Plantain Value Chain

VILLAGE/COMMUNITY LEVEL PRODUCERS

Background & Geographical Information
1. Name of supervisor?
2. What is the name of enumerator/data collector?
3. Date of data collection?

<table>
<thead>
<tr>
<th>GPS readings</th>
<th>Waypoint ID</th>
<th>Latitude</th>
<th>Longitude</th>
<th>Altitude</th>
</tr>
</thead>
</table>

1. Name of the Country: put countries in alphabetical order
2. Region/State/Province
3. District/Local Government Area
4. Village/community (HQ)
5. Approximate number of households ______________________% Female-headed households: _____
6. Estimated population: Men ______ Women ______
7. Approximate number of plantain producers: Women____ Men: _____
8. Approximate number of plantain producers: Women_____ Men: _____
9. Number of poor families in the village________________ (as defined by food/plantain insecurity)
10. Percentage of poor families in the village ______________%

Discussion attendance
How many are males? Group Leader/Representative
How many are females? Full name
Age of the youngest Gender
Age of the oldest Age
2nd Occupation
Tel. No

Plantain Production
1. What are the dominant crops produced in your village? (Rank 1st = most important and fill using the codes mentioned below)

<table>
<thead>
<tr>
<th>Crop* ranked by Overall importance</th>
<th>Rank by land area</th>
<th>Rank by sales</th>
<th>Rank by quantity consumed</th>
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</thead>
<tbody>
<tr>
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*1=Plantain; 2=Cassava; 3=Cocoyam; 4=Yam; 5=Maize; 6=Rice; 7=Sorghum; 8=Millet; 9=Vegetables; 10=Cocoa; seeds; 11=Oil palm; 12=Rubber; 13=Citrus.

2. What is the economic importance of plantain in your area?
4. Production system (crop) mainly used? Sole plantain _______ intercropping _______ (with which crop*); both (sole + intercropping) _______
5. Yearly production capacity, per typical plantain producer _______ (# plants) using an area of ____(Acre)
6. Type of common plantain farm? 1=home consumption only, 2=semi-commercial (both for home consumption and sale), 3=Commercial farm, 5=Other (specify)

7. Who is predominantly involved in plantain growth and production activities (Tick only once per column)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Land preparation</th>
<th>Sucker collection</th>
<th>Planting</th>
<th>Agronomic management</th>
<th>Harvesting</th>
<th>Marketing</th>
<th>Comments</th>
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</thead>
<tbody>
<tr>
<td>Men</td>
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<td>Men and women</td>
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<td>Youth (&lt;30years)</td>
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</tbody>
</table>

8. What are major production constraints for plantain in this area? (Ranking per priority)

9. Production calendar of current plantain production

<table>
<thead>
<tr>
<th>Main activities for growing banana</th>
<th>Month</th>
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</thead>
<tbody>
<tr>
<td>Land preparation</td>
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<tr>
<td>Sucker collection</td>
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<td>Planting</td>
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<tr>
<td>Agronomic management: de-suckering</td>
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<td>Agronomic management: de-trashing</td>
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<tr>
<td>Agronomic management: corm removal</td>
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<tr>
<td>Agronomic management: mulching</td>
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<td>Agronomic management: weeding</td>
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<td>Agronomic management: fertiliser</td>
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<td>Agronomic management: manure</td>
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<td>Harvesting</td>
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<td>Other (specify)</td>
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<td>Other (specify)</td>
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</table>

10. Which type of planting materials do you use? (Suckers, corms, etc.)

11. Where is your source of planting materials for the typical plantain farmer? 1=Own plantation, 2=Other farmer; 3=local market; 4=Other market; 5=NGO; 6=International Research center, 7=NARS, 8=Community-based seed producer/Farmer group/CBO/Local seed Business; 9=seed company; 10=farmer cooperative; 11=other (specify)

12. What is the main reason for your choice of source of your planting materials? 1=Available source, 2=Free source; 3=Cheaper source; 4=Trusted source; 5=Near village or homestead; 7=Others, specify

13. How often does a typical plantain farmer replace the plantain planting material on their farm?

14. Is it possible to purchase planting material for plantain in this community? 1=Yes, 2=No; If yes, what was price of planting material in 2022 season (GHC)?

15. Is it possible to sell planting material for plantain in this community? 1=Yes, 2=No; If yes, what was the price of planting material for the 2022 season (GHC)?

16. How do you differentiate plantain varieties/types from one another? 1=Fruit colour, 2=Fruit taste, 3=Fruit shape, 4=Plant height, 5=Other (specify)

Plantain diversity and management

1. How many types/varieties of plantain do you have in your fields in this village?
### Plantain use and marketing

1. **At which price do you sell plantain this season – 2023 (GHC):** per bunch ______ per kg ______ per finger ________

2. **You sell plantain every ___#___ weeks, ___#___ Months, or (specify) ____________

3. **How do you know the right time to harvest?**

4. **Usual harvesting stage:** 1=Green mature, 2=Medium, 3=Planted

5. **How many times do you harvest per year (from one mat/hill)?** 1=once, 2=twice, 3=three, 4=four times, 5=Other (specify)

6. **Average weight per bunch (kg)________ Average number of fingers per hand ________

7. **What are the uses of the plantain produced in the average household in this community?**
   - 1=Sale, 2=Home consumption (food), 3=Home consumption (non-food: rope, etc.), 4=Both sale and home consumption (food), 5=Both sale and home consumption (food and non-food)

8. **If you divide the entire plantain harvested by a typical farmer into 10 parts,**
   - how many parts do you consume as food (compared to non-food)? _______ Parts out of 10

9. **For the plantain used to make non-food items (rope, etc.), which type of items do you make (name and key ingredients from plantain tree)?

10. **Please list the user characteristics/traits you prefer for the plantain tree used for non-food items; please rank these traits, selecting up to your top five characteristics/traits; why are these characteristics/traits preferred?**

11. **Please list the producer characteristics/traits you prefer for the plantain used for non-food items; please rank these traits, selecting up to your top five characteristics/traits; why are these characteristics/traits preferred?**

12. **What are missing traits/characteristics you have identified for the plantain tree used for non-food items?**

### Table: Plantain varieties/types

<table>
<thead>
<tr>
<th>No</th>
<th>Common variety (specify if local or improved)</th>
<th>No of years in use</th>
<th>Reasons for keeping use of a given variety*</th>
<th>Height</th>
<th>Yield (bags per acre [football field])</th>
<th>Quality</th>
<th>Disease tolerance</th>
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*Possible reasons: 1=High yield, high adaptability to local climatic/soil conditions; 2=High disease and pest resistance; 3=Maturity period; 4=Farmers familiarity; 5=High selling price and/or stable market; 6=Easy to afford planting material/reuse saved planting material; 7=Better for boiling; 8=Better for frying; 9=Others, specify

4. According to the group, which plantain variety are the best genotype or variety (top 3 with 1=most important)? Why?

5. Do farmers in this community practice varietal/landraces selection? If yes, what are farmer’s variety selection criteria? Also, please rank these criteria (top 5 – agreement); please, give reasons for the ranking (why?).

6. Do you plant improved plantain varieties in this community?

7. Between local and improved varieties, which ones are preferred in this community? 1=Local, 2=Improved; Why?

8. Are there varieties you have stopped growing (over the years) in this community? 1=Yes, 2=No

9. If yes, could you tell us local name/description of the varieties?

10. Why have you stopped growing the varieties?

11. What could be done to ensure that your community does not stop producing preferred plantain varieties?

12. How is the diversity of the plantain genetic resources in your community today as compared to 10 years ago?
   - 1=Increased, 2=Decreased, 3=No change

13. If increased, why?

14. If decreased, why?
13. For food consumption, does the average/typical household in this community only consumes the plantain it has produced? Or does it also buy plantain for home consumption? If you divide the entire plantain consumed in a week (as food) into 10 parts, how many parts would be purchased for food consumption around harvest time? What about around the hunger period (between March to July)?

Source of the plantain consumed by the average household in this community:
A: Home production only
B: purchase only

14. How many days in a week does a typical household in this community consume plantain as food?

15. If you divide the entire plantain consumed (as food) into 10 parts, indicate how many parts are consumed (over a one-week period) as:
   - Raw (not cooked)? _______ Parts out of 10
   - Boiling? _______ Parts out of 10
   - Frying? _______ Parts out of 10
   - Roasting? _______ Parts out of 10
   - Baking? _______ Parts out of 10
   - Plantain flour? _______ Parts out of 10
   - Other (please specify) _______ Parts out of 10

16. For the plantain consumed raw, which type of meals do you make (name and key ingredients)?

17. Please list the consumer characteristics/traits you prefer for the plantain used raw.
   a. Please rank these traits, selecting up to your top five characteristics/traits
   b. Why are these characteristics/traits preferred?

18. Please list the producer characteristics/traits you prefer for the plantain used raw.
   a. Please rank these traits, selecting up to your top five characteristics/traits.
   b. Why are these characteristics/traits preferred?

19. What are missing traits/characteristics you have identified for the plantain used raw?

20. For the plantain used for boiling, which type of meals do you make (name and key ingredients)?

21. Please list the consumer characteristics/traits you prefer for the plantain used for boiling.
   a. Please rank these traits, selecting up to your top five characteristics/traits
   b. Why are these characteristics/traits preferred?

22. Please list the producer characteristics/traits you prefer for the plantain used for boiling.
   a. Please rank these traits, selecting up to your top five characteristics/traits
   b. Why are these characteristics/traits preferred?

23. What are missing traits/characteristics you have identified for the plantain used for boiling?

24. For the plantain used for frying, which type of meals do you make (name and key ingredients)?

25. Please list the consumer characteristics/traits you prefer for the plantain used for frying.
   a. Please rank these traits, selecting up to your top five characteristics/traits
   b. Why are these characteristics/traits preferred?

26. Please list the producer characteristics/traits you prefer for the plantain used for frying.
   a. Please rank these traits, selecting up to your top five characteristics/traits
   b. Why are these characteristics/traits preferred?

27. What are missing traits/characteristics you have identified for the plantain used for frying?

28. For the plantain used for roasting, which type of meals do you make (name and key ingredients)?

29. Please list the consumer characteristics/traits you prefer for the plantain used for roasting.
   a. Please rank these traits, selecting up to your top five characteristics/traits
   b. Why are these characteristics/traits preferred?

30. Please list the producer characteristics/traits you prefer for the plantain used for roasting.
a. Please rank these traits, selecting up to your top five characteristics/traits
b. Why are these characteristics/traits preferred?
31. What are missing traits/characteristics you have identified for the plantain used for roasting?
32. For the plantain used for baking, which type of meals do you make (name and key ingredients)?
33. Please list the consumer characteristics/traits you prefer for the plantain used for baking.
   a. Please rank these traits, selecting up to your top five characteristics/traits
   b. Why are these characteristics/traits preferred?
34. Please list the producer characteristics/traits you prefer for the plantain used for baking.
   a. Please rank these traits, selecting up to your top five characteristics/traits
   b. Why are these characteristics/traits preferred?
35. What are missing traits/characteristics you have identified for the plantain used for baking?
36. For the plantain used to make plantain flour, which type of meals do you make (name and key ingredients)?
37. Please list the consumer characteristics/traits you prefer for the plantain used for plantain flour.
   a. Please rank these traits, selecting up to your top five characteristics/traits
   b. Why are these characteristics/traits preferred?
38. Please list the producer characteristics/traits you prefer for the plantain used for plantain flour.
   a. Please rank these traits, selecting up to your top five characteristics/traits
   b. Why are these characteristics/traits preferred?
39. What are missing traits/characteristics you have identified for the plantain used for plantain flour?
40. For the plantain used to make ‘other’ food, which type of meals do you make (name and key ingredients)?
41. Please list the consumer characteristics/traits you prefer for the plantain used for ‘other’ food.
   a. Please rank these traits, selecting up to your top five characteristics/traits
   b. Why are these characteristics/traits preferred?
42. Please list the producer characteristics/traits you prefer for the plantain used for ‘other’ food.
   a. Please rank these traits, selecting up to your top five characteristics/traits
   b. Why are these characteristics/traits preferred?
43. What are missing traits/characteristics you have identified for the plantain used for ‘other’ food?
44. Have you had any training about plantain consumption and processing? 1=Yes, 2=No
45. If yes, from which source? 1=Lead farmer; 2=Institute; 3=Other (please specify)
46. Where do you sell plantain mostly? _ __ (1 = Farm-gate; 2 = Village market; 3 = Other (specify), etc.)
47. If you divide the plantain you sell into 10 parts, how many parts do you take to market and how many parts do
   other producers or traders come to you and buy (for the typical/average household in your community)?
   To market _______ Parts out of 10
   Traders come for _______ Parts out of 10
48. What is the sale dynamics for plantain over a one-year period in your community (do you sell more in some
   months compared to others or do you sell roughly the same amount every month?)
   a. Please specify the months and the approximate number of bunches sold per month.

<table>
<thead>
<tr>
<th>Month</th>
<th>Amount per typical farmer</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
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<td>February</td>
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<tr>
<td>March</td>
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<td>April</td>
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<td>July</td>
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<tr>
<td>August</td>
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</tbody>
</table>

5
49. Describe the relationships you have with the people buying plantain in this community/village
   a. Is relationship based on contracts or is it based on first come first served?
   b. Do you know before planting what the buyers are looking for or do you have to make estimates?
   c. How is the selling price defined (individual farmer or farmers’ group versus buyer)?

50. Where is the bulk of the plantain produced in this community sold? 1=Other rural areas? 2=Cities; 3=Exported to other countries?

51. Do all plantain growers produce their own seeds? 0=No; 1=Yes

52. If Yes, are the seeds produced in sufficient quantities? What are your perceptions on the “quality” of the seeds?

53. Do you have specialised plantain seed producers? 0=No; 1=Yes. Are they in your community?

**OBSERVATIONS**

1. Any comment/Observation? (Only for physical/face to face interviews)