

*Climate and Rural Poverty:
Incorporating Climate into Rural Development Strategies*
(South American Global Warming Impact Study)

Questionnaire on Farm Households

July 12, 2004

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Introductory Statement:

“Scientific evidence has confirmed that the climate will likely change in the future with implications for agriculture. The information provided by you in this interview about your farm activities in the period from July 1st 2003 to June 30th 2004 farming season will contribute to understanding the likely impacts of climate on agriculture in _____ [COUNTRY TEAM: insert name of country] and in South America as a whole. Your responses to these questions will be anonymous.

This country study is being conducted by _____ (COUNTRY TEAM: please write the name of your institution in the space provided).

Thank you for your kind co-operation.”

TS: Time Interview Began: _____

District Code: _____; Household ID: _____

I. GENERAL-ALL FARMERS

- 1.0.1 Type of Farm Entity: _____ (**KEY for 1.0.1:** 1: small-scale; 2: commercial)
(Interviewer: Please complete this question following the classification of farm types in the country's sample design)
- 1.0.2 Please state the relationship of the respondent to the head of the household of the farm: _____
KEY for 1.0.2
1: Head of household; 2: Husband;
3: Wife; 4: Child; 5: Grandchild; 6: Parents; 7: Siblings;
8: Other family members (includes household helpers)
9: Manager/other proxy for owner
- 1.0.3 Who makes decisions on the farm? _____
KEY for 1.0.3
1: Head of household; 2: Husband;
3: Wife; 4: Child; 5: Grandchild; 6: Parents; 7: Siblings;
8: Other family members (includes household helpers)
9: Manager/other proxy for owner

1.1 CLIMATE CHANGE, AGRICULTURE AND FARMER PERCEPTIONS

- 1.1.1 How long have you been a farmer (or farm manager)? _____ (In number of years)
- 1.1.2 Have you noticed any long-term shifts in climate on your farm, such as changes in temperature, rainfall, etc.? (Yes or No) _____
1.1.2.1 If yes, please explain:
- 1.1.3 What adjustments in your farming have you made to these long-term shifts, such as using different crop varieties, production systems or species?
- 1.1.4 How do you determine what the weather might be next season?
- 1.1.5 What strategies do you use to adapt your farm to the changes in weather from year to year?

District Code: _____; Household ID: _____

1.1.6 What are the main constraints for making the necessary adjustments to changes in weather year to year?

1.2 HOUSEHOLD ROSTER

1.2.1 Household size (of owner of the farm): _____

1.2.2 Household Characteristics.

1.2.2.1 Age of the head of the household: _____

1.2.2.2 Gender of the head of the household: _____ (KEY for 1.2.2.2: 1: Female; 2: Male)

1.2.2.3 Education of the head of the household (number of years of education): _____

1.2.2.4 Number of adult males (16 plus): _____

1.2.2.5 Number of adult females (16 plus): _____

1.2.2.6 Number of male children (under 16): _____

1.2.2.7 Number of female children (under 16): _____

1.2.3 Does the household have electricity? _____ (KEY for 1.2.3: 1: yes; 2: no)

1.2.4 Does the household have a telephone? _____ (KEY for 1.2.4: 1: yes; 2: no)

1.2.5 Does the household have a computer? _____ (KEY for 1.2.5: 1: yes; 2: no)

1.3 OCCUPATION OF THE HEAD OF THE HOUSEHOLD

1.3.1	1.3.2
What is the Primary Occupation of the head of the household in terms of income?	What is the Secondary Occupation of the head of the household
<p>KEY for 1.3.1 and 1.3.2: 1. Farmer; 2. Agriculture (farm) laborer; 3. Artisan; 4. Office worker; 5. Civil Servant; 6. Teacher; 7. Health worker; 8. Trader; 9. Student; 10. Unemployed; 11. Not in labor force; 12. Other non-agriculture worker</p>	

District Code: _____; Household ID: _____

II. CROP ACTIVITIES: To be completed only by farmers growing crops

2.1 FARMING SEASONS

2.1.1- 2.1.3 TO BE COMPLETED BY TEAM LEADER PRIOR TO COMMENCING INTERVIEWS

2.1.1. Crop season 1:	2.1.1a: Start:	2.1.1b: End:	2.1.1c: Season:
2.1.2. Crop season 2:	2.1.2a: Start:	2.1.2b: End:	2.1.2c: Season:
2.1.3. Crop season 3:	2.1.3a: Start:	2.1.3b: End:	2.1.3c: Season:

2.2 FARMING AREAS

2.2.1 How many **separate** land areas are used as cropland? _____ (Interviewer: If response is "1", respond to 2.2.2.1 and 2.2.2.5 only)

KEY for 2.2.1:

- 1: only 1 single area is farmed
- 2: 2 separate areas are farmed;
- 3: 3 or more areas are farmed

2.2.2 Please denote the size of the **following** separate crop land areas used over the period from July 1st 2003 to June 30th 2004: (Interviewer: Please denote the unit in which the quantity of land is measured locally during interview)

- 2.2.2.1 Largest single Area: _____ } (NB: Interviewer: this area is what is referred to as **PLOT 1** in the ensuing questions that make reference to a "Plot".)
- 2.2.2.2 2nd largest single Area: _____ } (NB: Interviewer: this area is referred to as **PLOT 2** in the ensuing questions)
- 2.2.2.3 How many additional plots do you farm? _____
- 2.2.2.4 Sum the size of all remaining areas: _____ } (NB: Interviewer: this cumulative area is referred to as **PLOT 3** in the ensuing questions)
- 2.2.2.5 Unit of measurement of land areas in 2.2.2.1- 2.2.2.4: _____ (Ha, acres, etc. Please specify)

2.3 LAND USE FOR EACH PLOT

2.3.1	2.3.2	2.3.3	2.3.4	2.3.5
Plot Numbers	System of Farming	Tenure type	How many (average) number of years have you used these plots?	Total rent paid (per month) if plot is leased
1				
2				

District Code: _____; Household ID: _____

KEY for 2.3.2:

- 1: Shifting cultivation (With long fallow period)
- 2: Continuous cropping (no fallow period)
- 3: Continuous cropping with multiple rotations (includes short fallow period)
- 4: Other (pls. specify . . .)

(Interviewer: Please allow for multiple response)

KEY for 2.3.3:

- 1: Own land and own use
- 2: Own land and rent to others
- 3: Sharecropped land
- 4: Communal land (traditional ownership)
- 5: Rented land
- 6: Borrowed land (Do not pay for usage)
- 7: Other (pls. specify . . .)

(Interviewer: Please allow for multiple responses)

2.4 LABOR FOR CROPS

2.4.1 Division of Labor information for each season	Household Labor					
	2.4.1.1 Adult Male		2.4.1.2 Adult Female		2.4.1.3 Children	
	a. No.	b. Days	a. No	b. Days	a. No	b. Days
Season 1 (Crop Land Only)						
Season 2 (Crop Land Only)						
Season 3 (Crop Land Only)						

2.4.2 Division of Labor information for each season	Hired Labor (Permanent)						Hired Labor (temporary)					
	2.4.2.1 Adult Male		2.4.2.2 Adult Female		2.4.2.3 Children		2.4.3.1 Adult Male		2.4.3.2 Adult Female		2.4.3.3 Children	
	a. No	a. Days	a. No	a. Days	a. No	a. Days	a. No	b. Days	a. No	b. Days	a. No	b. Days
Season 1 (Crop Land Only)												
Season 2 (Crop Land Only)												
Season 3 (Crop Land Only)												

2.5 Information on the PRIMARY CROPS grown in your farm over the period from July 1st 2003 to June 30th 2004.
Please use the following KEY for 2.5: (if a crop is not listed below, please denote as 'other' and specify).

- | | | |
|---------------------|---------------------|---------------------|
| 1. alfalfa | 2. banana | 3. barley |
| 4. bean | 5. cashew | 6. cassava |
| 7. chickapea | 8. chickapea | 9. clover |
| 10. cocoa | 11. cucumber | 12. enset |
| 13. field pea | 14., flax | 15. garden-eggs |
| 16. garlic | 17. grape | 18. groundnut |
| 19. kola | 20. lentil | 21. mango |
| 22. maize | 23. millet | 24. oil palm |
| 25. okra | 26. onion | 27. palm dates |
| 28. paprika | 29. peanuts | 30. pepper |
| 31. pigeon pea | 32. pineapple | 33. plantain |
| 34. potato | 35. rice | 36. safflower |
| 37. sesame | 38. shallots | 39. sheanut |
| 40. sorghum | 41. soybean | 42. spinach |
| 43. squash | 44. sugarcane | 45. sunflower |
| 46. tea | 47. tef | 48. tobacco |
| 49. tomato | 50. wheat | 51. yam |
| 52. other (specify) | 53. other (specify) | 54. other (specify) |
| 55. other (specify) | 56. other (specify) | 57. other (specify) |

2.5.0 Season	2.5.1 Plot No.	2.5.2 Crop Type (Use key for 2.5 above)	2.5.3.1 Planting		2.5.4.1 Harvest		2.5.5 Proportion of Plot area cultivated with crop (%)	2.5.6 Quantity Harvested (kg) <u>all harvest</u>	2.5.7 Amount consumed by household (kg)	2.5.8 Amount consumed by livestock (kg)	2.5.9 Harvest lost due to disease and pests (%)	2.5.10 Quantity sold (kg)	2.5.11 To whom is output sold?		2.5.12 Price and unit	2.5.13 Amount of Seeds used (kg)	2.5.14 Cost/kg of Seed	
			Month	Week	Month	Week							Key for 2.5.11 1. Consumers 2. Wholesaler 3. Exporters 4. Others					
1	1																	
	2																	
	3																	

District Code: _____; Household ID: _____

2.5.0	2.5.1	2.5.2	2.5.3.1	2.5.3.2	2.5.4.1	2.5.4.2	2.5.5	2.5.6	2.5.7	2.5.8	2.5.9	2.5.10	2.5.11	2.5.12	2.5.13	2.5.14
Season	Plot No.	Crop Type (Use key for 2.5 above)	Planting Month	Planting Week	Harvest Month	Harvest Week	Proportion of Plot area cultivated with crop (%)	Quantity Harvested (kg) <i>all harvest</i>	Amount consumed by household (kg)	Amount consumed by livestock (kg)	Harvest lost due to disease and pests (%)	Quantity sold (kg)	To whom is output sold? Key for 2.5.11 1. Consumers 2. Wholesaler 3. Exporters 4. Others	Price and unit	Amount of Seeds used (kg)	Cost/kg of Seed
2	1															
	2															
	3															
3	1															
	2															
	3															

District Code: _____; Household ID: _____

2.6-2.7 WATER, IRRIGATION, FERTILIZER, PESTICIDE

2.6.0	2.6.1	2.6.2	2.6.3	2.7.1	2.7.2
Season	Plot No	Water Source (Interviewer: Please allow for multiple sources. If rained only, please skip to 2.7.1; otherwise, go to 2.6.3)	If you use irrigation, which system do you use? (Interviewer: Please allow for multiple responses)	Fertilizer use (kg/yr)	Pesticide use (kg or liter/ year)
1	1				
	2				
	3				
2	1				
	2				
	3				
3	1				
	2				
	3				
		KEY for 2.6.2: 1: rain fed; 2: irrigated- public scheme; 3: irrigated – groundwater; 4: irrigated- private scheme ; 5: Other (pls. specify ...)	KEY for 2.6.3: 1: gravity; 2: sprinklers; 3: drip systems; 4: other (pls. specify...)		

2.7.3 Cost/kg of Fertilizer: _____

2.7.4 Cost/kg or liter of Pesticide : _____

2.8 FARM MACHINERY, INPUTS AND FARM BUILDINGS.

2.8.0 Tool/Machinery/ Implements	2.8.1 Number	2.8.2 Who owns the equipments?	2.8.3 Price (or value)/unit	2.8.4 Average lifespan of item
<i>Light machinery:</i>				
1. Cultass, machete				
2. Hoe				
3. File				
4. Axe				
5. Baskets				
6. Weeder				
7. Other Light Machinery (please specify _____)				
<i>Heavy machinery</i>				
8. Tractor				
9. Plough				
10. Trolley/Trailers				
11. Thresher				
12. Fodder cutting machine				
13. Generator/Diesel Pumps				

District Code: _____; Household ID: _____

14. Spraying machines (chem., fertilizer)				
15. Harvester machine				
16. Direct tillage machines				
17. Other Heavy Machinery (please specify _____)				
<i>Farm Animal Power</i>				
18. Bullocks				
19. Mules				
20. Other Animal Power (pls. specify _____)				
KEY for 2.8.2 : 1. household has ownership; 2. jointly owned with other households/farm entities 3. hired for household or joint use				
NB: for (7), (17) and (20), please specify each item and information requested in 2.8.1-2.8.4 using additional space on back of page				

District Code: _____; Household ID: _____

III. Livestock (Farmers who have livestock only)

3.1 Does your household own Livestock, Poultry or Other farm animals? Key for 3.1:(1:Yes, 2:No)

3.2 LIVESTOCK: Questions below pertain to period between July 1st 2003 and June 30 2004

3.2.1 Type	3.2.2 Number currently owned	3.2.3 Type of production system		3.2.4 Number animals born	3.2.5 Number of animals lost	3.2.6 Number of animals purchased	3.2.7 Purchase price (per animal)	3.2.8 Number of animals sold alive	3.2.9 Land used for grazing (hectares)	3.2.10 Sale price (per animal)
		Extensive	Intensive							
1. Cattle (for meat)										
2. Cattle (for milk)										
3. Breeding bulls										
4. Goat										
5. Sheep										
6. Pigs										
7. Oxen										
8. Chicken										
9. Other (specify _____)										
10. Other (specify _____)										

3.3 LIVESTOCK PRODUCTS

3.3.1 Own livestock products	3.3.2 Quantity for own use (kg/year)	3.3.3 Quantity sold(kg/yr)	3.3.4 Price per unit
Milk			
1. Milk			
2. Milk Products (Cheese)			
Meat (slaughtering)			
3. Beef			
4. Sheep			
5. Goat			
6. Pigs			
7. Chicken			
8. Other (specify)			
Other products			
9. Eggs			
10. Wool			

District Code: _____; Household ID: _____

11. Leather		
12. Other (specify _____)		

3.4 LABOR FOR LIVESTOCKS

	Hired Labor (Permanent)				Hired Labor (temporary)							
	3.4.1.1 Adult Male		3.4.1.2 Adult Female		3.4.1.3 Children		3.4.2.1 Adult Male		3.4.2.2 Adult Female		3.4.2.3 Children	
	a. No	b. Days	a. No	b. Days	a. No	b. Days	a. No	b. Days	a. No	b. Days	a. No	b. Days
Labor for livestock over the year												
Livestock												

IV. GENERAL: All farmers should answer

4.1 FARM LAND VALUE

4.1.1 If this farm **not** including buildings, equipment and livestock were for sale, what is its approximate value? _____

4.1.2 If this farm **including** land, buildings, equipment and livestock were for sale, what is its approximate value? _____

4.2 Can you please tell us the **TOTAL COSTS OF THE FOLLOWING ACTIVITIES** (per year):

Code	Type	4.2.1. Crops Harvested	4.2.2 Livestock
1	Transport costs	4.2.1.1 _____	4.2.2.1 _____
2	Packing/marketing	4.2.1.2 _____	4.2.2.2 _____
3	Storage costs	4.2.1.3 _____	4.2.2.3 _____
4	Post harvest losses	4.2.1.4 _____	4.2.2.4 _____
5.	Other (please specify) _____	4.2.1.5 _____	4.2.2.5 _____

4.3 FARM WAGE RATES

4.3	Farm Wage Rates	Household Labor			Hired Labor (permanent)			Hired Labor (temporary)		
		Adult Male	Adult Female	Children	Adult Male	Adult Female	Children	Adult Male	Adult Female	Children
4.3.1	Average wage/day	4.3.1.1 _____	4.3.1.2 _____	4.3.1.3 _____	4.3.1.4 _____	4.3.1.5 _____	4.3.1.6 _____	4.3.1.7 _____	4.3.1.8 _____	4.3.1.9 _____
4.3.2	Monthly amount of in kind payments									
4.3.3	Type of in kind payment									

District Code: _____; Household ID: _____

4.4 Please provide information on the **BUILDINGS** used to support agriculture production activities (table below)

4.4.1 Building No.	4.4.2 Purpose <i>(Interviewer: Please allow for multiple responses)</i>	4.4.3 Area (square meters)	4.4.4 Value
Building 1			
Building 2			
Building 3			
Building 4			
Building 5			
Building 6			
	KEY for 4.4.2 1: Storage of crops 2: Chickens 3: Other livestock 4: Greenhouse 5: Farmhouse 6: Living quarters for workers 7: Equipment storage 8: Other (specify)		

4.5 TRANSPORTATION

4.5.1 How far must you travel to **sell** your harvest? (a) In distance: _____(km.); **or** (b) _____ in time (hrs)

4.5.2 What transport do you use to get your output to the market? _____
Key for 4.5.2

1. walk; 2. animal; 3. cart; 4. truck or other motorized vehicle; 5. other (specify)

4.5.3 How far must you travel to buy your inputs? In distance: (a) _____(km.); **or** (b) _____ in time (hrs)

4.6 ORGANIZATION

4.6.1 Do you belong to any organization that helps the farm sell the outputs? _____ (**Key for 4.6.1** 1. Yes; 2. No Please specify name)

4.6.2 Do you belong to any organization that helps provide inputs including water, fertilizer, seeds, etc. _____ (**Key for 4.6.2** 1. Yes; 2. No Please specify name)

4.7 EXTENSION SERVICE

	A. For Crop production	B. For Livestock activities
4.7.1 Do you get information and advice from extension workers? KEY for 4.7.1: 1: yes; 2: no	4.7.1a:	4.7.1b:

District Code: _____; Household ID: _____

4.7.2	How many times do they visit you per year?	4.7.2a:	4.7.2b:
4.7.3	Do you pay for receiving extension advise? KEY for 4.7.3: 1: yes; 2: no ((if no, go to Q. 5.1.4)	4.7.3a:	4.7.3b:
4.7.4	How much do you pay annually for extension?	4.7.4a:	4.7.4b:
4.7.5	The Extension officials who visit/contact you are from which organization? KEY for 4.7.5 1. Government Agency (national) 2. Government agency (regional/local) 3. Cooperatives 4. Private extension groups 5. NGO 4. Input companies 5. Marketing companies 6. Other (specify)	4.7.5a:	4.7.5b:

4.7.6 If you get any technical assistance and advice from other sources apart from official extension workers, from where do you receive the necessary information? _____

KEY for 4.7.6:

- 1:Media; 2:Neighboring farmer,
- 3:Shopkeepers ; 4: Others (please specify)
- 5: None

4.8 HOUSEHOLD INCOME

- 4.8.1 What is the **total** household net income **from farm activities** (in your farm) in the **period from July 1st 2003 to June 30th 2004**? _____
(NB: use income table if necessary)
- 4.8.1.1 Over the **period from July 1st 2003 to June 30th 2004**, what **percent** of total household income is from farm activities? _____
- 4.8.2 What is the **total** net household income from this farm in a **normal average year**? _____ (NB: use income table if necessary)
- 4.8.2.1 In a **normal average year**, what **percent** of total household income is from farm activities? _____

4.8.3 How much **TAXES** has your household paid for the following over the period from July 1st 2003 to June 30th 2004?

4.8.3.1	Income Taxes
4.8.3.2	Property Taxes

District Code: _____; Household ID: _____

4.9 Did you **BORROW FUNDS** from any of the following sources for farming over the period from July 1st 2003 to June 30th 2004?

4.9.0 Source

- 1. Relatives/Friends
- 2. Commercial banks
- 3. Farmer associations/ co-operatives
- 4. Thrift and loan Society
- 5. Others (specify)

4.9.1

KEY for 4.9.1: (1: Yes; 2: No)

- 4.9.1.1: _____
- 4.9.1.2: _____
- 4.9.1.3: _____
- 4.9.1.4: _____
- 4.9.1.5: _____

District Code: _____; Household ID: _____

This section must be completed after the interview is completed. Given the importance of the following data for mapping and tracking purposes, please ensure it is filled out accurately.

Instructions: This section to be filled out by the interviewer. _____

Time Interview Ended: _____

Name of interviewer: _____ (this information is important to validate survey responses and will be used to cross check in the event that there are unusual observations during the analysis of the data)

Date of interview (mm/dd/yr)

Respondent Households' identification number
(Unique Household ID- should be assigned prior to interview)

(1=interview 1, 2=interview 2,.....,n=survey n) for each district

GPS Location:

Latitude

Longitude

Altitude

Location of Farm

Country

State/Province/Department

District/Municipal Name

District Code

Village

Optional: Contact Information of Respondent: _____
(address)

District Code: _____; Household ID: _____