

## 1. INFORMATION ON THE SURVEY

Date of investigation			
Questionnaire number			
Name of investigator			
Chiefdom			
Village			
GPS coordinate of the household	N	W	Altitude

### Producer Identification

Name and Surname of producer				
Type	Male		Female	
Date of birth				
Environment of Origin				
Level of education	No	Primary	Secondary	University
Civil Status	Single	Married	Divorced	Window(er)
Location of the interview	Home	Field	School	Other to be specified

### Household composition

Family (number of members)		
	Under 18 years old	Over 18 years old
Wife/Spouse		
Children		
Father*		
Mother*		

Other dependent persons	
No	Link to family

This is the parent of the farm manager if they are still alive.

## 2. CHARACTERISTICS OF THE OPERATION

2. What is the total area of the farm? \_\_\_\_\_  
 The farm may contain one or more blocks.

3. How many parcels of land are owned and cultivated, and what is the area (in hectares)?

	Number	Area		Number	Area
Number of parcels held			Number of plots cultivated		

4. If he had agricultural crops, list the crops:

5 years before	3 years before	One year before	Before preparing the ground

You can continue here:

.....

5. How is the land in your plots acquired?

Plots	Buy	Legacy	Rental	Metayage
Parcel A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Parcel B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Parcel C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other modes of ownership:

.....

6. If 'other' specify: .....

7. Do you hold title to the land you farm? If yes, please specify the type for each parcel \_\_\_\_\_

Parcel A	Parcel B	Parcel C
<input type="checkbox"/> Land title	<input type="checkbox"/> Land title	<input type="checkbox"/> Land title
<input type="checkbox"/> Rural Land Certificate	<input type="checkbox"/> Rural Land Certificate	<input type="checkbox"/> Rural Land Certificate
<input type="checkbox"/> Rental lease	<input type="checkbox"/> Rental lease	<input type="checkbox"/> Rental lease
<input type="checkbox"/> License to live	<input type="checkbox"/> License to live	<input type="checkbox"/> License to live
<input type="checkbox"/> Certified sales agreement	<input type="checkbox"/> Certified sales agreement	<input type="checkbox"/> Certified sales agreement
<input type="checkbox"/> Unofficial sales agreement	<input type="checkbox"/> Unofficial sales agreement	<input type="checkbox"/> Unofficial sales agreement

Other administrative document (specify):

.....

8. What is the distance between your plots and your home: ..... (Hours) and what is the distance between each of your plots

from A to B		from A to C		from B to C	

9. How long (in minutes) does it take to get from your family home to your plot? Choose one of the following means of transportation:

<input type="checkbox"/> On foot	<input type="checkbox"/> Bike	<input type="checkbox"/> Motorcycle
<input type="checkbox"/> Car	<input type="checkbox"/> Animal backs	<input type="checkbox"/> Other .....

10. On which geographical unit is your field located? Use the following options:

Parcel A	Parcel B	Parcel C
<input type="checkbox"/> Tray	<input type="checkbox"/> Tray	<input type="checkbox"/> Tray
<input type="checkbox"/> Slope	<input type="checkbox"/> Slope	<input type="checkbox"/> Slope
<input type="checkbox"/> Lowland	<input type="checkbox"/> Lowland	<input type="checkbox"/> Lowland

11. Please answer the following questions regarding the age of your crops

- How old is the farm? .....
- How old are your cinchona trees on each plot? Specify the number of trees for each class.....

Plots	<u>≤ 5 years</u>	6 - 10 years	11 - 15 years old	16 - 20 years	old >20 years
Parcel A					
Parcel B					
Parcel C					

At what age are cinchona trees cut? .....

12. What criteria do you use to decide when to harvest? age o tree watching o need for money o market demand o other o If other, specify

.....  
.....

13. What types of cinchona trees do you have in your fields? Report the vernacular names:

.....  
.....

14. What is the spacing between the lines of trees but also the spacing between the trees on those lines? Use the	Vernacular name	Meters (m)		
	Tree name 1			
	Tree name 2			
	Tree name 3			
	Tree name 4			

15. What cultivation system did you use?

Pure  Association of crops

The vernacular name is the common name for an animal or plant. It is also called common name, vulgar name, popular name or name of use.

What is your reason for using your chosen type of cropping system? Specify:

.....  
.....

16. If you have an associated cropping system, what are the other crops that accompany the Quinquina trees, what percentage of the area is allocated to each crop and what are they used for?

Agricultural crops			
Crop name	Area used (%)	Density (N° individuals/ha)	Use
Silvicultural crops			
Crop name	Area used (%)	Density (N° individuals/ha)	Use

17. What is the percentage of the area occupied by the Quinquina tree on the total area of your farm?

Less than or equal to 25%  25%-50%  50%-75%  More than 75

### 3. OPERATIONAL MANAGEMENT

18. What is the basic training of the farm manager\*: ..... and what is the relationship to quinine production? Specify:

.....  
 .....

- \* a. Practical experience (this includes training for rural extension),
- b. Basic agricultural training,
- c. Full agricultural training

19. Has the farm manager attended any professional training in the last 12 months? Yes  No

20. If the answer to the last question is yes, have you received any training related to your occupation? Yes  No

If yes, when and by which organization:

.....

21. How did the training help you?

.....  
 .....

22. Who operates the plot in addition to you? Select the choice and indicate the number for each

Wife  Threads  Girls  Other family member  Worker (external labour)

Other : .....

### 4.CULTIVATION TECHNIQUES

23. What is the propagation method of the Quinquina tree that you use to obtain the seedlings?

In vivo propagation	In vitro propagation
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<input type="checkbox"/> Sexual	<input type="checkbox"/> Asexual	<input type="checkbox"/>
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24. According to the mode of multiplication "in vivo" or "in vitro": How are they performed?  
 .....

25. What type of seed did you primarily use for this crop?  
 Local             Upgrades  
 Specify the name of the seed type  
 .....

26. What is your source of seed?  
 Market             Cooperatives         Other planter             Other  
 If other, please specify:  
 .....

27. Could you indicate the advantages of choosing one or the other type of seed?  
 .....

28. When did you start planting or transplanting this crop?  
 (Write the month and year, also the date if possible) ..... / ..... Date:

29. How do you assess the fertility of the soil?

Parcel A	<input type="checkbox"/> Poor	<input type="checkbox"/> Average	<input type="checkbox"/> Good
Parcel B	<input type="checkbox"/> Poor	<input type="checkbox"/> Average	<input type="checkbox"/> Good
Parcel C	<input type="checkbox"/> Poor	<input type="checkbox"/> Average	<input type="checkbox"/> Good

30. What activities do you carry out to improve the productivity of the land for quinquina production?

<input type="checkbox"/> Use of fertilizers	<input type="checkbox"/> Tree pruning
<input type="checkbox"/> Weed control	<input type="checkbox"/> Covers for the supply of organic matter
<input type="checkbox"/> Use of herbicide	<input type="checkbox"/> The implementation of agroforestry systems
<input type="checkbox"/> Other .....	

31. What type of fertilizer do you use and in what quantity and frequency?

Chemical             Organic             None

32. What is the source of water for irrigation in your plantations?

<input type="checkbox"/> River	<input type="checkbox"/> Lake, pond
<input type="checkbox"/> Dam, water impoundment r	<input type="checkbox"/> Well
<input type="checkbox"/> Drilling	<input type="checkbox"/> Other

33. Have you encountered any diseases on the Quinquina trees in your plot?

Yes             No

34. If the last answer (28) is yes: What diseases have attacked the trees?  
 .....

35. What was the production of Quinquina bark in the last 3 years? Indicate a maximum and a minimum value in kilograms.

2018	2019	2020
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	Min	Max	Min	Max	Min	Max
Parcel A						
Parcel B						
Parcel C						