molluscicide										
12. Nematicide										
<b>CODE L4: Sources of inputs</b>		<b>CODE L5: Sources of subsidy</b>		<b>CODE L6: Indicate the three major constraints encountered in order of importance</b>						
1=Government 2=Association/Cooperatives 3=Private traders (e.g. agro-dealers) 4=Own farm 5=Other farmers 6=NGO 7=Research institutions 8=Government extension officers 9=Others (specify)____		1=Government 2=NGO 3=Individuals 4=Faith based organization 5=Out grower scheme 6=Others (specify)____		1=None 2=High price/insufficient income 3=Distance to input market is far 4=Lack of access of input in right packing 5= Lack of access of input in right time) 6=Adulteration			7=Lack of access of desired brand/type of input 8=Ineffectiveness of input (e.g. pesticides) 9=Limited quantities of manure 10= Drudgery of work/time constraint 11=Others (specify) ____			

\*For organic manure, use farmer's measurement to arrive at weight in kg. e.g. oxen cart, wheel barrow etc.

L/3. I'd like to ask you about your household's experience with borrowing money in the **past 12 months (January-December 2017)?**

Source of agricultural loan	Has anyone in your household taken loans or borrowed cash/in-kind from the following source in the last 12 months? 1= Yes, 2 = No	Amount borrowed last 12 months (Indicate local currency .....)	Main purpose of loan ( <i>See CODE L7: below</i> )	Satisfaction with credit service ( <i>See CODE L8: below</i> )
1. Government bank				
2. Commercial banks				
3. Micro-finance institution				
4. Cooperatives				
5. Government credit schemes				
6. Agricultural finance Corporation				
7. Local money lender				
8. Group/table /village banking				
9. Family and friends				
10. Contractual out grower arrangements				
11. NGO				
12. Self-help group				

**CODE L7: Main purpose of loan**

1=Purchase farm inputs (e.g., seeds, fertilizers etc.)  
 2=Buy livestock  
 3=For marketing and value addition activities  
 4=Buy land  
 5=Construction of farm structures  
 6=Buy machinery and equipment  
 7=Payment of labour costs  
 8=Irrigation facilities  
 9=Pay for education  
 10=Medical  
 11=Others (specify) \_\_\_\_\_

**CODE L8: Satisfaction level**

1=Very dissatisfied  
 2=Dissatisfied  
 3=Neutral  
 4=Satisfied  
 5=Very satisfied

L/4. Does your household currently have any debt? [ ] 1=Yes 2=No

L/5. If yes, how do you compare your household's current level of indebtedness with previous year? (*tick appropriately*) [1]= increased [2] =same as previous year [3]=decreased [4]=don't know

J/6. If yes, how do you compare your household's current level of indebtedness with three years ago? (*tick appropriately*) [1]= increased [2] =same as three years ago [3]=decreased [4]=don't know

## Section M: Household gender decision making

M/1. I'd like to ask you about decision making in your agricultural activities

	Who make decision regarding.....	Who mainly decides on these activities? ( <u>SEE CODE M1 ADJACENT</u> )	<b>CODE M1: Who mainly decides on the activities</b>  1= Self 2=Husband 3=Wife 4=Joint Husband and wife 5=Family 6=Elder generation: father 7=Elder generation: mother 8=Children: daughter 9=Children: Son 10=Sibling: Sister 11=Sibling: Brother 12=In laws: Daughter 13=In-laws: Son 14=Not applicable
	<i>Agricultural</i>		
1	What crop variety to grow		
2	What pasture/fodder to grow		
3	What type of livestock breed to raise		
4	Who and number of farm labourers to hire		
5	Quantity of farm input use		
6	Quantity of output to sell and consume		
7	When and where to sell the grasses/forage/fodder legumes		
8	When and where to sell the harvested crops		
9	When and where to sell the milk and other milk products		
10	What price to sell the output		
11	What farm implements to sell and purchase		
12	Mode of negotiation (pricing condition) for products		
13	What agricultural input to purchase		
14	Whether to buy, sell and consume livestock		
15	Decision on use of cash from milk and other milk products		
16	Decision on use of cash from crops		
17	Adoption of technologies in pasture/fodder production		
18	Adoption of technologies in crop production		
19	Adoption of technologies in livestock raising		
20	Regarding the borrowing of money		
21	What to do with borrowed money		
22	Commitment and engagement in farmers' organization the household join		
23	Participation on extension services and training the household is joining		
24	Choice of financial planning and arrangement for household		
25	Choice of household equipment to purchase		
26	Choice of farm equipment to purchase e.g. machete, water tank,		
27	Choice of electronic to purchase e.g. radio, computer, TV, phone		
28	Choice of mean of transport to purchase e.g. car, motor cycle		
	<i>Non agricultural</i>		
29	Allocation of farm income		
30	Allocation of non-farm income, including remittances, if any		
31	Mode of education for children		
32	Choice of schooling for children		
33	Medical services for household members		

**END**

**Appreciation**

We would like to thank you for your willingness to participate in the interview and providing the information

Finally, give a chance to the farmer to ask question(s), if any

Approved by (supervisor name) ..... Signature: .....  
.Date.....

XX  
XXXXXXXXXXXXXXXXXXXX