

8 Appendix

QUESTIONNAIRE

Dear respondent,

I wish to express my gratitude to you in advance for participating in this survey. This questionnaire was designed purposely to assist in undertaking the research, “The effect of training on the reduction of Sigatoka disease on the economics of banana /plantain production in Cameroon”. The survey will take a few minutes and as a respondent, please provide answers to the questions to assist in accomplishing the research. I will be most grateful to you for your sincere and candid responses. Anonymity is guaranteed and all responses will be treated confidentially and for this purpose only.

Thank you for your time.

SECTION A: BACKGROUND DATA

Please tick [√] the appropriate responses

1. Gender Female Male

2. What is your age?

3. What is the highest level of education you have attained?

No formal education

Primary school

Secondary School

Vocational/Technical

High School

Tertiary (University)

4. What is your religion?

Christian

Muslim

Traditionalist Others (*Please state*):.....

5. Marital Status

Single

Married

Co-Habitation

Divorced/Separated

Widowed/Widower

6. What is your major occupation?

Farming

Trading

Salary job

Other please specify

7. What is your present location / community?

Limbe Buea

8. How long have you been in banana/ plantain production?

SECTION B: LAND AND PRODUCTION CHARACTERISTICS FOR BANANA / PLANTAIN PRODUCTION

9. What is your tenancy agreement on this farmland for banana/plantain cultivation?

Own Lease Family Land Other, specify.....

What is your farm size?

10. Is Banana/plantain cultivation the main source of income for the family?

Yes No

11. What was the size of your land (hectares) for Banana/plantain cultivation?

.....

12. Has your output increased for Banana/plantain in the last couple of years?

Increase

The same

Decrease

Not sure

13. Does your farm land retain water after rain?

1. Yes 2. No

14. a) Have ever heard about sigatoka disease.

1. Yes 2. No

b) If yes, could you specify some physical signs of the disease.....

SECTION C: MARKETABILITY IN BANANA/PLANTAIN PRODUCTION

15. What is the main remittance received as a Banana/plantain cultivator?

Money

Clothes

Food Items

Others, specify.....

16. How many bunches did you get from your last harvest?

17. On a scale of 1-5, please indicate your agreement or disagreement with the following statement as they relate to the impact of sigatoka disease on the marketability of Banana/plantain

RESPONSES

1 = Strongly Disagree 2= Disagree 3 = Neutral
4 = Agree 5 = Strongly Agree

| Statement | Responses | | | | |
|--|-----------|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| I know when my banana is infected with sigatoka disease | | | | | |
| I understand the stage at which the disease is critical on the plant where treatment needs to administer | | | | | |
| I am fully aware of the economic impact of the disease on the banana | | | | | |

SECTION D: CULTURAL PRACTICES, PEST, AND DISEASE CONTROL METHODS

18. a) How do you preserve soil fertility in Banana/plantain plantation?

Fertilization (Chemicals, animal manure, green manure etc)

Crop rotation (Cultivation of a series of dissimilar types of crops in the same area in sequential seasons)

Inter-cropping (Cultivation of two or more dissimilar types of crops in the same area in the same season)

Tillage

Other (specify):

19. Which type of input do you apply to your farm?

a) Organic fertilizer

10kg 20kg 30kg

b) Chemical fertilizer

10kg 20kg

1) In case fertilizers are applied, which kinds do you use?

Chemical fertilizers

Organic fertilizers (non-chemicals like animal manure, green manure, compost, etc.)

In case organic fertilizers are used, can you specify the type?

Livestock manure

Poultry manure

Green manure (Type of crops cultivated primarily to enrich the soil with nutrients and organic matter through ploughing it into the soil when flowering begins)

Other (specify):

2) In case that crop rotation, and/or intercropping and/or green manure are practiced, do

You integrate legumes?

Yes

No

20. a) How do you control pests and diseases in Banana/Plantain?

Biological & organic control methods (non-chemical control methods)

No control methods

Chemical pesticides (treatment), specify what do you use?

.....

Other methods (specify).....

b) In case of non-chemical methods for plant protection are used. Can you specify that?

Mechanical ways

Physical and pheromone traps

Biological enemies of pests

Other (specify):

21. How do you control weeds in Banana farm?

By burning plant residues after harvesting.

By grazing through animals.

By mechanical weeding (tillage, mowing and/or manual).

By crop rotation and/or intercropping

By chemical herbicides, specify what do you use?

22. How many times did you weed the farm during a production cycle?

23. What type of planting to you practice

a) Line/row planting.

- b) Broadcasting
- c) Pit Method

24. What is the planting space in your farm?... (note, where farmer by broad casting, he/she should approximate)

25. Did you buy approved sucker variety or local variety?

- 1) Approved variety
- 2) Local/own suckers
- 3) Both

Other (specify.....)

26. How many times did you prune your farm last season?.....

27. what local knowledge do you employ to control Sigatoka disease.

SECTION E: IMPACT OF SIGATOKA DISEASE ON LABOUR COST

28. How many people work on the Banana/Plantain farm?

29. On average, how much is a labourer paid while working on the farm for the last 2 years?

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30. a) Has the number of workers affected your production volume?

Yes No

b) If yes, how has it affected?

Didn't change Small Increase Small Decrease Large decrease

31. Do you believe there will be scarcity of hired labour in agriculture in the next 5 years?

Yes, there will be scarcity No, there won't
 Not sur

SECTION F: IMPACT OF THE SIGATOKA DISEASE ON THE PRODUCTIVITY

On a scale of 1-5, please indicate your agreement or disagreement with the following statement as they relate to the impact of Sigatoka disease on banana productivity

RESPONSES

1 = Strongly Disagree

2= Disagree

3 = Neutral

4 = Agree

5 = Strongly Agree

| S/N | Statement | Responses | | | | |
|-----|---|-----------|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| 32 | Sigatoka disease affects banana production once the disease enters a farm | | | | | |
| 33 | Even after treatment, Sigatoka disease always will hinder productivity. | | | | | |
| 34 | Do you think sigatoka disease has an impact on marketability of banana production? | | | | | |
| 35 | To improve the prevention and control of Sigatoka disease with the aim of boosting production, farmers should be given adequate training. | | | | | |
| 36 | The yield banana affected by sigatoka disease has reduce the price of the banana in the market. | | | | | |

37. Do you know sigatoka disease could result in reduced Banana yield?

Yes No

38. a) If yes, to what extent does it reduce the yield?

No effect Small effect Large effect Very large effect

b) If yes, to what extent does it reduce the price?

No effect Small effect Large effect Very large effect

39. How many times did you experience extension service in the last production season?..(note, include extension service via electronic means like phone calls)

40. Share with us what you think can be done to improve banana production and livelihood of smallholder farmers in controlling the black sigatoka disease

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