



REPUBLIC OF ZAMBIA

Ministry of Fisheries & Livestock
and
Central Statistical Office

Livestock & Aquaculture Census 2017

Household Questionnaire

IDENTIFICATION PARTICULARS

1.	Cluster	CLUSTER					
2.	Province	PROV					
3.	District	DIST					
4.	Constituency	CONST					
5.	Ward	WARD					
6.	Region	REGION 1 = Rural 2 = Urban					
7.	CSA Number	CSA					
8.	SEA Number	SEA					
9.	Veterinary Camp Name	VCN					
10.	Village/Locality Name						
11.	Household Serial Number						
12.	Name of Household Head						
13.	Contact Telephone Number (Where available)						
14.	GPS Coordinates	East		South			
15.	Name of Main Respondent						
16.	RESPONSE STATUS RSTATUS 1=Complete 2=Incomplete 3=Refusal 4=Non-contact 5=Postponed 6=Interview consented						

17.	ASSIGNMENT RECORD				Day	Month	Year
	a. Name of Enumerator:	ECODE		Date completed			2017
	b. Name of Supervisor:	SCODE		Date checked			2017

SECTION 1: DEMOGRAPHIC CHARACTERISTICS OF HOUSEHOLD MEMBERS

Enumerator: Ask for and list the names of all usual household members. Then ask the following questions for each of the members. If this household is part of a polygamous family, ask only about the household members at this particular household. Note: MEM 1 must be head of the household.

Table 1: Demography

Reference Period: Date of interview (Today)

Demog.sav

ID	Name (Start with the head of household) Enter Surname first	What is the sex of? 1= male 2= female	What is the relationship of ... to the head? (See codes below)	In which year and month was born?		Enumerator: Ask for all persons born in <u>2005 or before</u> (12 years and above) What is the marital status of? (See codes below)	Enumerator: Ask for all persons born in <u>2012 or before</u> (5 years and above) What is the highest level of educationcompleted? (See codes below)	Enumerator: Ask for all persons born in <u>2005 or before</u> (12 years and above) Did (MEM) participate in from 1 st October 2016 to date? 1= Yes 2 =No			
				Year	Month			Crop production	Livestock/poultry production including dogs and cats	Fish farming	Bee keeping
MEM	NAME	LSD01	LSD02	LSD03A	LSD03B	LSD04	LSD05	LSD06	LSD07	LSD08	LSD09
1	(HH head)		1								
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											

Relationship to head (LSD02)		Month (LSD3B)		Marital Status (LSD04)		Education levels (LSD05)			
1 = Head	8 = Brother/Sister	1 = January	8 = August	1 = never married	00=None	06=Standard 5;Grade 6	13= Form 6 Lower		
2 = Spouse	9 = Brother/Sister	2 = February	9 = September	2 = monogamously married	01=Sub-standard A; Grade	07=Standard 6; Grade 7	14= Form 6 Upper		
3 = Son/Daughter	10 = Aunt/Uncle	3 = March	10 = October	3 = polygamously married	01=Sub-standard B; Grade	08=Form 1; Grade 8	15= College Student		
4 = Son/Daughter in law	11 = Nephew/Niece	4 = April	11 = November	4 = divorced	02=Standard 1; Grade 2	09=Form 2; Grade 9	16=Undergraduate student		
5 = Grandchild	12 = Not related	5 = May	12 = December	5 = widowed	03=Standard 2; Grade 3	10=Form 3; Grade 10	17=Certificate/Diploma		
6 = Parent	13 = Other, specify	6 = June		6 = separated	04=Standard 3; Grade 4	11= Form 4; Grade 11	18= Bachelor's Degree		
7 = Parent in law		7 = July		7 = cohabiting	05=Standard 4; Grade 5	12= Form 5; Grade12	19= Master's degree & above		

SECTION 2: LIVESTOCK PRODUCTION AND HEALTH

2.1 Did the household raise any Livestock from 1 st October 2016 to date? <i>1= Yes 2=No. If No, skip to section 3</i>	HH01
---	------

Table 2.1: Livestock Production, Animal Health and Housing: Reference period 1st October, 2016 to date

Livestock Raised	Did the Household raisebetween 1 st October 2016 and now? <i>1 = Yes 2 = No --->go to next livestock type</i>	How manywere raised on 1 st Oct 2016? <i>(Enter "0" if none were raised)</i>	How manyare you raising now? <i>(Enter "0" if none, and go to LP08)</i>	What was/is the main purpose of raising? <i>See codes on page 4</i>	Of the total number of animals, in LP03, how many are female?	How many of those in (LP03) ... belong to members of this household? <i>(Enter "0" if none and skip to LP08)</i>	How many from those in (LP06)belong to female members of this household? <i>(Enter "0" if none)</i>	How many ... were purchased / bartered-in between 1 st October 2016 and now? <i>(Enter "0" if none)</i>	How many were born between 1 st October 2016 and now? <i>(Enter "0" if none)</i>	How many ... were received as gifts/lobola between 1 st October 2016 and now? <i>(Enter "0" if none)</i>	How many ... were slaughtered between 1 st October 2016 and now? <i>(Enter "0" if none)</i>	What was the total value in Zambian Kwacha of..... slaughtered between 1 st October 2016 and now?	How many ... were bartered out/exchanged live between 1 st October 2016 and now? <i>(Enter "0" if none)</i>	How many ... were given out as gifts/lobola between 1 st October 2016 and now? <i>(Enter "0" if none)</i>	Did suffer from any disease between 1 st October 2016 and now? <i>1 = Yes 2 = No >> skip to LP18B</i>	What main disease affected most of the between 1 st October 2016 and now? <i>See codes on page 4</i>	Was the disease confirmed by a veterinary professional? <i>1 = Yes 2 = No</i>	Other than the disease mentioned in LP 15A what other disease affected most of the between 1 st October 2016 and now? <i>See codes on page 4</i>	Was the disease confirmed by a veterinary professional? <i>1 = Yes 2 = No</i>	Did the ... receive any conventional treatment between 1 st October 2016 and now? <i>1 = Yes 2 = No</i>
	LP01	LP02	LP03	LP04	LP05	LP06	LP07	LP08	L09	LP10	LP11A	LP11B	LP12	LP13	LP14	LP15A	LP15B	LP16A	LP16B	LP17
Cattle																				
Cows																				
Heifers																				
Bulls																				
Untrained Oxen																				
Trained Oxen																				
Tollies/Steers																				
Calves																				
Goats																				
Sheep																				
Pigs																				
Donkeys																				
Horses																				
Rabbits																				
Village Chickens																				
Chickens Broilers																				
Chickens Layers																				
Ducks																				
Geese																				
Guinea fowls																				
Turkeys																				
Pigeons																				
Quails																				
Ostriches																				
Dogs																				
Cats																				
Other specify...																				

Table 2.1 continued.....

Livestock Raised	How many....were lost due to..... between 1 st October 2016 and now? <i>(Enter "0" if none)</i>				How many Were sold live for cash between 1 st Oct 2016 and now. <i>(Enter "0" if none and go to LP21)</i>	What is the total value of sales in Zambian Kwacha of sold in LP19 <i>(ZMW)</i>	From the livestock slaughtered (LP11A) how many skins/hides were sold? <i>(Enter "0" if none and go LP23)</i>	What is the total value in Zambian Kwacha of the skins/hides sold in LP21?	What have been for this household the major feeding practice for livestock between 1 st October 2016 and now? <i>See codes on page 4</i>	What is the main production system used to raise..... between 1 st October 2016 and now? <i>See code on page 4</i>	What is the major constraint faced in raising.....? <i>See code on page 4</i>	What housing system for has this household mainly used between 1 st Oct 2016 and now? <i>See code on page 4</i> <i>If None, skip to next livestock type</i>	What are the main Materials used for the...?		
	Disease	Theft	Accident	Other									Roof <i>See code on page 4</i>	Floor <i>See code on page 4</i>	Main wall/ Fence <i>See code on page 4</i>
	LP18A	LP18B	LP18C	LP18D	LP19	LP20	LP21	LP22	LP23	LP24	LP25	LP26	LP27	LP28	LP29
Cattle															
Cows															
Heifers															
Bulls															
Untrained Oxen															
Trained Oxen															
Tollies/Steers															
Calves															
Goats															
Sheep															
Pigs															
Donkeys															
Horses															
Rabbits															
Village Chickens															
Chickens Broilers															
Chickens Layers															
Ducks															
Geese															
Guinea fowls															
Turkeys															
Pigeons															
Quails															
Ostriches															
Dogs															
Cats															
Other specify...															

Codes for Table 2.1

Purpose of keeping Livestock (LP04)	Livestock Diseases (LP15A , LP16A)	Major Feeding Practices (LP23)	Main livestock production system (LP24)	Constraints (LP25)	Housing System (LP26)	Roofing material (LP27)	Flooring material (LP28)	Fence/Wall material (LP29)
1=Meat (home consumption)	1=Brucellosis	1 = Free range	1 = Traditional	1=Disease	1 = none	1=Thatch (Grass,Reeds/Stalks)	1 =Mud	1 =Burnt bricks
2=Milk	2=CBPP	2 = Zero grazing	2= Extensive	2=Inadequate livestock extension services	2 = confined in sheds	2=Wood	2=Concrete	2=Cement blocks
3=Draught power	3=Lumpy Skin Disease	3 = Free range with Supplement	3=Semi intensive	3=Inadequate feed (Pasture./fodder)	3 = confined in paddocks	3=Asbestos	3= Wooden Poles	3=Pole and mud
4=Eggs	4=CCPP	4 = Zero grazing and Supplement	4=Intensive	4=Limited access to breeding stock	4 = confined fences	4=Iron sheets	4= Metal poles	4=Wooden poles
5=Rodent control	5=ECF	5 = Other (specify)		5=Long distance to dipping facilities	5 = cage	5=None	5= None	5= Metal poles
6=Aesthetic value	6= Rabies			6=Limited access to credit	6 = basket	6=Other.....Specify	6= Other...Specify	6=Grass
7=Selling/income	7= FMD			7= Limited access to market	7 = inside the house (e.g. kitchen)			7=Unburnt mud bricks
8=Manure	8= Anthrax			8=Predators	8 = Other (specify)			8 =Wire
9=Security	9= Black Quarter (BQ)			9=Theft				9=Other...Specify
10=Other...Specify	10= Newcastle disease			10= Limited access to vet drugs/vaccines				
	11=Fowl Pox			11=Inadequate supply of feed supplements				
	12=Gumboro			12=Limited access to water				
	13=Helminthiosis			13= Inadequate access to breeding technology				
	14= ASF			14 = Limited access to equipment for livestock feed processing				
	15=Babesiosis (Red Water)			15 = Other(Specify)				
	16=Typanosomiasis			16 = None				
	17= Foot Rot							
	18= Tetanus							
	19= Mange							
	20=Anaemia							
	21= Canine Distemper							
	22= Anaplasmosis							
	23=Cowdriosis (Heart water)							
	24=Other ...Specify							

Table 2.2 Livestock Management: Reference period 1st October, 2016 to date

2.2.1	Is your livestock holding enclosed by a fence? 1=Yes 2=No	HH02	
2.2.2	Does the household keep livestock records? 1=Yes 2=No	HH03	
2.2.3a	Does the household practice supplementary feeding? 1=Yes 2=No	HH04A	
2.2.3b	How much in total was spent on stock feed from 1 st October 2016 to date? ZMW	HH04B	
2.2.4	What is the main source of water for your livestock? (see codes below)	HH05	
2.2.5	What is the distance to the nearest water source that you use for your livestock? (in kilometers) Enter '0' if less than 1 km	HH06	(km)
2.2.6	Does the household have access to livestock extension services? 1=Yes, 2=No	HH07	
2.2.7	What is the distance in kilometers to the nearest livestock extension services? (in kilometers) Enter '0' if less than 1 km	HH08	(km)
2.2.8a	What is the main cattle grazing system the household practises? See codes below	HH09A	
2.2.8b	What is the main Goat grazing system the household practises? See codes below	HH09B	
2.2.9	What is the main method the household uses to control diseases? See codes below	HH10	
2.2.10	What main tick control method does your household practise? See codes below	HH11	
2.2.11	Did the household vaccinate any of the livestock against any disease from 1 st Oct 2016 to date? 1=Yes 2=No >>> skip to Q2.2.13	HH12	
2.2.12	Which of the following diseases did your household vaccinate against from 1 st Oct 2016 to date? 1=Yes 2=No	Black Quarter (BQ) (Black Leg)	HH13A
		Haemorrhagic Septicemia (HS)	HH13B
		East Coast Fever (ECF)/ Corridor Disease	HH13C
		Contagious Bovine Pleuro-pneumonia (CBPP)	HH13D
		Foot and Mouth Disease (FMD)	HH13E
		Brucellosis	HH13F
		Lumpy Skin Disease (LSD)	HH13G
		Newcastle Disease (ND)	HH13H
		Infectious Bursal Disease (IBD) (Gumboro)	HH13I
		Rabies	HH13J
Anthrax	HH13K		
Other.....Specify	HH13L		
2.2.13a	Who mainly treats the livestock when they are sick? See codes below	HH14A	
2.2.13b	How much in total was spent on pests and disease control from 1 st October 2016 to date? ZMW	HH14B	
2.2.14a	Did you hire any labour to help you with livestock raising from 1 st October 2016 to date? 1=Yes 2=No	HH15	
2.2.14b	What is the main type of labour employed for your livestock activities? 1= Household member, 2 = Hired Casual, 3= Hired permanent 4= Other..... Specify	HH16	
2.2.14c	What was the total cost of the labour you hired for raising livestock from 1 st October 2016 to date?	HH17A	
2.2.14d	Did the household access Artificial Insemination (A.I) services between 1 st October 2016 and now? 1=Yes 2=No	HH17B	

Codes for Table 2.2

Source of water (HH 05)	Cattle and Goat grazing system (HH09A & HH09B)	Disease control method (HH10)	Tick control method (HH 11)	Who Treats Sick animals (HH14)
1 = Stream/river	1 = Communal grazing near village	1 = Traditional medicines	1=Dipping	1= Household members
2 =Spring	2 = Transhumance	2 = Conventional medicines	2=Spraying	2= GRZ Veterinary/Extension staff
3=Lake	3 = Both communal and transhumance	3 = Vaccination	3=Pour-on	3= Private Veterinary/ Extension staff
4 = Water utility company	4 = Zero grazing	4 = Destruction/Slaughter	4=Hand dressing (Tick grease)	4= Community Livestock worker
5 = Swamp/dambo/wetlands	5 = Fenced paddocks	5= Do Nothing	5=Traditional	5= Otherspecify
6=Dam/reservoir	6= Tethering	6= Other....specify	6= Injectables	
7=Borehole	7=Otherspecify		7=None	

Table 2.4: Milk Production and Sales: Reference period 1st October, 2016 to date

Livestock Type	From 1 st October, 2016 to date did you milk any of your? <i>1=Yes, 2= No. If No, skip to Next livestock type</i>	From 1 st October, 2016 to date, on average, how many did you milk?	Who in your household mainly milked the From 1 st Oct 2016 to date 1 =Male spouse 2 = Female Spouse 3 = Male child 4 = Female child 5 = Other Male 6 = Other Female 7 = Male/Female Head	What was the main purpose of the milk? <i>1 = For Food 2 = sale; 3 = processing; 4 = other (specify)</i>	During the peak period (rain season) of production how much milk on average did you get per per day?(in litres)	For how many months did you milk your....during the peak period (rain season) ?	Did the household sellmilk from 1 st October 2016 to date? <i>1=Yes, 2= No. If No, skip to MP07D</i>	Where does the household mainly sell the milk? <i>1=At the homestead 2=Milk collection centre 3=Within the community 4=Outside the community</i>	What is the quantity of milk sold per day during the peak period (rain season) on average? (in litres)	Where is the milking usually done? <i>1=Milking parlour 2=Within the kraal 3=Outside the kraal 4=Other specify,....</i>	What type of container is used during milking? <i>1=Plastic Container 2=Stainless steel bucket 3=Other specify,....</i>	What is the farm gate price during the peak period (rain season)? (ZMW per litre)	During the lean period (dry season) of production how much milk on average did you get per per day? (in litres)	For how many months did you milk your during the lean period (dry season)?	What is the quantity of milk sold per day during the lean period (dry season) on average? (in litres)	What is the farm gate price during the lean period (dry season) ? (ZMW per litre)
	MP01	MP02	MP03	MP04	MP05	MP06	MP07A	MP07B	MP07C	MP07D	MP07E	MP08	MP09	MP10	MP11	MP12
Cattle(Cow)																
Goat(Doe)																
Sheep (Ewe)																

TABLE 2.5 EGG PRODUCTION AND SALES: Reference period 1st October, 2016 to date

Poultry Raised	Has any of the raised by the household produced eggs from 1st October, 2016 to date? 1 = Yes 2=No <i>IF No = Go to next poultry type</i>	How many clutches did have on average from 1st October, 2016 to date? <i>Enter the number</i>	How many eggs per clutches did lay on average in the last clutching period? <i>Enter the number</i>	How many had clutches in the past 3 months? <i>Enter the number</i>	Did this household sell the eggs in the last 3 months? 1 = Yes 2=No <i>IF No = Go to next poultry type</i>	How many of the eggs produced did you sell in the last 3 months? <i>Enter the number</i>	How much has this household earned by selling eggs in the past 3 months? local currency (ZMW)	Who in the household is mainly in charge of the sell of eggs? 1 =Male spouse 2 = Female Spouse 3 = Male child 4 = Female child 5 = Other Male 6 = Other Female 7=Male/Female Head
	EP01	EP02	EP03	EP04	EP05	EP06	EP07	EP08
Village Chickens								
Chickens Layers								
Ducks								
Guinea fowls								
Turkeys								
Pigeons								
Quails								
Ostriches								

Livestock Raised	Has this household used any of its for draught power (e.g. ploughing, transport) from 1st October, 2016 to date? 1 = Yes 2 = No IF "NO" SKIP TO APM05	What has been the main use of the draught power from 1st October 2016 to date? 1 = transport 2 = crop agriculture (ploughing, seeding, weeding, threshing, milling) 3. Other (specify)	Has this household used any of to provide ploughing and transport services to other households? 1 = Yes 2 = No IF "NO" SKIP TO APM05	How much money has this household received by providing ploughing and/or transport services with from 1st October, 2016 to date? local currency in ZMW	Has this household made any use of the dung/droppings from 1st October, 2016 to date? 1 = Yes 2 = No IF "No" SKIP TO APM07	What has been the main use of dung/ droppings from 1st October, 2016 to date? 1 = Manure 2 = fuel 3 = construction material 4 = feed to other animals 5 = other (specify)	Did this household sell..... dung/ droppings from 1st October, 2016 to date? 1 = Yes 2 = No IF "NO" SKIP TO NEXT LIVESTOCK TYPE	How much has this household earned from the sales ofdung/ droppings from 1st October, 2016 to date? (ZMW)
	APM01	APM02	APM03	APM04	APM05	APM06	APM07	APM08
Cattle								
Goats								
Sheep								
Pigs								
Donkeys								
Horses								
Rabbits								
Poultry								

Table 2.6 Animal Draught Power and Manure use Reference period 1st October, 2016 to date

Table 2.7: Animal Reproduction and Management: Reference period 1st October, 2016 to date

Livestock raised	Has this household practiced any controlled mating or other breeding strategy forfrom 1st October 2016 to date? 1= Yes 2= No >>> go to AB05	What has been the main controlled mating or breeding strategy used by this household for from 1st October 2016 to date? See codes below	Has this household incurred any cost related to breeding? 1= Yes 2= No >> go to AB05	How much did this household spend in total from 1st October 2016 to date for breeding? (ZMW)	Who in this household was mainly responsible for watering the from 1st October 2016 to date? 1 = Male spouse 2 = Female Spouse 3 = Male child 4 = Female child 5 = Other male 6 = Other female 7 = Other workers 8 = Male/Female head	How frequent has this household watered from 1st October 2016 to date? 1 = once a day 2 = more than once a day 3 = Don't Know	How much has the household paid for water used to water the livestock from 1st October 2016 to date? (ZMW) Enter "0" if HH did not spend	Who in this household was mainly responsible for feeding the from 1st October 2016 to date? 1 = Male spouse 2 = Female Spouse 3 = Male child 4 = Female child 5 = Other male 6 = Other female 7 = Other workers 8 = Male/Female head
	AB01	AB02	AB03	AB04	AB05	AB06	AB07	AB08
Cattle								
Goats								
Sheep								
Pigs								
Donkeys								
Horses								
Rabbits								
Poultry								

CODES FOR TABLE 2.7

CONTROLLED MATING OR BREEDING (AB02)

1. Natural mating, Sire selected from within the herd	5. Natural mating, Dam (female) purchased
2. Natural mating- Communal sire	6. Artificial insemination
3. Natural mating, Sire purchased or exchanged	7. Other (Specify).....
4. Natural mating, non-breeding males castrated	

SECTION 3: BEE KEEPING

Reference period: 1st October, 2016 to date

3.1 Is/was this household involved in bee keeping from 1 st October, 2016 to date? 1=Yes 2=No. If No, go to section 4	HH18
--	------

Table 3 Bee Keeping (Own Production)

3.2	What type of beehive(s) did the household have from 1 st October, 2017 to date? <i>1=Local, 2=Modern, 3= Local and modern</i>		HH19
3.3	How many beehives did the household have from 1 st October, 2017 to date?		HH20A
3.4	Of the beehives reported in Q. 3.3, how many are/were owned by female members of the household?		HH20B
3.5	Of the beehives reported in Q. 3.3, how many are/were colonized from 1 st October, 2016 to date?		HH20C
3.6	How much comb honey has the household harvested from 1 st October 2016 to date? Enter '0' if they didn't harvest and skip to Q3.10	Quantity	HH21A
		Unit <i>(See codes below)</i>	HH21B
3.7A	Did the household sell any comb honey? 1=Yes 2=No. If No skip to HH25		HH22
3.7B	How much comb honey was sold? (ZMW)	Quantity	HH23A
		Unit <i>See codes below</i>	HH23B
3.7C	What was the price per unit of the quantity sold in HH23B? ZMW		HH24
3.7D	Did the household process any comb honey from 1 st October 2016 to date? <i>1=Yes 2=No If No, skip to Q3.10</i>		HH25
3.8	How much beewax has the household produced from 1 st October 2016 to date? <i>(If None enter 0 and skip to Q3.10)</i>	Quantity	HH26A
		Unit <i>See codes below</i>	HH26B
3.9A	Did the household sell any beewax ? 1=Yes 2=No. If No skip to Q3.10		HH26C
3.9B	How much beewax was sold? (ZMW)	Quantity	HH26D
		Unit <i>See codes below</i>	HH26E
3.9C	What was the price per unit of beewax sold in HH26E? ZMW		HH26F

3.10 What three (3) major constraints does the household experience in **bee keeping**? *See codes below*

Start with the most severe constraint

1 ST CONSTRAINT MOST SEVERE	2 ND CONSTRAINT SEVERE	3 RD CONSTRAINT LEAST SEVERE
HH27A	HH27B	HH27C

Codes for HH 21B, HH23B HH26B HH26E	Constraints (HH27A, HH27B, HH27C)	
5=20lt tin	1. Pests	7. Inadequate Extension services
11=5lt gallon	2. Inadequate management skills	8. Deforestation
12=MEDA	3. Lack of market linkages	9. Disease
20=kilogram	4. Agricultural Spraying	10. None
21= 1 litre container	5. Low Colonization	11. Other (Specify).....
22=Drum	6. Lack of equipment & tools	

SECTION 4: FISH FARMING

Reference period: 1st October 2016 to date. Question 4.1

4.1 Has this Household been practicing fish farming from 1st October 2016 to date? 1 = Yes, 2 = No. *If No skip to Section 5* HH28

Table 4.1 Fish Farming Facility

Facility	Did the Household managefrom 1 st October 2016 to date? 1 = Yes 2 = No --- >go to next fish farming facility	How many is the household managing?	How many..... belong to the household?	What is the main source of water for the.....? <i>See codes below</i>	Of the.....owned by the household (given in F3) how many are owned by female members of the household?	What main type of fish culture does the household practice in? <i>1 = monoculture 2 = polyculture 3 = Monoculture and poly culture</i>	What is the total area/volume of both the stocked and un stocked..... managed by the household? <i>(Ask for volume units for cages and tanks only)</i>		How many..... were stocked from 1 st October 2016 to date?	What is the total area/volume of..... that have been stocked from 1 st October 2016 to date?		What is total number of fingerlings stocked from 1 st October 2016 to date?	What is average length of the production cycle (in months) of the main specie produced in.....from 1 st October 2016 to date?
							Quantity	Unit 1 = m ² 2 = m ³ 3 = Ha		Quantity	Unit 1 = m ² 2 = m ³ 3 = Ha		
	FF1	FF2	FF3	FF4	FF5	FF6	FF7A	FF7B	FF8	FF9A	FF9B	FF10	FF11
Ponds													
Cages													
Tanks													
Pens													
Dams													
Weir													
Other (specify)													

Source of Water (FF4)
1= Stream/river
2=Spring
3= Lake
4= Dam/reservoir
5= Swamp/dambo/wetlands
6= Borehole
7=Water utility company
8= Other.....Specify

Table 4.2: Fish Farming Management

4.2	What is the main purpose of raising fish? <i>1=Food (home consumption) 2=Selling/income 3 =Aesthetic value 4=Other...Specify</i>		HH29
4.3	What main type of fish is/was the household producing? <i>1=Table size fish 2= Fingerlings 3= Table size and fingerlings</i>		HH30
4.4	What is/was the main species stocked from 1 st October 2016 to date? <i>See codes below</i>		HH31
4.5a	What is the main type of fingerlings stocked? <i>1= Sex reversed 2 = Mixed</i>		HH32A
4.5b	How much in total was spent on the purchase of fingerlings from 1 st October 2016 to date? ZMW		HH32B
4.6	Does the household feed the fish? <i>1= Yes 2= No. If No skip to Q4.9</i>		HH33
4.7	What is the main type of feed the household uses to feed the fish? <i>1=Single ingredient 2= Multiple ingredients 3= Commercial complete 4=None 5= Other (specify).....</i>		HH34
4.8a	What is the main source of the feed? <i>1=On- Farm 2= Commercial-vendors 3= Other (specify).....</i>		HH35A
4.8b	How much in total was spent on the purchase of fish feed from 1 st October 2016 to date? ZMW		HH35B
4.9	How much fish did the household harvest from 1 st October 2016 to date?	Quantity	HH36A
		Unit <i>1 = kg 2 = tonnes</i>	HH36B
4.10	Of the fish harvested in Q4.9 what was the total quantity sold?	Quantity	HH37A
		Unit <i>1 = kg 2 = tonnes</i>	HH37B
4.11	What is the farm gate price of the main fish species reported in Q 4.4? (price per kg)		HH38
4.12	Did the household experience any fish deaths in the fish facilities? <i>1 = Yes 2 = No If No, skip to Q4.15</i>		HH39
4.13	Did the dead fish show any signs of disease? <i>1 = Yes 2 = No >>>>> Skip to Q4.15</i>		HH40
4.14	What signs did you see? <i>1= External growth on the body 2=Sores on the body 3=Other specify</i>		HH41
4.15	Did the household observe any signs of disease on the live or harvested fish? <i>1 = Yes 2 = No If No, skip to Q4.17</i>		HH42
4.16	What were the major signs? <i>1= External growth on the body 2=Sores on the body 3=Other specify</i>		HH43
4.17	Did you incur any loss of fish after harvesting? <i>1 = Yes 2 = No</i>		HH44
4.18	Did you preserve your fish? <i>1 = Yes 2 = No >>>>> Skip to Q4.20</i>		HH45
4.19	What is the main method the household used to preserve the fish? <i>1= Freezing 2= Smoking 3=Salting 4=Sun drying 5= Other specify.....</i>		HH46
4.20	What are the three (3) major constraints that you experience in fish farming? <i>See codes below</i> Start with the most severe constraint	1 st CONSTRAINT	HH47A
		2 nd CONSTRAINT	HH47B
		3 rd CONSTRAINT	HH47C

Codes for Table 4.2

Fish Species (HH31)	Constraints (HH47A, HH47B, HH47C)	
1= Three spotted tilapia (<i>Oreochromis Andersonii</i>)	1=Disease	9=Lack of equipment & tools
2= Green headed tilapia (<i>Oreochromis Machrochi</i>)	2=Lack of fisheries extension services	10= Inadequate water
3= Red breasted tilapia (<i>Tilapia Rendalii</i>)	3= Inadequate feed	11= Other...Specify
4= Nile tilapia (<i>Oreochromis Niloticus</i>)	4= Pests	12= None
5= Carp fish (<i>Cyprinus Carpio</i>)	5= Lack of credit	
6= Cat fish (<i>Clarius garrerpenus</i>)	6=Lack of market	
7= Tanganyika Bream (<i>Oreochromis Tanganyike</i>)	7= Predators	
8= Other Specify	8=Theft	

SECTION 5: CROP AND FODDER PRODUCTION

5.1a Has this Household been involved in Crop or fodder crop production from 1 st October 2016 to 30 th September 2017? 1 = Yes, 2 = No. <i>If No skip to the Section 6</i>	HH48
5.1b Did the household use any of the crop residues to feed livestock? 1 = Yes, 2 = No	HH49

Table 5.1: Crop Management

Crop	Did the Household growbetween 1 st October 2016 and 30 th September 2017? 1 = Yes 2 = No --> go to the next crop	What was the main tillage method used? <i>See codes below</i>	What was the TOTAL AREA planted under this crop?		What type and quantity of Basal dressing fertilizer did you apply?		What type and quantity of top dressing fertilizer did you apply?		What quantity of this crop did you harvest?		What quantity of the harvested CROP did you use as feed for livestock?		What quantity of the by-products of the harvested crop did the household use to feed the livestock?	
			Quantity	Unit 1= Lima 2= Acre 3= Ha 4= Square Metres	Type <i>See codes below - if none enter 0 and skip to CM07</i>	Quantity kgs	Type <i>See codes below - if none enter 0 and skip to CM09</i>	Quantity kg	Quantity	Unit <i>See codes below</i>	Quantity	Unit <i>See codes below</i>	Quantity	Unit <i>See codes below</i>
	CM01	CM02	CM03	CM04	CM05	CM06	CM07	CM08	CM09	CM10	CM11	CM12	CM13	CM14
Maize														
Rice														
Sorghum														
Millet														
Sunflower														
Soya beans														
Groundnuts														
Sweet Potatoes														
Irish Potatoes														
Cassava														
Cow peas														
Velvet beans														
Rhodes grass														
Rye														
Kikuyu														
Napier grass														
Buffel grass														
Panicum spp														
Pigeon peas														
Forage Sorghum														
Star grass														
Sunn hemp														
Silverleaf														
Sesbania sesban														
Leucaena														

Tillage Method (CM02)	BASAL FERTILIZER (CM05)	TOP DRESSING FERTILIZER (CM07)	Unit (CM10 & CM12 & CM14)	
1 = conventional hand hoe	0 = None	0 = None	1 = 90kg bag	11=5lt/gallon
2= planting basins/potholes	1 = Compound D	1 = Urea	2 = 50kg bag	12=Meda
3=zero tillage	2 = Compound X	2 = Ammonium Nitrate	3 = 25kg bag	13=bunches
4=ploughing	3 = Compound S	3 = CAN(calcium ammon. nitr)	4 = 10kg pocket/bag	14=Muchumbu
5=ripping	4 = Triple Super Phosphate (TSP)	4 = Liquid fertilizer	5 = 20lt tin	15=ka B.P.
6=ridging	5 = Single Super Phosphate(SSP)	5= Do not know	6 = 90kg bag unshelled/unpolished	16=crates

7=bunding	6 = Compound R		7 = 50kg bag unshelled/unpolished	17=tonnes
8=chitemene zero tillage	7 = Liquid fertilizer		8 = 25kg bag unshelled/unpolished	18=boxes
9=chitemeneplooughing/hand hoe	8= Do not know		9 = 10kg bag unshelled	19=number
			10 =20lt tin unshelled/unpolished	20=kilogram (kg)

SECTION 6: SELECTED HOUSEHOLD ASSETS

6.1. Please tell us about the type and number of assets or implements in working condition owned by the household.

Table 6: Assets

Type of Assets <i>Enumerator: Please ask AST01 for all assets before going to AST02</i>		From 1 st October, 2016 to date, did the household own..... <i>1 = Yes 2 = No -> go to NEXT ASSET</i>	How many.....did the household have in working condition on 1 st Oct 2016? <i>(Enter 0 if none)</i>	How many does the household have in working condition now? <i>(Enter the number, if 0 go to the next asset)</i>	If you were to sell these..... what is the total value you would sell all thefor? <i>(Enter the value in Zambian Kwacha)</i>
	ASSET	AST01	AST02	AST03	AST04
Tractor drawn ploughs	1				
Ox-drawn plough	34				
Harrows	2				
Cultivators	3				
Rippers	4				
Tractors	5				
Hand driven tractor	6				
Scotch carts	7				
Water pumps/ borehole	8				
Trucks/Lorries	9				
Pick-ups/ Vans/Cars	10				
Motorcycles	11				
Bicycles	12				
Hammer mills	13				
Hand Hammer Mills	14				
Rump press/ Oil expeller	15				
Sprayers	16				
Sheller	17				
Radio	18				
Television set	19				
Treadle pump	20				
Solar Panel and Equipment	21				
Hoe	22				
Castration Equipment	23				
Feed Mixer	24				
Milking Equipment	25				
Branding equipment	26				
Dip tank	28				
Spray race	29				
Boats	30				
Fishing nets	31				
Shovels	32				
Picks	33				
Wheelbarrow	35				

Mobile Phone Set	36				
Computer	37				

Thank you very much for participating in this interview. We appreciate your time and effort