

Supplementary information – Farmer KAP Survey

SCREENING QUESTION

SURVEY RESPONDENT MUST BE THE **MAIN DECISION MAKER** REGARDING FERTILISER APPLICATION RATES FOR THE FARM OR GREENHOUSE

(Check that this is the case before proceeding with selection of respondent and interview).

SURVEY ADMINISTRATION DETAILS

Interviewer's name

Write in: _____

Name of community where interview taking place

Write in: _____

Date of interview

Write in: _____ / _____ / _____

A). RESPONDENT PROFILE

Respondent's name

Write in: _____

Respondent's age

Write in: _____

Respondent's gender (tick correct option):

Male

Female

Respondent's Village

Write in: _____

Main occupation of the respondent

Farmer

Other (write in): _____

Is the respondent the head of the household?

Yes

No

Does anyone else in the family other than the respondent make decisions regarding how their land is managed?

Yes

No

If Yes, who?

Write in: _____

Number of family members involved in working the land unit (including respondent):

1

2

3

4

5

6

More than 6

Who are the other family members working the land unit? (tick all options that apply):

Spouse

Son

Daughter

Grandson

Grand daughter

Other family members (specify): _____

What level of education establishment has the respondent attended?

Primary (up to x years)

Secondary (up to x years)

Post Secondary School Further Education (i.e vocational training)

Post secondary School Higher Education (i.e University Degree)

Other (specify): _____

Hukou registration of the respondent?

Rural

Urban

None

What types of crops are grown on the respondent's land unit? (Write list):

How much land does the respondent have control over?

Write land area in mu: _____

B). INFLUENCES ON THE AMOUNT OF FERTILISERS APPLIED

Q1. ASK ALL RESPONDENTS

I'm going to read out a list of comments about fertiliser application rates. For each comment, please could you say whether you agree or disagree. Please use a scale of 1 to 5 where 5 means you completely agree and 1 means you completely disagree

INTERVIEWER: READ OUT ALL STATEMENTS AND MARK EACH FOR SCALE OF 1 TO 5.

(a) 'The amount of fertiliser I put on my crops is the amount my father always used to put on his crops'

(b) 'I put on the same amount of fertiliser as all the other farmers near me, we all use about the same amount'

(c) 'The amount of fertiliser I put on my crops is the amount recommended to farmers here by local agricultural technicians and advisors'

(d) 'The amount of fertiliser I put on my crops is the amount recommended by fertiliser companies to farmers here'

(e) 'The amount of fertiliser I put on my crops is the amount indicated by the instructions on the fertiliser bags'

(f) 'I base my fertiliser applications on the levels provided by technical advice but I also add an extra amount of fertiliser just to make sure I am applying enough'

(g) 'Because fertiliser is cheap, I feel I can be generous with the amount I apply to my crops'

(h) 'I don't apply fertiliser as many times as is recommended, therefore when I do apply it I add an extra amount'

(i) 'I don't apply fertiliser as many times as is recommended because it takes too much time/labour'

Q2. IF RESPONDENT AGREES WITH STATEMENT (f) AT Q1 [i.e. score of 4 or 5] ASK THE FOLLOWING:

Why do you have concerns that the recommended amount of fertiliser for your crops is not enough?

C). SOIL TESTS UNDERTAKEN

Q3. ASK ALL RESPONDENTS

Do you ever have tests carried out on your land to see how much nutrient (N,P,K) is already in the soil?

Yes

No

Q4. IF YES AT Q3 (if not at Q3 go to Q7)

Approximately how often are these tests undertaken?

INTERVIEWER: READ OUT AND TICK ONE OPTION ONLY

More frequently than every year

Every Year

Every 3 Years

Every 5 Years

Less often than every 5 Years

Q5. IF YES AT Q3

Who is involved in carrying out these tests?

INTERVIEWER: READ OUT AND TICK ALL OPTIONS THAT APPLY

Yourself

Farming co-operative

Agricultural Technician (Village Level)

Agricultural Technician (Town Level)

Agricultural Technician (Regional Level)

Fertiliser company

University Staff

Other (specify) _____

Q6. IF YES AT Q3

Do you adapt your fertiliser application rates on the basis of these tests to avoid applying too little or too much fertiliser?

INTERVIEWER: READ OUT AND TICK ONE OPTION ONLY

Yes – always

Yes - sometimes

No

Q7. ASK ALL RESPONDENTS

I'm going to read out a list of comments about soil testing. For each comment, please could you say whether you agree or disagree. Please use a scale of 1 to 5 where 5 means you completely agree and 1 means you completely disagree

INTERVIEWER: READ OUT ALL STATEMENTS AND MARK EACH FOR SCALE OF 1 TO 5.

(a) 'I understand the benefits of soil testing for managing use of fertiliser for my crops'

(b) 'I like the idea of having the soil tested regularly on my land'

(c) 'I know who to go to to get information about soil testing'

Q8. IF RESPONDENT AGREES WITH STATEMENT (b) AT Q7 (Score 4, 5),
ASK:

Who would you trust most to carry out soil tests on your farm?

INTERVIEWER: READ OUT AND TICK ONE OPTION ONLY

Farming co-operative

Agricultural Technician (Village Level)

Agricultural Technician (Town Level)

Agricultural Technician (Regional Level)

Fertiliser company

University Staff

Other (specify) _____

D). FERTILISER TRAINING (INFORMATION) RECEIVED

Q9. ASK ALL RESPONDENTS

Have yourself or anyone in your family attended a face-to-face training session on fertiliser application in the last 3 years?

Yes – Respondent

Yes – Other family member

No

(if answer to Q9 is no, go to Q13; if yes ask Q10-12)

Q10. If other family member at Q9, who attended this face-to-face training?

- Spouse
- Son
- Daughter
- Grandson
- Grand daughter
- Other family members (specify): _____

Q11. Approximately how many hours have you (or other family member) spent attending fertiliser application training in the last 3 years? (tick cell that applies):

| | < 5hrs | 5-10hrs | 11-20hrs | 21-30hrs | 31-40 hrs | Over 40 hrs |
|--|--------|---------|----------|----------|-----------|-------------|
| Respondent | | | | | | |
| Spouse | | | | | | |
| Son | | | | | | |
| Daughter | | | | | | |
| Grandson | | | | | | |
| Grand daughter | | | | | | |
| Other family member 1 (specify _____) | | | | | | |
| Other family member 2 (specify _____) | | | | | | |

Q12. Who provided the face-to-face training you (or other family member) received?

INTERVIEWER: READ OUT AND TICK ALL OPTIONS THAT APPLY

- Farming co-operative
- Agricultural Technician (Village Level)
- Agricultural Technician (Town Level)
- Agricultural Technician (Province Level)
- Fertiliser company
- University Staff
- Other (specify) _____

Q13. ASK ALL RESPONDENTS

Do you get any information about fertiliser application rates from any of the following?

INTERVIEWER: READ OUT AND TICK ALL OPTIONS THAT APPLY

- Leaflets
- Books
- Television
- Neighbours
- None of the above

E). INTERACTION WITH AGRICULTURAL EXTENSION

Q14. ASK ALL RESPONDENTS

How often have you received verbal advice on fertiliser use from each of the following in the last 3 years?

INTERVIEWER: READ OUT AND TICK ONE CELL FOR EACH ROW

| | Once | Twice | Three times | Four times | Five times | More than five times | Never |
|--|------|-------|-------------|------------|------------|----------------------|-------|
| Agricultural Technician (Village Level) | | | | | | | |
| Agricultural Technician (Town Level) | | | | | | | |
| Agricultural Technician (Regional Level) | | | | | | | |
| Fertiliser company | | | | | | | |
| University staff | | | | | | | |
| Marketing Association | | | | | | | |
| Other (specify) | | | | | | | |

Q15. ASK ALL RESPONDENTS (EXCEPT THOSE RECEIVING NO ADVICE AT Q14)

I'm going to read out a comment other people have made about using advice on fertiliser applications. Please could you say whether you agree or disagree. Please use a scale of 1 to 5 where 5 means you completely agree and 1 means you completely disagree

INTERVIEWER: READ OUT ALL STATEMENTS AND MARK EACH FOR SCALE OF 1 TO 5.

- (a) 'I have found the advice to be good and I continue to follow it'
- (b) 'I followed the advice for one season only and then went back to my original practice'
- (c) 'The advice I received was given in a way I could not easily understand'
- (d) 'I understood the advice but did not follow it because I did not think it was right for my land'

Q16. ASK ALL RESPONDENTS

If you have a problem with a crop which you suspect might be a nutrient related problem who would you prefer to go to for advice?

INTERVIEWER: READ OUT AND TICK ONE OPTION ONLY

- A neighbour
- A relative
- Farming co-operative
- Agricultural Technician (Village Level)
- Agricultural Technician (Town Level)
- Agricultural Technician (Province Level)
- Fertiliser company
- University Staff
- Other (specify) _____

F). AWARENESS OF ENVIRONMENTAL IMPACT

Q17. ASK ALL RESPONDENTS

Have you noticed any changes in your local rivers, streams or lakes over your lifetime regarding the colour of the water or the number of fish or other animals that live in or near the water?

- Yes
- No

Q18. IF YES AT Q17

What changes have you noticed?

1. _____
2. _____
3. _____
4. _____
5. _____

Q19. FOR EACH CHANGE NOTED AT Q18

Which of the following do you think might have caused these changes?

INTERVIEWER: READ OUT AND TICK ALL OPTIONS THAT APPLY

| | Changes recorded in at Q18 | | | | |
|---|----------------------------|----|----|----|----|
| | 1. | 2. | 3. | 4. | 5. |
| Domestic sewage | | | | | |
| Other activities of householders | | | | | |
| Activities of farmers | | | | | |
| Activities of industries other than farming | | | | | |
| Other causes (specify) | | | | | |

Q20. IF 'ACTIVITIES OF FARMERS' MENTIONED AT Q19

Which farming activities do you think have caused these changes?

G). FARM LABOUR AVAILABILITY

Q21. ASK ALL RESPONDENTS

How many hours **on average** each week **during the most labour-intensive farming activities, such as planting, weeding, harvesting, etc** does each person in your household spend working on your land unit?

INTERVIEWER: REFER BACK TO LIST GENERATED AT PROFILE SECTION

INTERVIEWER: READ OUT AND TICK CELLS THAT APPLY FOR EACH FAMILY MEMBER

| | < 5hrs | 5-10hrs | 11-20hrs | .21-30hrs. | 31-40 hrs | Over 40 hrs | None |
|---------------------------------|--------|---------|----------|------------|-----------|-------------|------|
| Respondent | | | | | | | |
| Spouse | | | | | | | |
| Son | | | | | | | |
| Daughter | | | | | | | |
| Grandson | | | | | | | |
| Grand daughter | | | | | | | |
| Other family member 1 (specify) | | | | | | | |
| Other 2 (specify) | | | | | | | |

Q22. FOR EACH FAMILY MEMBER MENTIONED AT Q21

Does this family member also work in another job in your village or in a town or city?

| | Yes | No |
|---------------------------------|-----|----|
| Spouse | | |
| Son | | |
| Daughter | | |
| Grandson | | |
| Grand daughter | | |
| Other family member 1 (specify) | | |
| Other family member 2 (specify) | | |

Q23. Does your family provide enough labour to management your farm?

Yes

No

H). FUTURE SCENARIOS

Q24. ASK ALL RESPONDENTS

Which of the following best describes how you use your land?

INTERVIEWER: READ OUT AND TICK ONE OPTION ONLY

To grow crops for consumption by your family

To grow crops for consumption by your family but also to sell

To grow crops for sale only

Other (specify) _____

Q25. ASK ALL RESPONDENTS

Would you like to stop farming your land yourself if you had a choice?

Yes

No

Q26. ASK IF NO AT Q25 (if yes at Q25 go to Q27)

Why do you say this?

Q27. ASK IF YES AT Q25

Which one of the following options would be best for you?

INTERVIEWER: READ OUT AND TICK ONE OPTION ONLY

- (a) To rent out the land to a farming company or larger farmer but still work on the land as a farm worker
- (b) To rent out the land to a farming company or larger farmer and go to work in another job in the town or the city
- (c) To rent out the land to a farming company or large farmer and retire

THANK YOU AND CLOSE