

Pilot Evaluation of the Utilization of Drought Research Information in the Sahel

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QUESTIONNAIRE FOR USER COMMUNITIES

Introduction

Beginning in response to the disastrous 1968-73 drought, considerable research and monitoring activity has focused on the causes and impacts of Sahelian drought. These efforts have generated a copious amount of information, recommendations and literature on various aspects of droughts. This questionnaire and the present study are designed to elicit information on the extent to which communities, activities-at-risk, and policy makers are aware of and have access to, important research findings and forecasts relating to drought. The goal of the study is to evaluate the sources of drought information available to selected vulnerable groups and policy makers, determine the various ways in which that information is utilized, and identify constraints to the adoption/implementation of potentially beneficial research findings.

We seek your assistance in completing this questionnaire. Please answer the questions as honestly as possible. Your answers will be treated as strictly confidential and used solely for purposes of advancing our understanding of the problems and issues involved. Thank you for your cooperation.

Section A: Personal Information

It is important for us to determine the personal characteristics of respondents in order to evaluate access to and use of drought research information by different groups. As previously stated, the information you provide is strictly confidential and will be used solely for the purpose of this research.

A1 Identification code _____

A2 Name of village _____ Location (GPS) _____

A3 Educational attainment

- a. No formal education
- b. Koranic/primary/elementary school
- c. Middle/technical/high school
- d. A level/post secondary school
- e. University degree

A4 Occupation

- a. Full time Farming
- b. Full time livestock herding: Nomadic _____ Settled _____ (chose one)
- c. Farming/livestock herding
- d. Part time farming in combination with (state) _____
- e. Fishing
- f. Trading
- g. Civil servant
- h. Teaching/professional
- i. Other (please specify) _____

A5 Number of years in occupation _____

Section B: Agriculture and water sources

Agriculture and water resources are the two activities most visibly and directly affected by drought. We are interested in information concerning your involvement in agriculture and your sources of water supply

B1 What is your major source of water for domestic purposes?

- a. Rain water
- b. River water
- c. Drilled well
- d. Hand-dug well
- e. Pipe borne water
- f. Combination of _____
- g. Other (state) _____

B2 How dependable is your major source of water for domestic purpose?

- a. Extremely dependable
- b. Somewhat dependable
- c. Dependable about half the time
- d. Somewhat undependable
- e. Not dependable at all

B3 During the past 10 years, has your major source of water become _____?

- a. More dependable
- b. Less dependable
- c. About the same
- d. Not sure

B4 Over the past 10 years, have you observed any changes in the following?

		Yes	No
Rainfall	Total amount		
	Timing of onset		
	Time of cessation		
	Frequency of rain events		
	Intensity of rain events		
Groundwater	Level of water table		
	Timing of Recharge (rise)		
	Timing of discharge (fall)		
	Yield (rate) of wells		
Streamflow	Level of streamflow		
	Timing of Recharge (flow)		
	Timing of cessation		
	Frequency of floods		

B5 What do you attribute the changes in B4 (above) to?

- a. Increased population and use
- b. Poor management
- c. Changes in climatic factors
- d. Combination of _____
- e. Others _____

B6a If farmer, please list principal crops grown

Food crops	Cash crops
1.	1.
2.	2.
3.	3.
4.	4.
5.	5.

B6b Mode of crop production

- a. Entirely rain-fed
- b. Entirely irrigated
- c. Combined rain-fed and irrigated agriculture
- d. Other (specify)_____

B6c If involved in irrigated agriculture, please indicate sources of water and water lifting mechanism

Source of water	Water lifting/storage mechanism
Rain harvesting	
Streamflow	
Groundwater	
Reservoir	
Other (please specify)	

B6d How many of the following livestock do you own?

- a. Cattle_____
- b. Goats_____
- c. Sheep_____
- d. Donkeys_____
- e. Horses_____
- f. Camels_____

B7 Do you belong to a farmers/herdsmens association or cooperative union?

- a. Yes (please state the name and the approximate number of members)
Name _____
Approximate number of members_____
- b. No (please state reason) _____

Section C: Drought and Environmental Concerns

C1 Please rank the following issues in order of priority as they affect you. Rank in descending order (e.g. assign a rank of 1 to the issue you consider most important, 2 to the next one in your priority and so on)

Issue	Rank
Loss of biodiversity/species extinction	
Desertification	
Deforestation	
Drought	
Dune migration	
Sandstorms	
Soil erosion	
Declining soil fertility	
Other (specify)	

C2a What is drought?

C2b When was the last drought you experienced_____

C2c To the best of your recollection, what was the most severe/devastating drought you can remember?_____

C3 On a scale of 1-5, to what degree are your current activities are vulnerable to drought and rainfall variability?

- 1 Entirely dependent
- 2 Somewhat dependent
- 3 Neutral
- 4 Only very slightly dependent
- 5 Not dependent at all

C4 What are the warning signs and indicators that suggest to you that a drought or period of rainfall scarcity is imminent

- a. News media (Radio/ television/newspapers)
- b. Forewarning from government agencies or extension workers
- c. Rainfall forecast_____
- d. Experience and intuition
- e. Other (please specify)_____
- f. There are no warning signs

C5 Which of the following applies to the way in which you factor the risk of drought in planning your activities?

- a. Utilize forecast information in planning our activities
- b. Base decision on historical trends/expected seasonal rainfall
- c. Depend on information from government/non-governmental agencies and extension workers
- d. Follow instructions from village head
- e. Consensus decision by farmers group or association
- f. No standard procedure, react as the weather pattern evolves
- g. Drought not a consideration at all
- h. Others (specify)_____

C6a Is your organization aware of the availability of drought and rainfall forecast information for the Sahel?

- a. Yes, we regularly receive drought precipitation forecast information (*please answer question C6b*)
- b. Yes, but we do not receive forecast information (*please answer question C6c*)
- c. No, we are not aware of the existence of such information (*please answer question C6d*)

C6b(i) Please state the source of forecast information _____

C6b(ii) What is the type of forecast?

- a. Seasonal rainfall
- b. Monthly rainfall
- c. Weekly rainfall
- d. Other time period or type (please specify)_____

C6b(iii) Please comment on the forecast information using the following criteria

	Excellent	Satisfactory	Neutral	Somewhat inadequate	Totally inadequate. Unacceptable
Reliability/accuracy of forecast					
Timeliness of forecast					
Lead time of forecast					
Forecast resolution					
Presentation of forecast					
User friendliness					

C6c Please explain why you do not receive forecast information

- a. Not reliable enough
- b. We would love to but have not been included in the distribution
- c. Not necessary for our activities
- d. Other _____

C6d Could you use such information if it were available to you

- a. Definitely
- b. Maybe (*Please explain under what conditions you would use it*) _____
- c. No (*Please explain*) _____

C7 With which government ministry/agency/NGO do you most closely work or rely on for expert advice/information?

Section D: Access to and Preparation for Drought Information

D1 Have you received advice from any agency on how to **prepare** for droughts?

- a. Yes, frequently _____ state how often _____
- b. Yes but infrequently _____ state how often _____
- c. Hardly at all _____ state how often _____
- d. Never

D2 Have you received advice from any organization on what to do **during** or **after** a drought?

- a. Yes, frequently _____ state how often _____
- b. Yes but infrequently _____ state how often _____
- c. Hardly at all _____ state how often _____
- d. Never

D3 When you need expert advice/information about droughts, where do you go to get it?

D4 Do you have an existing plan of what to do once you realize that you are experiencing a drought?

- a. Yes, _____ Describe the plan _____
- b. No _____ Explain why _____
- c. Other _____ Specify _____

D5 In the past 10 years, which of the following changes have you implemented?

Change	Old	New	Explain why
Farming techniques?			
Farm location?			
Herd/farm sizes			
Water exploitation methods?			
Water use			
Water storage methods			
Food storage			
Other (state)			

D6a Have you ever changed any of the things in D5 (above) because of the recommendation or result of a scientific study/information?

D6b Do you know of anybody who has changed any of the things in D5 (above) because of the recommendation or result of a scientific study/information?

D7 Which of the following would you be willing to change if a study recommended that you might be better off?

Action recommended	Strongly agree	Agree	Not sure	Disagree	Strongly disagree
Reduce herd sizes					
Relocate					
Change cropping times					
Change types of crops					
Change grazing methods					
Other (state)					

D8 List the specific sources from which you obtain current information on droughts and rainfall in the Sahel.

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

D9 In terms of getting information or assistance concerning drought and rainfall conditions, please list the options that are open to you either before during or after the event.

	Before a drought	During the drought	After the drought
1.			
2.			
3.			
4.			
5.			

D10a During the past 5 years, have you read any books/articles on drought and rainfall in the Sahel?

a. Yes. Complete the table below

Author	Title	Year of Publication	When and Most important information obtained

b. No

D10b During the past 5 years, has anybody/agency provided you information about drought/rainfall patterns that they obtained from a book?

a. Yes. Complete the table below

Person/Agency	When	Information provided

b. No

THE END

We wish to thank you most sincerely for your patience and cooperation. Please feel free to make any additional comments that you think relevant and useful to our study. We also value your opinion of our questions.

Additional comments.
