

Household Survey to evaluate the impact of M-Farm

Note to the enumerator: The respondent should ideally be the household head AND should be using M-Farm.

Questionnaire no.		Date of interview (dd/mm/yyyy)	
Name of enumerator:		Name of Village:	
(Sub)district or administrative unit:		GPS Location of the household:	
Available mobile phone networks:		Language in which interview was conducted	

INTRODUCING THE SURVEY

- This survey is being undertaken in cooperation with the Anglican Church of Kenya Development Services and the University of Nairobi.
- The aim of the survey is to evaluate M-Farm in order to better understand the benefits and challenges associated with the service.
- The findings will help to improve the services of M-Farm.
- Answering the survey is entirely voluntary. By agreeing to start the questionnaire, the respondent has agreed to participate in the survey.
- The survey will include with many farmers and the information gathered through the questionnaires will be aggregated. Personal information will be confidential.

FIRST QUESTION FOR THE FARMER BEFORE STARTING THE SURVEY

Note to the enumerator: The farmer may be using the service, but may not be aware that it is called M-Farm. Please check in case the farmer says that he/she is not using M-Farm. If that's the case, please make a note and continue with the survey.

1. Do you use M-Farm? O yes O no

If YES, move on to the main survey.

If NO, ask why not and then terminate the interview.

- ☐ I don't know about M-Farm.
- ☐ I know about M-Farm, but I don't know how to use it.
- ☐ I find M-Farm too expensive.
- ☐ I don't find it useful (please explain why): _____
- _____
- _____
- ☐ Other reason(s): _____
- _____
- _____

Part 1: General information about the household

2. Name of respondent: _____ 3. Gender: M / F
4. Is the person being interviewed the household head? ☐ yes ☐ no
- If **NO**, relation to household head: _____
5. Age: _____ 6. Level of education: _____ 7. Years spent farming: _____
8. Ethnicity: _____
9. Describe the house in which this household lives (*this can also be answered by the enumerator*):
- What type of material are the walls? _____
 - What type of material is the roof? _____
 - How many habitable rooms (excluding cooking kitchen or bathroom)? _____
 - What is the main source of lighting fuel? _____
 - Is there access to electricity? ☐ yes (source? _____) ☐ no
 - Is there a fridge? ☐ yes ☐ no
10. Information about the household members:

Note to the enumerator: Household members include the people who share a meal in the evening.

Name	Relation to respondent	Gender	Age	Level of education
a.	Respondent			
b.	Spouse			
c.				
d.				
e.				
f.				
g.				
h.				
i.				
j.				
k.				
l.				

Code for relation to respondent:

1 Father	5 Grandfather	9 Uncle	13 Sister-in-law
2 Mother	6 Grandmother	10 Aunt	14 Brother-in-law
3 Brother	7 Daughter	11 Mother-in-law	15 Other (please specify)
4 Sister	8 Son	12 Father-in-law	16 Grandson
			17 Granddaughter

11. Do you own a functioning mobile phone? ☐ yes (how many? _____) ☐ no
- If **YES**:
- a. What is the make of your phone? _____
- b. How do you pay for the calls? ☐ prepaid ☐ postpaid
- c. What network do you use? ☐ Safaricom ☐ Airtel ☐ Orange ☐ Yu
- d. How do you charge the phone battery? ☐ own electricity ☐ recharge shop ☐ other: _____
- e. How long have you owned a phone? _____ (years)
- f. What of the following functions does your phone have:
- ☐ Colour screen ☐ Camera
- ☐ Internet access ☐ FM Radio
- ☐ Email ☐ Music player
- g. What is your phone number: _____
12. If you **DO NOT OWN** a mobile phone, is there a number that you can be reached on? _____

Part 2: Information about the farm

13. How big is the land you cultivate? _____ (acres)
14. How much of the land you cultivate do you own? _____ (acres) and/or rent? _____ (acres)
15. Does the household own land that you do not cultivate? ☐ yes (_____ acres) ☐ no
16. What crops are being grown on the land? Have you changed your crop distribution since using M-Farm?

Crop	Share of the land (in acres)	KG harvested per year	Change since using M-Farm		
			Increase	Same	decrease
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐

Note to enumerator: Please probe a little for the next question. Try to find out, if the shares have changed because of the price information or the contract with East African Growers (or both).

17. **If the shares have changed since using M-Farm**, is this because you are using M-Farm? ☐ yes ☐ no

If **YES**, why? _____

18. Does the household own livestock? ☐ yes ☐ no
- | | | |
|-------------------------------------|--|-------------------------------------|
| Number | | Number |
| ☐ Chicken _____ | | ☐ Rabbits _____ |
| ☐ Goats _____ | | ☐ Donkeys _____ |
| ☐ Cattle _____ | | ☐ Oxen _____ |
| ☐ Sheep _____ | | ☐ Fish _____ |

Other (please specify type and number): _____

19. What is the main source of water for your fields?

- ☐ Rainfall
 ☐ River, lake or dam
☐ Shared water hole or well
 ☐ Other (specify): _____
☐ Tap in the house or yard

20. Do you irrigate your fields? ☐ yes (how? _____) ☐ no

21. Does the household own or have access to storage facilities for the harvest?

- ☐ use own storage facilities
 ☐ use someone else's
 ☐ don't have access
 ☐ don't need

22. Do you have access to credit facilities? ☐ yes ☐ no

If YES, where? ☐ Bank ☐ private lender ☐ NGO ☐ family ☐ other: _____

23. Do you have insurance for you farm? ☐ yes ☐ no

If YES, from where? ☐ insurance company ☐ NGO ☐ other: _____

If YES, what do you insure? ☐ inputs ☐ harvest ☐ assets (specify): _____

24. Who in your household works on the farm? (**Note to enumerator:** This should include the respondent.)

Name or relation to respondent	Weeks per year	Hours per week

25. Do you hire labour to work on your land? ☐ yes ☐ no

Crop	Number of workers		
	Land preparation	Planting	harvesting

Part 3: Access to agricultural technologies

Note to the enumerator: Explain briefly what we mean by "agricultural technologies" and make sure that the person being interviewed has the same understanding of agricultural technologies before continuing.

26. Do you use any of the following agricultural technologies? (multiple answers possible)

	Y/N	If YES, which?	Where do you usually buy/rent them?	How do you usually pay for them?
Certified seeds				
Fertiliser				
Pesticides				
Herbicides				
Machines for land preparation				
Machines for weeding				
Machines for harvest				
Irrigation				
Code for the fourth column:		5 Extension agent	Code for the payment method:	
1 Another farmer		6 Government office	1 Cash	
2 Agrovets		7 M-Farm Aggregator	2 Mobile phone	
3 Middlemen		8 Other (please specify)	3 In kind (e.g. your harvest)	
4 Market		9 East African Growers	4 Other (please specify)	

27. Do you practice crop rotation? O yes O no
28. Do you use conservation methods? O yes O no
29. Are there any other agricultural technologies that you would like to use? O yes O no

If **YES**, which? _____

Note to the enumerator: When asking the next question, you do not need to ask about technologies that the farmer said he/she is not using (e.g. you do not need to ask question about fertiliser if the farmer already said that he/she is not using fertilisers). **Multiple answers possible.**

30. How do you decide:

	Type of information	Source of information
a. Which crops to grow?		
b. Which methods to use to grow crops?		
c. How much to grow?		
d. Which and how much fertilisers, pesticides or herbicides to use?		
e. What farming machines to buy?		
f. Who to sell your produce to?		
Code for type of information:		
1 Trial and error	5 Price of the seeds/inputs/machines	9 Training
2 Suitability of the land	6 Expected price for produce	10 Asking for information
3 Availability of water	7 Demand for the produce	11 Do the same as last year
4 Expected weather	8 Information on the packaging	12 Other (please specify)
Code for source of information:		11 Radio
1 Family members	6 Middlemen	12 TV
2 Farmer Coop	7 Extension agent	13 M-Farm
3 Other farmers	8 Government offices	14 Other (please specify)
4 Village information centre	9 ADS	15 No information
5 Agrovets	10 Newspaper	16 East African Growers

31. What are your main sources for the following information?

	Source of information
Weather	
Crop disease outbreaks	
Quality of the soil	
Code for source of information:	
1 Family members	6 Middlemen 11 Radio
2 Farmer Coop	7 Extension agent 12 TV
3 Other farmers	8 Government offices 13 Other (please specify)
4 Village information centre	9 ADS 14 No information
5 Agrovets	10 Newspaper 15 East African Growers

32. Which of the following reasons prevent you from using agricultural technologies? Are there any other reasons?

This statement is	true	not true	don't know
I don't know about technologies.	☐	☐	☐
I don't have access to technologies in my area.	☐	☐	☐
I don't have the money to buy the technology and needed inputs.	☐	☐	☐
I cannot obtain credit to pay for the technologies.	☐	☐	☐
I don't know whether the technologies are suitable for my farm.	☐	☐	☐
I don't know whether the technology is better than the old one.	☐	☐	☐
I don't want to take the risk that the technologies don't perform well.	☐	☐	☐
I don't know how to use technologies.	☐	☐	☐
I'm not able to contact an extension agent for advice.	☐	☐	☐
The risk of losing the harvest due to bad weather is too high.	☐	☐	☐
The risk of losing the harvest due to crop diseases or pests is too high.	☐	☐	☐
The soil on my land is not good enough.	☐	☐	☐
I don't have enough labour.	☐	☐	☐
I don't have reliable water supply.	☐	☐	☐
I cannot transport the harvest to the market.	☐	☐	☐
I don't know whether someone will want to buy the harvest.	☐	☐	☐
I don't know what price I will get for the harvest.	☐	☐	☐
I cannot obtain insurance to insure the technology.	☐	☐	☐
I'm not part of a group that would help me sell the harvest.	☐	☐	☐
Other reasons (please specify):			
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐

Part 4: Access to markets

Note to enumerator: You only need to ask about the 2-3 main crops (covering at least ¾ of the land).

33. To whom do you sell your produce? *(multiple answers possible)*

Crop		Buyer		Point of collection		Payment method	
Code for buyer: 1 Local consumer 4 Hotel 2 Middlemen 5 School 3 Supermarket 6 Other (please specify) 7 East African Growers				Code for point of collection: 1 Farm gate 2 At the market 3 Delivery to supermarket / hotel / school 4 Group collection centre 5 Other (please specify)		Code for payment method: 1 Cash 2 Bank account 3 Mobile phone 4 In kind 5 Repaid loans 6 Other (please specify)	

34. If you sell your crops **AT THE MARKET**, at which market(s) do you most frequently sell your crops?

Crop	Market	Distance (km)	Mode of transport

Code for mode of transport

1 Carrying	3 Borrowed vehicle (which?)	5 Other (please specify)
2 Own vehicle (which?)	4 Pay someone to transport crops	

35. Which is the nearest market where you could sell your crops?

a. How far is it? (in km) (in travel time)

b. What is the condition of the road? ☐ All-weather road ☐ Not accessible during rains ☐ No road

36. Do you also sell to other countries? ☐ yes ☐ no

If **YES**, which country/ies?

37. Are there any other markets where you would like to sell you produce?

O yes (where? _____) O no

38. Since you started using M-Farm, have you changed how you sell your crops **because of M-Farm**? If YES, please specify. (**Note to enumerator:** Also probe whether the change is due to the price information and/or the selling arrangement with East African Growers)

- ☐ Kinds of crops? _____
- ☐ Quantities of crops? _____
- ☐ Buyers? _____
- ☐ Point of collection? _____
- ☐ No change.

39. How much income does the household earn from selling the crops? (in KHS per year)

Note to enumerator: If the respondent is reluctant to specify his/her income, you can also ask them to indicate a range, rather than the exact amount. This also applies to the next question.

40. Do you have other sources of **off-farm** income?

Source of income	How much? (in KHS per year)

Part 5: Use and impact of M-Farm

41. How did you hear about M-Farm? _____

42. Why did you decide to participate in M-Farm? _____

43. Do you used the following M-Farm services:

a. Obtain price information ☐ yes ☐ no

b. Sell your crops ☐ yes ☐ no

If you **DO NOT USE** one of the services, why not? _____

44. Have you participated in any training courses through M-Farm?

☐ yes (which? _____) ☐ no

45. Have you participated in any other **agricultural** training activities in the past two years? ☐ yes ☐ no

Content of training	Organiser	Did you pay (Y/N)?
Code for organiser: 2 Government ministry 4 Private company 6 Other (specify) 1 Other farmer 3 NG= 5 Training institute 7 East African Growers		

46. Would you like to participate in other agricultural training activities? ☐ yes ☐ no

If **YES**, which? _____

QUESTIONS TO ASK IF THE FARMERS USES M-FARM TO ASK ABOUT PRICES

47. How long have you been using M-Farm to enquire about prices? _____ (in months)

48. Do you find this service ☐ easy to use ☐ difficult to use ☐ don't know

If you find the service **DIFFICULT TO USE**, why? _____

49. Do you find the price of using M-Farm ☐ too expensive ☐ ok ☐ too cheap

If too expensive or too cheap, how much would you be willing to pay per SMS? _____ KSH

50. Who in your household sends SMS to M-Farm? (**Note to the enumerator:** Gender and age only need to be filled in if you did not get the names of the family members at the beginning. If you did, only list name.)

- ☐ I do.
- ☐ Any other householder members?

Name or Relation to respondent	Gender	Age

51. M-Farm uses **SMS** to access **price information**. **IN COMPARISON**, how would you rate the following ways of communication to receive information from M-Farm:

	Worse	As good as	Better	Don't know
Regular SMS updates (rather than on demand)	☐	☐	☐	☐
An M-Farm helpline	☐	☐	☐	☐
Recorded voice messages from M-Farm	☐	☐	☐	☐
Face-to-face interaction with M-Farm staff	☐	☐	☐	☐

52. For which crops and markets do you enquire about prices?

Crop	Market(s)	When during the farming cycle?	How often?
Code for when during the farming cycle: 1 During planting 2 When the produce is ready for harvest 3 When the produce is ready for sale 4 Other (please specify)			

53. If you use M-Farm only rarely, why? _____

54. Do you share the price information with others? ☐ yes ☐ no
 If **YES**, with whom? ☐ family ☐ farmer group ☐ other farmers ☐ other: _____

55. Compared to the price information from M-Farm, at what price do you usually sell your produce?
☐ At a lower price ☐ At (almost) the same price ☐ At a higher price ☐ Always different

If NOT at the same price, how big is the difference on average? _____ (in KSH)

56. Before using M-Farm, where did you obtain your price information? Where else do you obtain price information today? How does the M-Farm price information compare to other sources?

	Before using M-Farm	Now	Price information from M-Farm is		
			Better	As good as	Worse
Middlemen	☐	☐	☐	☐	☐
Produce buyers in the market	☐	☐	☐	☐	☐
Information boards in the village	☐	☐	☐	☐	☐
Information boards in the market	☐	☐	☐	☐	☐
Information boards in government offices	☐	☐	☐	☐	☐
Extension service agents	☐	☐	☐	☐	☐
Radio	☐	☐	☐	☐	☐
TV	☐	☐	☐	☐	☐
Newspaper	☐	☐	☐	☐	☐
Other (please specify)					
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐

57. Does the price information provided through M-Farm helped you to

	Yes	No	Don't know
Negotiate a better price?	☐	☐	☐
Find the trader with the best offer?	☐	☐	☐
Decide which crops to grow?	☐	☐	☐
Decide how much to grow?	☐	☐	☐

58. Has the price information received through M-Farm increased your income? ☐ yes ☐ no

If **YES**, by how much? _____ (in KHS per harvest compared to harvests before using M-Farm)

59. Did the price information bring any other benefits? _____

60. Would you also like to receive price information from other markets?

☐ yes (which? _____) ☐ no

61. Is there any **additional information** that you would like to receive **through M-Farm**?

QUESTIONS TO ASK IF THE FARMERS USES M-FARM TO SELL PASSIONFRUIT THROUGH M-FARM

62. Have you signed a contract to sell your passion fruits to East African Growers? ☐ yes ☐ no

If **YES**:

- When? _____ (month and year)
- With whom? ☐ ADS ☐ EAG ☐ M-Farm ☐ other (specify): _____
- What is the agreed price? KSH _____ per _____ (please indicate unit)

Note to enumerators: If possible, note the amount in kg for the next two questions, but if they give you a different unit, use that and we calculate it later.

63. Since starting to sell passion fruits through M-Farm, how much have you sold to EAG? _____

64. During that time, how much passion fruit have you sold to other buyers? _____

65. How do you usually get paid for the passion fruits that you sell to EAG?

☐ cash ☐ M-Pesa ☐ bank account ☐ other (please specify) _____

66. **IF YOU ALSO RECEIVE PRICE INFORMATION THROUGH M-FARM:**

Compared to the price information from M-Farm, at what price do you usually sell your passion fruits to EAG?

☐ At a lower price. ☐ At (almost) the same price. ☐ At a higher price.

If you **sell at a lower or higher price**, how big is the difference on average? _____ (in KSH)

67. Does selling your passion fruits to EAG through M-Farm help you to

	Yes	No	Don't know
Obtain a better price for your passion fruits?	☐	☐	☐
Sell more passion fruits?	☐	☐	☐
Sell your passion fruits faster and thereby reduce spoilage?	☐	☐	☐
Sell together with farmers you already knew?	☐	☐	☐
Establish new contacts with other farmers?	☐	☐	☐

68. Has selling passion fruits to EAG through M-Farm increased your income? ☐ yes ☐ no

If **YES**, by how much? _____ (in KSH per harvest compared to harvests before using M-Farm)

69. Did selling through M-farm bring any other benefits? _____

Part 6: Information about mobile phone access and use

70. If you **OWN** a mobile phone, do you allow others to use it? ☐ yes ☐ no

If YES, who?	How often? (per week)	Do you charge for use?		
		never	sometimes	always
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
Code:				
1 Household member (specify relation)	4 Others in the village			
2 Other family members	5 Other (please specify)			
3 Friends				

71. Do other household members own mobile phones? O yes O no

Name or Relation to respondent	Gender	Age	Level of education

72. Does someone else in your household need a mobile phone? O yes O no

If YES, for what? _____

73. Do you use someone else's mobile phone? O yes O no

If YES, whose mobile phone?	How often? (per week)	Do you pay for use?		
		never	sometimes	always
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
Code: 1 Household member (specify relation) 4 Others in the village 2 Other family members 5 Pay phone 3 Friends 6 Other (please specify)				

74. How much do you spend on using a mobile phone per week? _____ (in KHS)

75. How often do you use the mobile phone to:

	never	sometimes	often	If NEVER, why not?
Send SMS	☐	☐	☐	
Receive SMS	☐	☐	☐	
Flashing	☐	☐	☐	
Make calls	☐	☐	☐	
Receive calls	☐	☐	☐	
Send money	☐	☐	☐	
Receive money	☐	☐	☐	
Access the internet	☐	☐	☐	
Other (please specify)				
	☐	☐	☐	
	☐	☐	☐	

76. Which of the following **information & communication technologies** do you own OR use:

	own	use someone else's	don't use
Landline	☐	☐	☐
Computer	☐	☐	☐
Internet	☐	☐	☐
Radio	☐	☐	☐
TV	☐	☐	☐

Thank you for participating in this survey!