

Questionnaire for the Dairy Baseline Survey in Malawi

THE SURVEY IS BEING CONDUCTED BY BUNDA COLLEGE OF AGRICULTURE AND
SCOTTISH RURAL COLLEGE

INTRODUCTION

Good (morning, afternoon). My name is _____. I am conducting a study concerning dairy production issues in your neighbourhood on behalf of Bunda College. The aim of this study is to understand dairy production systems, marketing and identify problems you encounter in your enterprise. This study will be conducted in all milk-shed areas throughout the country. While the general conclusions of the study may be used to help formulate government policy recommendations for improving dairy production in the country, all the specific information about you, your family and undertakings will be treated confidentially. We hope that you will be willing to help us in this study.

MAWU OYAMBA

Dzina langa ndi _____. Tafika mdela lanu lino pakafukufuku amene tikupanga wokhudza ulimi wa ng'ombe za mkaka mmalo mwa sukulu yazaulimi ku Bunda. Cholinga cha kafukufukuyi ndi kufuna kudziwa za mmene ntchito ynu ikuyendera, mmene mumagulitsira mkaka wanu ndinso mavuto amene mumakomana nawo. Kafukufukuyi achitika mmalo momnse momwe amalandilira mkaka mdziko lonse lino. Ngakhale kuti zomwe mutiyankhe zithandiza boma kukonza ndondomeko zothandizira alimi an ng'ombe za mkaka kuno ku Malawi, zomwe mutiuze zokhudza inu, banja lanu ndinso zomwe mumachita pakhomo panu, zidzasungidwa mwachinsisi. Chonde khalani okasuka kuti uza zonse mukudziwa ndi zomwe mumachita zokhuza ulimi wanu.

Enumerator's Name:
Date of Interview (DD/MM/YY): / / 2012
Time Started:..... Time Ended:.....
Cross-checked by (Enumerator's Name).....
Final check by (Supervisor's Name):
Date Checked (DD/MM/YY): / / 2012

MODULES:

- Module 1: Basic Household Information
- Module 2: Dairy Farm Management and Milk Production
- Module 3: Dairy Marketing Chain and Market Access
- Module 4: Access to Animal Health and Livestock Extension Service
- Module 5: Food Security and Climate Change

10) Land ownership

Land type	Ha	How acquired 1 Given by parents 2 Given by chief 3 Given by Govt. 4 Rented land 5 Borrowed for free 6 Purchased	If rented, how much rent do you pay, MK (please specify whether it is per month, per year etc)	Land tenure status 1 Customary 2 Freehold 3 Leased 4 Public 5 Other, please specify).....	When acquired, year	Can you pass on your land to family members? <input type="checkbox"/> Yes (1) <input type="checkbox"/> No (0)
Agricultural land						
Pasture land						
Forest land						
Fallow land						
Dimba						
Other types						

11) Ownership of house

- Own house (1) Rented (2) Host with family or relatives (3)
 Temporary shelter (4) Other (5), please specify.....

12) Does your house have?

- a) Electricity (ESCOM) Yes (1) No (0)
 b) Electricity (Solar) Yes (1) No (0)
 c) Access to water Yes (1) No (0)
 d) Toilet/Latrine Yes (1) No (0)
 e) Iron sheet roof Yes (1) No (0)
 f) Burnt brick walls Yes (1) No (0)
 g) Cemented / Tiled floor Yes (1) No (0)

13) Do you / your household own any of these (choose as many as apply)?

Implements:

- a) Hoe Yes (1) No (0)
 b) Treadle pump Yes (1) No (0)
 c) Axe Yes (1) No (0)
 d) Sickle Yes (1) No (0)
 e) Slasher Yes (1) No (0)
 f) Sprayer Yes (1) No (0)
 g) Protective equipment ¹ Yes (1) No (0)
 h) Dip tank (either household or communal, please specify.....)

Yes (1) No (0)

- i) Watering can Yes (1) No (0)

Machinery:

- a) Ox cart / ox plough Yes (1) No (0)
 b) Cultivator Yes (1) No (0)
 c) Generator Yes (1) No (0)
 d) Motorised pump Yes (1) No (0)

Structures / Buildings:

¹ For those spraying

- a) Livestock khola Yes (1) No (0)
- b) Chicken house / poultry kraal Yes (1) No (0)
- c) Shed / Storage house Yes (1) No (0)
- d) Granary Yes (1) No (0)
- e) Cattle crush (either household or communal, please specify.....)

Yes (1) No (0)

Durable goods:

- a) Chair Yes (1) No (0)
- b) Bed Yes (1) No (0)
- c) Table Yes (1) No (0)
- d) Stove Yes (1) No (0)
- e) Mobile phone Yes (1) No (0)
- f) Refrigerator Yes (1) No (0)
- g) Radio Yes (1) No (0)
- h) TV Yes (1) No (0)
- i) Satellite dish Yes (1) No (0)
- j) Bicycle Yes (1) No (0)
- k) Car Yes (1) No (0)
- l) Motorcycle Yes (1) No (0)
- m) Bank account Yes (1) No (0)
- n) Watch Yes (1) No (0)
- o) Sewing machine Yes (1) No (0)

14) If you don't have a khola, where do you keep your animals?

- Open ground (1)
- Parents' khola (2)
- Communal khola (3)
- Other (4), please specify.....

15) Livelihood sources

15a. Income sources of the family	15b. Rank (max. 5) of your sources of household income in ascending order as follows: (1 = most important to 5 = least important)	15c. Average amount per month in the High season ² , Kwacha	15d. Average amount per month in the Low season ³ , Kwacha
1. Dairy farming			
2. Other livestock / Beef fattening/ rearing livestock			
3. Crop (Agriculture) (maize, barley, tobacco)			
4. Fisheries			
5. Government employment			
6. Private sector employment			
7. Daily labour			
8. Trade / Shopkeeper			
9. Social support			
10. Forest products			

² High season is from June to November

³ Low season is from December to May

15a. Income sources of the family	15b. Rank (max. 5) of your sources of household income in ascending order as follows: (1 = most important to 5 = least important)	15c. Average amount per month in the High season ² , Kwacha	15d. Average amount per month in the Low season ³ , Kwacha
11. Other.....			

16) How much of the following staple food crops did you plant this year? Bags of 50 kg

Crop	Unit of measure	Number of units	Weight per unit, kg	Yield, kg/ha
Maize				
Fresh Cassava				
Cassava dried				
Rice				
Irish potato				
Sweet potato				
Millet, kg				
Sorghum (kg)				

17) How much of the following staple food crops did you harvest this year? Bags of 50 kg

Crop	Unit of measure	Number of units	Weight per unit, kg	Kg harvested
Maize				
Fresh Cassava				
Cassava dried				
Rice				
Irish potato				
Sweet potato				
Millet, kg				
Sorghum (kg)				

18) How much of the crops harvested was for your own consumption, and how much was sold?
..... Bags of 50 kg

Crop	Used for own consumption	Sold	Unit of measure	Number of units	Weight per unit, kg
Maize					
Fresh Cassava					
Cassava dried					
Rice					
Irish potato					
Sweet potato					
Millet, kg					
Sorghum (kg)					

Module 2: Dairy Farming

Section 2-A. General

19) When did you start dairy farming?years (Enumerator to calculate the number of years)

20) Did you have prior knowledge of dairy farming? Yes (1) No (2)

21) If yes, from where?

22) How did you start dairy farming?

- Encouraged by parents/relatives/friends (1)
- Introduced by Govt./NGO/Donors (2), please specify.....
- Self-motivated (3)
- Inherited (4)
- Other (5), please specify).....

23) Do any members of your family / friends practice dairy farming? (choose as many as apply)

- Parents (of husband / wife) (1)
- Brother / sisters (of husband / wife) (2)
- Friends (of husband / wife) (3)
- Other (4), please specify.....
- None of the above (5)

24) Why did you start dairy farming? (choose up to 2 options)

- To increase income (1)
- To increase food security (2)
- To diversify sources of income (3)
- Other (4), please specify.....

Section 2-B. Dairy farm structure, facilities and management

25) Number of dairy cattle kept on farm

25a. Type of animals	25b. Local breed	25c. Crossbreed	25d. Pure breed – <i>Yachizungu</i>
	Number of animals	Number of animals	Number of animals
1. Lactating (milking) cows - <i>Zokamidwa</i>			
2. Dry cows (pregnant) - <i>Zosiya kukama</i>			
3. Dry cows (not pregnant) – <i>Zosisiyitsa kukama pa zifukwa zina</i>			
4. Heifers (more than 1 year old) – <i>Misoti</i>			
5. Female calves (less than 1 year old)			
6. Male calves (less than 1 year old)			
7. Male fattening cattle (>1 year old) – <i>Zothena</i>			
8. Bull (more than 2 years old) – <i>Nkhunzi</i>			

26) Number of other livestock kept on farm

Type of animals	Number of animals
1. Ox	
2. Donkey	
3. Mule / Horse	
4. Goat	
5. Sheep	
6. Pig	
7. Chicken	
8. Turkey	
9. Duck	
10. Guinea fowl	
11. Beehive	
12. Other, please specify.....	

27) How did you get the (dairy) animals when you first set up your dairy farm?

- Credit by government (1) Pass on credit by NGO (2)
 Purchased myself (3) Inherited (given by) from relatives (4)
 Donated (5)
 Other (6), please specify.....

28) Who owns the (dairy) animals/farm? (multiple choices possible)

- Husband (1) Wife (2) Both husband and wife (3) Daughter (4) Son (5)
 Relative (6) Farm labourer (7)
 Other (8), please specify).....

29) Who manages the (dairy) animals/farm? (multiple choices possible)

- Husband (1) Wife (2) Both husband and wife (3) Daughter (4) Son (5)
 Relative (6) Farm labourer (7)
 Other (8), please specify).....

30) Are the animals used for milk, or meat purposes?

30a. Animal Breed	30b. Milk only	30c. Meat only	30d. Milk and Meat ⁴
	Number of animals	Number of animals	Number of animals
Crossbreed			
Holstein/Friesian – <i>Black & white in colour</i>			
Zebu – <i>local</i>			
Ayrshire /Jersey – <i>Greyish in colour</i>			
Other, please specify.....			

⁴ i.e. used for milk, and culled later in life plus bull calves fattened for meat

31) Herd dynamics

31a. Type of animals	31b. Total number	31c. Number born (in the last 12 months)	31d. Number dead (in the last 12 months)			31e. Cause of death, please specify (in the last 12 months)	31f. Number of stillbirths	31g. Number of newborn deaths (in the last 12 months)	31h. Culling (in the last 12 months) <i>Kuchotsa</i>		
			No	Sex of the animal	Age when died				No	Sex of the animal	Age culled
Local breed											
Cross breed											
Pure breed											
	31i. Slaughtering for home consumption (in the last 12 months)		31j. Number of animals sold (in the last 12 months)			31k. Number of animals transferred (in the last 12 months)		31l. Number of animals received as gifts (in the last 12 months)		31m. Number of animals given as gifts (in the last 12 months)	31n. Number of (dairy) animals stolen from the farm (in the last 12 months)
	No	Sex of the animal	Age slaughtered								
Local breed											
Cross breed											
Pure breed											

32) Characteristics of each cow on your farm:

Cow No.	32a. Cow Name or ID number (if applicable)	32b. Cow breed 1. Crossbreed 2.Zebu 3. Holstein/Friesian 4.Ayrshire /Jersey 5.Other	32c. Sex 1=Male 2=Female	32d. Date of birth (dd/mm/yy)	32e. Weight when fully grown, kg	32f. How many kg of feed a day they consume when fully grown	32g. Milk-ing status (1) In milk (2) Not in Milk	32h. If not in milk, the last date when the cow gave milk (dd/mm/yy)	32i.If in milk when did it start giving milk (dd/mm/yy)	32j. Milk yield, litres per day			32k. Date of drying (dd/mm/yy)	32l. Date of last calving (dd/mm/yy)	32m. Date of last insemination (dd/mm/yy)	32n. How many times did the cow have to be inseminated before getting pregnant ?	32o. Duration between inseminations (days)	32p. Pregnant status (1) Yes (0) No
										At calving to 30 days	At peak, 30 – 60 days	At the end, after 60 days						
1																		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

Section 2-C. Labour use in dairy farming

33) How many workers do you have at the (dairy) farm, i.e. contributing to the dairy enterprise?

33a.Type of employment	33b. Male (No. of persons)	33c. Female (No. of persons)	33d.Total
Self-employed or unpaid workers (family member, i.e. husband, wife, son, daughter or relatives)			
Paid workers / ganyu			
How much is a worker paid in a month? (Kwacha/ person)			

34) Who regularly performs the following activities on your dairy farm?

Activity	Person responsible (multiple choices possible)
Feeding	
Fetching water (for drinking, cleaning, etc)	
Milking	
Cleaning	
Dipping	
Marketing	
Khola maintenance	

Codes for the responses: Farm Manager (1) Husband (2) Wife (3) Workers (4) Male children (5) Female children (6)

Section 2-D. Feeding

35) Which type of grazing do you practice (for your dairy animals), and for how many months a year?

- Free grazing (in pasture) (1); *Months of grazing in this category each year.....months*
- Free grazing in communal land (dambos) (2); *Months of grazing in this category each year.....months*
- Semi-zero grazing (3) – Kudyetsa ku dambo kapena m'khola; *Months of grazing in this category each year.....months*
- Zero grazing (4) – Kudyetsera m'khola; *Months of grazing in this category each year.....months*
- Other (5), please specify.....
Months of grazing in this category each year.....months

36) Do you practice fertilisation of grazing land?

- Yes (1) No (0)

37) If yes, please specify the amount and type of fertilizer applied (multiple choices possible)

Type of fertiliser	Amount, kg/ha
Synthetic (1)	
Manure (2)	
Compost (3)	
Legumes (4)	

38) If you use community land (dambos) for grazing, how much of total feed quantity does this provide?
.....% (Enumerator to calculate % if necessary)

39) Have you undertaken any land improvement and conservation measures during the last 2 years?

- Yes (1) No (0)

40) If Yes, please indicate the type of conservation you have undertaken (choose as many as apply)

- Soil or stone bunds (1);ha
 Terraces (2);ha
 Drainage ditches (3);..... ha
 Fences (4);ha
 Planting trees (5);Number
 Other (6), please specify.....;ha

41) Which grass do you grow on the farm?

Name	Grass yield ⁵	
	kg of dry matter per ha	kg of fresh weight per ha
Ruzi grass (1)		
Panicum grass (2)		
Guinea grass (3)		
Napier grass (4)		
Rhodes grass (5)		
Centrocema (6)		
Thatch grass (7)		
Star grass (8)		
Plicatum grass (9)		
Other (10), please specify.....		

42) Feed / Fodder (roughage) (multiple choice possible)

42a.Type of feed	Yes (1) or No (0)	42b.Source (1) Plant yourself or (2) Natural pasture or (3) Purchase	42c.Feeding practice (1) Grazing (2) Stall-feed (3) Both	42d. How many times do you feed your cows per day?	42e.How much do you feed (per cow per day)? <u>Unit Code:</u>		42f.If purchase, please indicate average price, Kwacha per unit (please specify unit)	42g.If purchase, please indicate amount purchased per month, see unit codes below		
					Unit and wt (kg)	Quantity ~ no of units		Price per unit	High season	Low season
Concentrate feed (1) (e.g. dairy mash) – <i>Zosakhala zaudzu</i>										
Grass (grazing) (2)										
Grass (cut and carry) (3)										
Hay (4) – <i>udzu wofutsa</i>										
Maize bran (5) – <i>Madeya</i>										
Groundnut haulms (6) –										

⁵ Enumerator to use either dry matter per ha or fresh weight per ha as specified by the farmer.

42a.Type of feed	Yes (1) or No (0)	42b.Source (1) Plant yourself or (2) Natural pasture or (3) Purchase	42c.Feeding practice (1) Grazing (2) Stall-feed (3) Both	42d. How many times do you feed your cows per day?	42e.How much do you feed (per cow per day)? <u>Unit Code:</u>		42f.If purchase, please indicate average price, Kwacha per unit (please specify unit)	42g.If purchase, please indicate amount purchased per month, see unit codes below		
					Unit and wt (kg)	Quantity ~ no of units		Price per unit	High season	Low season
Masangwi										
Feed supplements (7)										
Do you produce Silage (8) – <i>Udzu owoletsa</i>										
Forage (9) – Legumes <i>Nyemba</i>										
Fodder ^b (10) – <i>Masamba ochokera m'miteng</i>										
Other (11) a).....										
b).....										
c).....										

Note: Unit Code: Kilogram = 1; Basket of ____ kg = 2; Pale of 20 liters=3; Bag of ____ kg=4; Other = 5, please specify.....

43) Do you purchase crop by-products during the year?

Yes (1) No (0)

44) If you purchase crop by-products, which crop by-products did you purchase for the farm over the last 12 months?

44a.Type of crop by-product	44b.Price per kg	44c. Quantity purchased				44d. Which month is it available?
		44c1.Unit of measure	44c2. Number of units	44c3. Weight per unit, kg	44c4.Total kg	
Ground nut haulms						
Maize stalks						
Soybean haulms						
Banana stems						
Rice straws						
Cassava leaves						
Other, please specify.....						

⁶e.g. from agroforestry

Note: Unit Code: Kilogram = 1; Basket of ____ kg = 2; Pale of 20 liters=3; Bag of ____ kg=4; Other = 5, please specify.....

45) Do you have enough fodder for your animals for the whole year? Yes (1) No (0)

46) Do you regularly experience a shortage of feed? Yes (1) No (0)

47) If yes, which season / month do you experience the most severe shortage.....

48) How do you obtain feed when experiencing a shortage of feed, please

explain.....
.....

49) Do you make conserved feeds (e.g. hay) Yes(1) No(0)

50) If yes, how much hay do you make?(specify quantity and units)

51) Have you experienced differences in feed availability over the past ten (10) years?

Yes(1) No(0)

52) a) Do you have enough water for your animals throughout the day? Yes (1) No (0)

b) Amount of water consumed.....litres (convert if buckets)

c) Total monthly cost of water.....Kwacha

53) What is the source of water for the animals (choose up to 2)? Indicate the distance for each source indicated (multiple responses are possible)

On-farm well (1) Dist_____m Piped public water supply (2) Dist_____m

Rain catchment (3) Dist_____m River / stream (4) Dist_____m

Other (5), please specify..... Dist_____m

Section 2-E. Milk production and milking practice

54) How many times a day do you milk your cows? Once (1) 2 times (2) 3 times (3)

55) Do you clean hands before milking? Yes (1) No (0)

56) Do you clean milking utensils before milking? Yes (1) No (0)

57) Average milk per day in the high season..... kg or litre, from (number of milking) cows

58) Average milk per day in the low season.....kg or litre, from (number of milking) cows

59) Do you mix evening and morning milk before you send it to the MBG every morning?

Yes (1) No (0)

60) Do you plan to increase the amount of milk you produce? Yes (1) No (0)

61) If yes, how do you plan to increase your milk production? (choose up to 3)

Increase the number of dairy cows (1)

Improve the grade of animals (2)

Produce more feed (3)

Buy more feed (4)

Spend more on controlling animal disease (5)

Depends on extension advice (6)

Change farm management practices (e.g.feed) (7)

Don't know (8)

Other (9) (please explain).....

62) Do you think there are any significant constraints to the (dairy) production of the farm?

- Yes (1) No (0)

63) If answered yes, which are the three main constraints you are facing with your dairy farm (choose 3 and rank from 1 to 3 in the order of importance, with 1 being the most important)?

- Lack of fodder or roughage (1), ranking.....
- Low quality of fodder or roughage (2), ranking.....
- Low quality of concentrate feed (3), ranking.....
- High cost of concentrate feed (4), ranking.....
- Lack of credit to buy new animals (5), ranking.....
- Lack of farm labourer/s (6), ranking.....
- Low quality of milk (7), ranking.....
- Low milk yield (8), ranking.....
- Low market price of milk (9), ranking.....
- High price of cattle feed (concentrate feed) (10), ranking.....
- Infertility (11), ranking.....
- Animal disease (12), ranking.....
- Good quality semen and genetics (13), ranking.....
- Other (14), please specify,
 - a).....,ranking.....
 - b) ,ranking.....
 - c) ,ranking.....
 - d) ,ranking.....

Section 2-F. Manure management

64) How much time a day do the cows spend grazing?

Type of an animal	Hours per day
Calves	
Gestating cows	
Lactating cows	
Bulls	

65) How much time a day do the cows spend housed?

Type of an animal	Hours per day
Calves	

Gestating cows	
Lactating cows	
Bulls	

66) When not grazing, how is the manure stored?

67) When not grazing, how is the manure removed?.....

68) How long is the manure stored before using?.....days

69) Is the stored solid (if any) manure covered by, kept with or mixed with any material?

a) Covered by other material Yes (1) No (0)

b) Kept with other material (but not mixed) Yes (1) No (0)

c) Mixed with other material Yes (1) No (0)

70) Common manure storage system

Lagoon (1) Solid storage facility (2)

Dry lot (heap) (3) Pit storage (4) Daily spread (5)

Other (6), please specify.....

71) Common manure storage system (multiple choices possible)

Manure Management During Housed Period (adult females only)	% of Manure Stored in this System (Enumerator to calculate if necessary)
Liquid / slurry (with crust) (1)	
Liquid / slurry (without crust) (2)	
Lagoon (3)	
Solid manure (4)	
Drylot (5)	
Daily spread (6)	
Burned (7)	
Anaerobic digestion (8)	
Other (9) (please specify).....	

72) Do you use manure or cattle slurry? Yes (1) No (0)

73) If yes, for what? (multiple choices possible)

In pasture (grass) field (1) In other crop field (2) Fuel (3)

Biogas (4) Other (5), please specify.....

74) What percentage of manure produced when the cattle are housed is applied on your fields?.....

75) What percentage of manure you produce is used as fuel?.....

76) Do you sell manure? Yes (1) No (0)

77) If yes, what percentage of manure is sold?.....

78) What is the price per unit (e.g., bag, ox-cart, etc)? Kwacha_____ / _____ (indicate unit)

79) If don't use and don't sell manure, what is done with manure?

Please explain.....

80) Do you produce biogas on your farm?

Yes (1) No (0)

No, but intend to (2)

Other (3), please explain.....

81) Are any cattle also used for traction or work? Yes (1) No (0)

82) If yes: how many?.....heads

83) If yes: for how many hours a day?.....hours

Module 3: Dairy Marketing Chain and Market Access

Section 3-A. Marketing

84) Disaggregated milk quantities

Category	Average litres per day	
	High season	Low season
Total production		
Home consumption		
Milk wastage		
Milk given to calves		
Milk sold through the MBG		
Milk sold locally		
Milk sold through the dairy cooperative (other than MBG)		
Other, please specify.....		

85) Selling price in the MBG, per kg or litre.....Kwacha

86) If the selling price in MBG is different in low season, please indicate.....Kwacha

87) Selling price locally, per kg, litre or local unit(if in local units, please indicate the number of litres or kg per unit)

88) How far do you live from the MBG/collecting centre or market? kilometres, or hours walking

89) What mode of transport do you normally use to get to the MBG?

- Go by foot (1)
- Bicycle (2)
- Ox-cart (3)
- Own vehicle (4)
- Hired vehicle (5)
- Other (6), please specify.....

90) What are the costs incurred during production and marketing of your milk over the last 12 months?

	Item	Total Cost
1	Processing costs	
2	Costs for using extension and veterinary services	
3	Transport costs	
4	Storage cost	
5	Market costs (fees)	
6	Electricity costs (lighting, storage, processing)	
7	Other costs, please specify.....	

91) Do you ever have difficulties selling your milk? Yes (1) No (0)

92) If yes, what are the difficulties?

- Poor quality of milk/sour milk (1)
- No market (2)
- Low price (3)
- Lack of transportation (4)
- Other (5), please specify.....

93) What is the (average) quantity of your milk rejected by MBG/Coop in the last month?litres

94) Do you ever have a delay in getting paid for milk sold? Yes (1) No (0)

95) If you do have delays, how many days on average per month (in the last 6 months)?

.....days

96) Does your MBG or dairy cooperative have an incentive system (additional payment) paid to farmers who have better quality of milk? Yes (1) No (0)

97) If yes, how much do they pay for the: Standard (normal) milk.....Kwacha/litre

Better quality of milk.....Kwacha/litre

98) What do you do to increase the quality of milk you sell?

.....

Section 3-B. Milk bulking groups and dairy co-operatives

99) Are you (or any members of your family) a member of a dairy co-operative (other than MBG)?

- Yes (1) No (0)

100) If no, why (please explain).....

101) What services of the MBG or dairy co-op do you use (choose all that apply)?

Services	Yes (1) or No (0)
Milk collection	
Veterinary services and livestock extension	
Feed	
Veterinary drugs	
Artificial insemination	
Other farming inputs	
Credit	
Other (please specify).....	

Section 3-C. Access to credit/finance

102) Do you have (or have you had in the past 12 months) access to credit to support your dairy farm?

- Yes (1) No (0)

103) If yes, where did you get the credit from?

- Regional/international NGO (1)
- Malawi Rural Finance Company (2)
- Malawi Rural Development Fund (3)
- Formal lending agencies (4)
- Credit union (5)
- Friends/relatives/neighbours (6)
- Other (7), please specify.....

104) If no, would you consider borrowing to invest in your (dairy) farm?

- Yes (1) No (0)

105) If no, why (please explain).....

106) What is the maximum amount you think you could borrow?.....Kwacha

107) Do you know what the interest rate is / would be?.....%

108) Did you try to access credit in the past but did not obtain it?

- Yes (1) No (0)

109) Can you identify any constraints when trying to get credit (choose up to 3)?

- High interest rate (1)
- No formal documentation for the land (2)
- Credit organizations not willing to lend to smallholders (3)
- Other (4), please specify.....

Section 3-D. Theft and security

110) If you have had any dairy animals stolen in the last 12 months, what impact did it have on you as a dairy farmer? (choose up to 3)

- No impact (1)

128) Where are some veterinary services available?

- In local MBG (1)
- Government district veterinary offices (2)
- Government EPA / Dip Tanks (3)
- Other (4), please specify.....

129) Are you satisfied with veterinary services you use? Yes (1) No (0)

130) Do you have any suggestions on how to increase the effectiveness of the services you use, please explain?

.....

Section 4-C. Reproduction and breeding service

131) Have you been trained on heat detection? Yes (1) No (0)

132) Do you use artificial insemination (AI)? Yes (1) No (0)

133) Do you pay for AI service? Yes (1) No (0)

134) If yes, how much do you pay for each service?.....Kwacha

135) Do you use a bull for the whole herd? Yes (1) No (0)

136) Who is inseminating the cows?

- Government inseminator (1) Private inseminator (2)
- Farmer AI Technician (3) Veterinarian (4)
- Other (5), please specify.....

137) How many times do you observe your animals per day to see if a cow is on heat?

- 0 1 2 3 More than 4

138) How many times did you inseminate your cows when they became in heat?

- 1 time 2 times

139) Average number of services per conception?

140) Are you satisfied with the AI / breeding services you use? Yes (1) No (0)

141) Do you have any suggestions on how to increase the effectiveness of the services you use, please explain?

.....

Section 4-D. Record keeping and level of knowledge

142) Do you practice record keeping on your farm? Yes (1) No (0)

143) If yes, select the type of information you record in Table below

Type of record	Code
Individual cow records (1)	
Breeding/fertility/reproduction records (2)	
Milk production records (3)	
Milk sales records (4)	
Costs (5)	
Other (6), please specify.....	

144) From whom did you (the farmer) get most of his knowledge on dairy farming

- Other dairy farmers (1)
- Government official (2)
- Cooperative extension (3)
- Local/International NGO (4)
- Other (5), please specify.....

145) Please rank your knowledge on dairy feed and feeding

- Very good (1)
- Good (2)
- Fair (3)
- Needs to be improved (4)

146) What kind of knowledge/information you would like to receive more via training? (multiple choices possible)

- General farm management (1)
- Feed and feeding (2)
- Animal disease (3)
- Udder management (4)
- Mastitis (5)
- Marketing (6)
- Artificial insemination (7)
- Farm accounts/record keeping (8)
- Quality of milk (9)
- Breeding (10)
- Other (11), please specify.....

Module 5: Food Security and Climate Change

Section 5-A. Food security

147) During the last 7 days how many meals did the household take per day?

- 1 (1)
- 2 (2)
- 3 (3)
- More than 3 (4)
- Other (5), please specify.....

148) How many meals a day do you have during the lean periods (on average)

- 1 (1)
- 2 (2)
- 3 (3)
- More than 3 (4)
- Other (5), please specify.....

149) Describe the food security level in your household

- Food secure throughout the year (1)
- Secure for most of the year / seasonal food security (2)
- Food insecure for most of the year (depend on the outside aid) (3)

150) Months of food inadequacy⁷ per year (on average)?.....months

151) Did your household have to undertake any of these strategies in the last 12 months (choose up to 3):

- Storing food from the harvest season (1)
- Reducing the consumption of food/consuming green maize (2)
- Food aid from relatives (3)
- Dependent on food aid from the Government (4)
- Dependent on food aid from NGOs (5)
- Reducing number of meals per day (6)
- Cutting of trees and sale for charcoal (7)
- Working for other people in exchange for food (8)
- Other (9), please specify.....

152) In the past 7 days, what were the sources of food for the household?

- Own produce (1)
- Purchase from market (2)
- Casual labour paid in food (3)
- Wild food (4)
- Gift (5)
- Food for work (6)
- Free food (7)
- Winter/irrigated own food (8)
- Barter of household assets (9)
- Barter of livestock (10)
- Other (11), please specify.....

153) In the past 7 days, what income sources did the household use to provide for the food consumed?

- Sale of own staple food crop (1)
- Sale of own other food crops (2)
- Sale of own cash crops (3)
- Sale of own livestock / fish / milk (4)
- Sale of firewood (5)
- Ganyu (6)
- Income from business work (7)
- Income from paid job (8)
- Remittances (9)
- Sale of household assets (10)
- Other (11), please specify.....

154) Please indicate the types of food eaten over the last 7 days (choose as many as applicable):

Item	Code
Cereals, Grains and Cereal Products (1)	

⁷ i.e. not having enough food to satisfy daily needs

Roots, Tubers and Plantains (2)	
Legumes / Vegetables (3)	
Nuts and Pulses (4)	
Meat, Fish and Animal Products (5)	
Milk and Milk Products (6)	
Fruit (7)	
Fats / Oil (8)	
Sugar / Sugar products (9)	
Spices / Condiments (10)	
Wild foods (11)	
Other (12), please specify	

Section 5-B. Climate change

155) Have you heard about climate change? Yes (1) No (0)

156) Describe features that, in your opinion, indicate climate change

.....

157) Do you think climate change is affecting Malawi?

Yes (1) No (0)

158) If yes, in what way (please explain)?.....

159) Did you notice any change in the regular weather patterns in the last 5 years (choose all that apply)?
Mwaonapo kusintha kwa nyengo kodabwitsa kotani pa zaka zisanu zapitazi kufika panopa?

- More frequent droughts (1)
- Flooding (2)
- Erratic rainfall (3)
- Changes in crop yields (4)
- Changes in disease outbreaks (5)
- Did not notice any change (6)
- Other (7), please specify.....

160) Do you think the events identified in the question above have had an impact on your dairy farm?

Yes (1) No (0)

161) If yes, how (please explain)?

162) Do you think these events (identified in the question 159 above) affected any of the following?

a. Factor	Effect ~ 1 = Increase; 2 = decline ; 3 = no change; 4 = do not know	If yes, how do you cope?	How does the change affect you your household?
b. Feed availability			
i. Grass			
ii. Legumes			
iii. Crop residues			
iv. Concentrate			
c. Cattle diseases			

d.	Milk yield			
e.	Milk quality			
f.	Herd size			
g.	Water availability			
h.	Profit from dairy			

163) As a dairy farmer, are you aware that your activities can contribute to climate change or reduce the impacts of climate change?

- Yes (1) No (0)

164) Are you involved in any community forestry work?

- Yes (1) No (0)

165) How many trees do you have on your farm?

a) Local trees (number).....Please specify names:

- a.
b.
c.

b) Exotic trees (number)..... Please specify names

- a.
b.
c.

166) Are you involved in any agro-forestry work?

- Yes (1) No (0)

167) If yes, what system of agro-forestry (and mention species used)?

Agroforestry system	Species used	Amount of land under this system, ha	Years practicing this system

168) If no, why are you not involved in any agro-forestry activities?

.....
.....

Before the enumerator leaves the farmer, he/she must rank the general condition and cleanliness of the khola with respect to

Condition	Ranks range between 1 and 3: 1=Poor 2=Fair 3=Good
Condition of the animal (degree of thinness, fatness)	
Condition of the pens (size, ventilation, strength of structure, etc)	
Condition of the roof (iron sheets, grass thatched with plastic paper,	

leakage, exposure to direct sunshine, etc)	
Condition of the floor (whether concrete or mad floor or bedding)	
General cleanliness (presence of dung, feed, urine)	

THANK YOU VERY MUCH FOR YOUR TIME AND ANSWERS