

Sampling Protocol

Key Informant Sampling

In order to get longitudinal data, key informant interviews should be conducted with the same informants (or people holding the same positions, if original respondent is no longer available) at each stage of the evaluation (baseline, monitoring, evaluation).

Minimum of 5 Semi-structured interviews per district.

At the district level, interview the following:

- District livestock and agricultural officers (get permission from District commissioner and executive officer first).
- Project personnel for two most active NGOs in the district (ask district officers for contacts working in the villages selected).

At the village level, interview the following:

- Ask district personnel to direct you toward village leadership (not limited to official leaders, as these people may also be respected community members or elders) and interview at least two respected village leaders. Preferably one man and one woman.

Individual HH Survey Sampling

Within the districts conduct a total of 200-250 surveys (100-125 in each district) using weighted, clustered samples. Conduct an equal number of surveys in each district and in each village (clusters) and weight them according to the relative size of each of the wards in the district, using 2012 census data (wards will have to be used because village level data is likely to be difficult to come by). Within each village, use convenience sampling, having volunteers disperse in different directions from a central location and knock on doors. To ensure equal numbers of male and female respondents volunteers should ask for the head of household (or his/her spouse), alternating between male and female respondents.

The map below depicts the two districts to be sampled. The villages to be sampled will be determined by the PDT once villages and activity plans have been finalized. The plan above may need to be modified should different activities be carried out in different villages.

NOTE: Insert a more detailed map here upon selection of villages by the PDT

Control Group

Should the group wish to also sample control villages, the sample enumerators and sampling methods should be used in control villages in each district. Control villages should be selected to maximize similarities but minimize information flow between control and intervention sites.



Training & Enumerators

Training of the 10 enumerators should take place in a central location. Training should be conducted over the course of 4 days by at least one individual proficient in survey and interview data collection methods and familiar with the objectives of the project. Two additional days should be allotted for field-testing and revising the survey tool (see below). The All enumerators should be trained at the same time in order to minimize discrepancies in practice. **The PDT will select enumerators**, but consideration should be given to the following scenarios.

- 1) The same 10 volunteers may be used in both districts. In this scenario, all data collection would take place in one location, and then he team would shift to the second district. This would minimize differences in how the data is collected across sites, but may be more costly, as enumerators would have to be paid per diem during data collection for leaving their districts.
- 2) The PDT may select 5 enumerators from each district, brining them together for a single training, and sending them back to their districts for concurrent data collection.

In either scenario enumerators should be fluent in the local language and understand local customs.

Field-testing and Final Revisions of the Survey Tool

After the enumerators have been trained, at least 4 volunteers should be retained for field-testing the tool. If possible, this exercise should include all enumerators, as it will be valuable practice and ensure that all are familiar with any revisions that result from the test.

During the field-test, volunteers will first administer the tool to each other, providing answers and identifying questions that are unclear or elicit unanticipated responses (i.e. the answers are not relevant to the intended purpose). These questions should be discussed (so that their intent is clearly understood) and revised. On the second day of field-testing, each volunteer should administer the survey to two (or one, if the entire team is present) subjects. The group should then reconvene to again discuss responses and determine if questions are obtaining the information desired. Again, any problematic questions should be revised to elicit desired information.



M&E PROTOCOL TO EVALUATE CLIMATE SERVICES FOR FARMERS AND PASTORALISTS: THE BASELINE SURVEY

PART I- Key Respondent (village leaders) Semi-Structured Interview Guide

Introduction and consent by respondent

Data Handlers:

	Name 🕦	Code	Date (d/m/y)	Signature
Interviewer		[]		
		FLDCODE	FLDDAY, FLDMTH,FLDYEAR	
Supervisor		[]	//	
		SUPCODE	SUPDAY,SUPMTH,SUPYEAR	
1st Data entry clerk		[]	/	
		DE1CODE	DE1DAY, DE1MTH,DE1YEAR	
SITE NAME:				
GPS coordinates (UTM)			N:	GPSN
(to be filled in by site supervis	sor where applicable)		S:	GPSS
			E:	GPSE
			W:	GPSW
County/District name	Village name	j.	•	•

Before the beginning of the interview read out the following paragraph and ensure that the respondent understands before asking for consent.

"Good morning/afternoon. We are coming from (CGIAR, CCAFS, ICRISAT, ICRAF...) a non-governmental research organization (with permission from the local government). We wish to develop a survey to understand the usefulness of climate information services that households in your community have received. We would like to ask you some questions that should take no more than one to one hour of your time. We would like to share some of this information widely in order that more people understand how your community is using climate information, and problems to resolve to make this information more useful for you. We are also looking to explore ways that local communities such as yours can contribute to the improvement and production of better climate information and related agricultural advisory services. As such, we are hoping to first understand locally specific contexts about life, about decision making, about social structures, and about aspects of life that are unique to your community and your livelihoods.

Your name will not appear in any data that is made publicly available. The information you provide will be strictly used for research purposes; your answers will not



affect any government benefits or subsidies you may receive now or in the future. Any data we glean from your individual answers will be aggregated. If we use specific information from our interview, we will remove your name.

Do you consent to be part of this study? You may withdraw from the study at any time during the course of the interview/conversation. If there are questions that you would prefer not to answer then we respect your right not to answer them.

Has consent been given? (01=Yes, 00=No)	[]	CONSENT

SECTION I. KEY INFORMANT RESPONDENT DETAILS AND TYPE- *Ideal respondent: District extension or agricultural officers, NGO informants that have been working in the community for some time, or local leaders (village chief, religious leader, school teacher who has been a member of the community for a long time, or another respected elder, both men and women).*

These questions provide basic information about the respondent that is necessary to understand who is being surveyed.

What is being assessed:

• Gender, position in the community, time in that position, ethnicity

1. Name of Main respondent a. First name b. Last name	RESPNAM1 RESPNAM2	<i>g</i>
2. Sex of the respondent (01=Male, 02=Female)	RESPSEX	[]
3. Age of respondent	RESPAGE	24
4. Respondent's ethnicity/tribe/caste (see codesheet)	ETHNIC	8
5. Position/role in community/organization and duties	RESPROLE	<i>B</i>
6. How long in above position/role	RESTIME	34
7. Previous positions/roles in community/organization	RESPREV	Z
8. Village Name		

Section II: Community Risks

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This section is meant to provide a better sense of the risks facing the community. This will influence the kinds of information they find valuable as well as how/whether they use that information.

What is being measured:

Top threats as an indicator of risks to productivity

1. What are the top 5 risks/threats that jeopardize your community's agricultural productivity (in the last 5 years)?

a.	What are the top 5 risks/threats that	b. How do these risks/threats	c. What can village leadership do to help	d. How do you help people
	jeopardize your community's	impact your community?	their community specifically address	within your community cope
	agricultural productivity (in the last 5		these challenges before (prevent) they	with these risks if they
	years)?		impact your community?	occur?
i.				
ii.				
iii.				
iv.				
٧.				

Codes for 2a: 1. Drought, 2. Erratic rainfall ,3. Flood, 4. Strong winds, 5. Hailstorms, 6.Pest and diseases, 7. Soil erosion, 8. Poor seed quality, 9. lack of inputs (seeds, labor, farm equipment, etc), 10. Lack of cash, 10. Lack of agricultural information, lack of climate information, 11. Lack of technical knowledge, 12. Lack of credit, 13.Insecure property rights, 14.Other (please specify); Codes for 2.b:1.Low yield, 2. crop failure, 3. Food insecurity, 4. Property damage, 5.late cropping calendar, 6.animal death, 7.lack of water, 8.poor soil fertility, 9.increased poverty, 10. Hunger 11. Other (specify)

Section III: Sources of information

This section will provide information on the key sources of information available to community leaders over the course of the project. This can be compared to responses from individuals to see to what extent information making it to leaders is adequately disseminated to individual households.

What is being assessed:

Sources of information for community leaders as an indicator of information availability.

Where and how people share different kinds of information as an indicators of information flows constraints to dissemination.

Where leaders get advice as an indicator of trusted sources.

- 1. What types/kind of information are most useful for your community members to make key decisions in their agricultural activities (farming, cattle rearing, etc.)?
 - a. What makes these kinds of information useful? (Enumerators prompt with: Can you provide/describe 3 key pieces of information that people need to be successful farmers/pastoralists?)
- 2. What kind of information about agriculture (or grazing) is available to you as a community leader/notable?
 - a. How do you obtain this information?

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b. Do you face any barriers/constraints do you face in obtaining this information? Where do you get your important agricultural information and whom do you share it with?

2a. Please list types of information used below in line with your response to question 1 section III:	b.For each type of info: list the source (who creates/ generates that info)?	c. For each type of info: How do you get it (methods/means of delivery)	d. Whom specifically did you share this information with (who did you inform)?	e.How was it communicated to your community once you received it?
i.				
ii.				
iii.				
iv.				

Note to enumerators: Probe respondent to provide concrete examples of information they received and then communicated to the community. *enumerators prompt if necessary the following: **Type**-climate warning, weather advisory, etc.; **Methods/means of delivery** (info channel)-at house of worship, rural radio, megaphone at village center, thru SMS; **When** (information lead time)-days, weeks, months before event; **To Whom**-other village leaders, neighbors, village citizens, etc.; Who not reached—(explain)

- 3. In your view, are different types of information accessed by farmers/pastoralists? (yes-01, no-00)
- 4. In your opinion, what additional information would be useful for your community when making (insert livelihood) decisions?
- 5. Do you think underrepresented groups (i.e. youth, the very poor, the landless, etc.) access agricultural advisories the same or differently? (yes-01, no-00).
 - a. If yes, please explain.
- 6. What are the most trusted sources/messengers of advice on agriculture, grazing, and climate-related issues in this community?

Section IV: Sources and Communication of Climate Information (Specifically)

Note: this section deliberately comes toward the end so as not to bias the previous questions in favor of climate information).

This section assesses the kinds of information available to village leadership, barriers to dissemination, and the kinds of climate information still desired by leadership.

What is being assessed:

2.

- Kinds of climate information/training received and frequency of information as indicators of the availability of information.
- Changes in livelihoods practices as an indicator of the ability to act on climate information.

Kinds of climate information/training received and requency of information; response to information; communication channels; barriers to communication.

1. Is scientific climate information available in your community?



IF AND ONLY IF, ANSWER TO Q 1 IS YES, PROCEED WITH Questions.

- 2. Which specific climate information have you been receiving?
 a. How did they influence your decision-making?

Type of information re	eceived	a. Which climate informatio n have you been receiving? (01=Yes, 00=No)	b. How often do you receive this info? 01=daily 02=weekly 03=monthly 04=season ally	c. From whom/h ow did you receive the info? List up to three	d. How much time ahead of forecast event did you receive this info? 01= months, 02= weeks, 03= days, 04= a few hours	e. Who usually receives the information in the household? 01=Husband, 02=Wife 03=Both, 04= Child; 05= all of them, 06=Other family member (specify)	f. Did information come with advice on how to use the information in your farming? (01=Yes, 00=No)	g. If yes, what kind of advice was provided?
Forecast of an extreme event (e.g: heavy rains, storm, dry spell, strong winds, cyclone, tidal surge, other)	RKEX	[]	[]	[] [] []	[]	[]	[]	
Forecast of the start of the rains (onset)	FCRN	[]	[]	[] []	[]	[]	[]	
Forecast of the rains for the following 2-3 months (seasonal forecast)	FCMN	[]	[]	[] [] []	[]	[]	[]	
Forecast of the weather for today and/or next 2-3 days	FCDY	[]	[]	[] []	[]	[]	[]	



Type of information rec	ceived	a. Which climate informatio n have you been receiving? (01=Yes, 00=No)	b. How often do you receive this info? 01=daily 02=weekly 03=monthly 04=season ally	c. From whom/h ow did you receive the info? List up to three	d. How much time ahead of forecast event did you receive this info? 01= months, 02= weeks, 03= days, 04= a few hours	e. Who usually receives the information in the household? 01=Husband, 02=Wife 03=Both, 04= Child; 05= all of them, 06=Other family member (specify)	f. Did information come with advice on how to use the information in your farming? (01=Yes, 00=No)	g. If yes, what kind of advice was provided?
Forecast for parasites or plant/animal diseases	RKPD	[]	[]	[] []	[]	[]	[]	

- 3. Are people able to act on this information listed above? Why/why not?
- 4. Were there people you felt were not adequately reached by climate information and related agricultural advisory services?
 - a. Why or why not?
- 5. Can you describe the system that is in place to communicate climate information in the community? Enumerators: Assist respondent to draw a flowchart that tracks the flow of information from the Met Service to the community. Be sure to specify communication channels used in each line of the flowchart. Also specify (if any) channels through which information spreads to other communities:
- 6. Have there been any climate trainings in your community in the last year?
 - a. If yes, what material was covered?
 - b. Who provided the training?
 - c. How were participants selected? Where there groups of
 - d. Did the training offer new methods for sharing climate information with the community?
 - i. If yes, did you use any of these methods?
 - ii. Did those methods succeed? Why or why not?
- 7. Have you faced barriers/constraints in sharing new (climate/agriculture) information with your community?
 - a. If yes, which ones?
 - b. Can you provide an example?
- 8. Please provide 2-3 ways you would like to see climate information **communication** improved in your community:

1.



2	
L.	
3.	

9. If you could receive five types of climate information to enable you to better manage climate-related risks in your community, what would these five types of climate information be? Please mention what format you would prefer to receive the information in, from whom and by when. Finally, please rank them by importance: [1^{st=}most important—5^{th=}least important]

a. Type of Information (key)	b. Lead time (by when do you wish to receive this information)	c. Format (key)	d. Who (Messenger)	e. Rank: type of information
i.				
ii.				
iii.				
iv.				
V.				

Guidelines for -Type of Information: 1 Forecast on rainfall expected over the season (seasonal rainfall outlook)- specify whether total rainfall quantity needed or distribution over the season; 2: Forecast on onset; 3: Forecast on end of the rainy season; 4: Number of days of rainfall; 5: temperature forecast (specify average or extremes); 6 monthly update of climate forecast; 7. Daily and weekly weather forecast; 8. Real time weather information (daily rainfall and temperature); 9: probability of extreme weather events (heavy rainfall events or dry spells occurring); 10: other (please specify). Key for Lead time: 1: at beginning of season (mention exact month/period desired); 2: a month before forecast events; 3: a week before forecasters know; 4: as soon as forecasters know. Key for-format: 1:sms in cell phones; 2:voice message in cell phone; 3:radio message; 4: television program; 5:extension agents visits; 6:visit from NGO; 7:word of mouth; 8:newspaper 9:advertisement; 10: village communicator; 11: village elder; 12: other (specify)Key for - Who: 1: central weather station, 2: local extension agents, 3. Local weather station 4: Traditional forecaster, 5: Traditional leaders, 6: Expert farmers; 7:NGO workers, 8: Friends, relative, 9: other (pls specify).

Section V: Gender and Access to Climate Information

This section is important for monitoring whether, at the village level, climate services are available to both men and women. It can corroborate individual answers or point to potential blockages in equal access to information.

- What is being assessed: Ability to seek climate advice and access to training as indicators of equal gender access
- 1. In your view, are different types of information accessed by men and women? (yes-01, no-00)
 - a. If yes, please explain why?
- 2. Do men and women have equal opportunity to attend trainings on climate information? (01: yes; 00: no) [____]
 - a. If yes, how do you ensure that women are able to participate?
- 3. Do men and women have equal access to climate information? (01: yes; 00: no) [____]
 - a. If not, why not?
- 4. Do men and women have equal ability to act on climate information? (01: yes; 00: no) [____]
 - a. If not, why?



M&E PROTOCOL TO EVALUATE CLIMATE SERVICES FOR FARMERS AND PASTORALISTS: THE BASELINE SURVEY

INDIVIDUAL HOUSEHOLD SURVEY

Introduction and consent by respondent 1 Data Handlers:

1. Data nanuleis.					
	Name 🖎	Code	Date (d/m/y)		Signature
Interviewer		_ []	//		
		FLDCODE	FLDDAY, FLDMTH,FLDY	EAR	
Supervisor		_ []	//	 _	
		SUPCODE	SUPDAY,SUPMTH,SUPY	EAR	
1st Data entry clerk		[1	//		
·					
County/District name	Village na	me:			
Godine, Plotific Hamo	vago na				
GPS coordinates (UTM)		N: _	GPSN S:	GPSS	
(to be filled in by site supervisor when	e applicable)	E:	GPSE W:	GPSW	
Refore the beginning of the int	erview read out the follow	ing paragraph	and ensure that the respondent (understands before asking fo	or consent
			CRAF) a non-governmental rese		
S .	•		climate information services that	, ,	
			ours of your time. We would like to		
			make this information more useful i		
			n of better climate information serv		
specific contexts about file, about	t decision making, about so	ciai nomis and s	tructures, and about aspects of life	that are unique to your commi	iriity arid your iiveiirioods.
Your name will not annear in any	data that is made nublicly:	availahle The in	formation you provide will be strictly	v used for research nurnoses:	your answers will not affect
			Any data we glean from your individ		
use specific information from our			any data we glean nom your marvic	idai ariswers wiii be grouped w	illi Olileis alisweis. II we
use specific information from our	interview, we will remove y	oui name.			
Do you consent to be part of this	study? You may withdraw t	rom the study at	any time during the course of the i	interview/conversation If there	are questions that you
would prefer not to answer then			any ame daming the course of the h	nter vie in centre readenii ii tirere	are questions that yeu
	· · · · · ·	anonor mon.			
Has consent been given? (01=Ye	es, 00=No)		[]	CONSENT	

Section I: Household Type and Respondent Information



The ideal respondent: household head and/or spouse. Sampling strategies should ensure that equal numbers of men and women are surveyed. Most of these questions can be completed without having to question the respondent directly. Be sensitive about the way you gather this information.

1. Name of Main respondent		RESPNAM1	>=
c. First name		RESPNAM2	
d. Last name			<u> </u>
2. Sex of the respondent (01=Ma	ale, 02=Female)	RESPSEX	[]
3. Age of respondent		RESPAGE	<u> </u>
4. Level of education			
4. What is the relationship of ma	ain respondent to household head	RESPREL	[]
(00=Head,	05=Nephew/Niece,		
01=Spouse of head,	06=Son/daughter-in-law,		
02=Parent,	07=Brother/sister,		
03=Child,	08= Other related (specify)		
04=Grandchild,	09=Other unrelated (specify)	SPECREL	<u> </u>
5. Respondent's ethnicity/tribe/	caste* see code sheet	HHETHNIC	<u> </u>
6. Respondent's religion* see code	e sheet	HHRELIG	<u> </u>
7. Primary livelihood activity of	the household head	RESLIVE	[]
00=farmer			
01=agro-pastoralist			
02=pastoralist			
03=trade			
04= other (specify)			
8. Household type		HHTYPE	
01=Male headed, with a wife of			11
02=Male headed, divorced, sir			
03=Female headed, divorced,	single or widowed,	SPECTYPE	<u> </u>
06=Child headed (age 16 or under)/Orphan		OI EOTTI E	
07=Other, specify			
9. Number of people in HH: (demographic section, #/age)		[]	
9. a) Number under the age of 5.		HHLT5	[]
9 b) Number over the age of 60 yrs.		HHGT60	[]



Section II: Additional Demographic Information – Household Assets and Risks

This section is meant to provide a better sense of the resources available to the respondent, which will shape their access to information and their ability to act on that information. This will also help to monitor potential constraints to the use of the information provided throughout the project.

What is being assessed:

- · Assets, facilities, land ownership as indicators of socio-economic status
- Key threats as indicators of risks
- 1. Which of the following items and how many of them does your household own at the present time?

Which of the fo	ollowing items and I	now many of them	01=Yes,	Number
does your hou	sehold own at the p	resent time	00=No	
a. Radio		ASRADIO	[]	[]
b. Televi	sion	ASTV	[]	[]
c. Cell pl	none	ASCELLPH	[]	[]
d. Bicycle		ASBIKE	[]	[]
e. Motore	cycle	ASMTBIKE	[]	[]
f. Car or	truck	ASCAR	[]	[]
g. Solar	panel	ASSOLAR	[]	[]
h. Tracto	r	ASTRACT	[]	[]
i. Mecha	anical plough	ASMECHPL	[]	[]
,	e.g. for grinding s or oilseeds)	ASMILL	[]	[]
k. Improv	ved stove	ASSTOVE	[]	[]
I. Gener diesel	ator (electric or	ASMOTOR	[]	[]
m. Batter batter	y (large, e.g. car y)	ASBATT	[]	[]
n. Cows		LIVSTCK	[]	[]
o. Small and sh	livestock (goats neep)	SMLIVSTCK	[]	[]
p. Other	(specify):	ASSETZ	[]	[]
q. Other	(specify):	ASSETAA	[]	[]



2. Does your household have access to the following?

Type of Facility	01:	Since (year)	Distance (to location) in km or distance in (hrs)	Mode of transport to locale (foot, bicycle, motorcycle, car, etc.) please specify
1. Electricity				
2. Telephone (land line)				
3. Drinking water (piped)				
4. Drinking water (river)				
5. Drinking water (rain harvest)				
6. Other sources water (specify)				
7. Water for livestock (specify source)				
8. Primary School in community				
9. Secondary School in				
10. Medical Center in the community				



2.	Under w	hich conditions do you have access to the land you farm or use for grazing? (Circle only one. Provide explanation as necessary).
	a.	I own the land and the title is in my name
	b.	My spouse owns the land and the title is in his/her name

c.	Permit to occupy	land	owned b	ру
	_			

- **d.** Lease
- e. Customary right in my name
- f. Customary right in my spouses name
- g. Communal land
- **h.** Rent
- i. Land Loaned from_____
- **j.** Farm labor trade
- k. Other (please specify): _____
- 3. Risks to Livelihood Productivity:

What are the top 5 risks/threats that jeopardize your livelihood productivity? (specify Livelihood type:)	b. How do these risks/threats impact you?	c. How do you prevent these risks from impacting you?	d. How do you cope with the impact of these risks if they occur?
i.			
ii.			
iii.			
iv			
V.			

Codes for 2a: 1. Drought, 2. Erratic rainfall ,3. Flood, 4. Strong winds, 5. Hailstorms, 6.Pest and diseases, 7. Soil erosion, 8. Poor seed quality, 9. Lack of inputs (seeds, labor, farm equipment, etc), 10. Lack of cash, 11. Lack of agronomic information, 12. Lack of climate information, 13. Lack of technical knowledge, 14. Lack of credit, 15.Insecure property rights, 16.Other (please specify); Codes for 2.b:1.Low yield, 2. crop failure, 3. Food insecurity, 4. Property damage, 5.Late cropping calendar, 6.Animal death, 7.Lack of water, 8.Poor soil fertility, 9.Increased poverty, 10. Hunger, 11. Other (specify), codes for 2.c: 1.Nothing is done, 2.Planting trees, 3.Irrigation, 4.Drought tolerant varieties, 5.Change crop type, 6. Diversification, 7.Soil conservation techniques, 8.Change cropping dates, 9.Change land area, 10.Other (specify); codes for 1d. 1.Do nothing, 2.Buy food, 3.Sell livestock, 4.Sell household assets, 5. Reduce meals, 6.Off-farm labor, 7.Small business, 8. Forest product (charcoal, firewood) sales, 9.Loan, 10. Family solidarity, 11. Seek help from neighbors

Section III: Sources of Information (General)

This section will provide information on the sources of information people are using over the course of the three years. This will help to monitor whether respondents change the kinds of information they use over the course of the project and if their perceptions of the relative importance of different kinds of information has changed.

What is being assessed:



Sources of information used in decisions and ranking of sources – as indicators of the importance of climate and other forms of information in decision-making. Sources of advice - as indicators of most trusted sources of information

These indicators can be used to track the availability and use of climate services for decision-making over time.

1. Please tell us about the information you currently use to inform your agricultural decisions (for farmers and agro-pastoralists only):

Type of Information serving as decision trigger:	When you prepare fields (clearing/slashing)	2. When to plough	3. When to plant	4. When to weed	5. When to apply fertilizer / pesticide	6. When to harvest
Category 1. Observations of the Environment / Indigenous Knowledge (specify nature in notes)						
Notes:						
Category 2. Traditional Cropping calendar						
Category 3. Personal Experience (action oriented)						
Category 4. Experience from other farmers / successful farmer in community						
Category 5. Climate/weather forecast						
Category 6. Advice from Expert outside community						
Other (specify):		1	1	1	1	I

2. Please tell us about the information you currently use to inform your large-stock (repeat the table for both cows and bulls) management decisions (for pastoralists and ago-pastoralist only):

Type of Information serving as	What kind?	Where to graze your	When to move cattle	When to sell cattle	When to vaccinate cattle	Milking cows	l
decision trigger:		cattle					l



Category 1. Observations of the Environment / Indigenous Knowledge (specify nature in notes)				
Notes:	2		2	
Category 2. Traditional Cropping calendar				
Category 3. Personal Experience (action oriented)				
Category 4. Experience from other farmers / successful farmer in community				
Category 5. Climate/weather forecast				
Category 6. Advice from Expert outside community				
Other (specify):		1		1

3. Please tell us about the information you currently use to inform your small-stock management decisions (for pastoralists and ago-pastoralist only):

Type of Information serving as decision trigger:	What kind?	Where to graze your small-stock	When to sell small- stock	When to vaccinate small-stock
Category 1. Observations of the Environment / Indigenous Knowledge (specify nature in notes)				
Notes:				
Category 2. Traditional Cropping calendar				



Category 3. Personal Experience (action oriented)			
Category 4. Experience from other farmers / successful farmer in community			
Category 5. Climate/weather forecast			
Category 6. Advice from Expert outside community			
Other. Please specify			

4. Please rank the sources of information above according to their importance in helping you to make decisions.

Type of information	Rank
Category 1.	
Observations of the Environment / Indigenous Knowledge	
(specify nature in notes)	
Notes:	
Category 2.	
Traditional Cropping calendar	
Category 3.	
Personal Experience (action oriented)	
Category 4.	
Experience from other farmers / successful farmer in community	
Category 5.	
Climate/weather forecast	
Category 6.	
Advice from Expert outside community	

5.	Are you currently	satisfied with	information you	have to inform your	(insert main l	livelihood) de	ecisions?
•	, ,				(

- a. 01-yes; 00-no [___]b. If not, what specific additional information would enable you to make better (insert main livelihood) decisions?
- 6. Where do you get important (insert main livelihood here) information and whom do you share it with? Through which communication channels? (*Enumerators:* fill in table below):



Type of information	a. Where do you obtain each type of information [if obtain from multiple places, please use multiple lines to designate where, and whom it is shared with] (see codes below):	b. Person information is obtained from : 0=spouse; 1=non-spouse relative; 2=friend; 3=neighbor; 4=leader; 5= village official; 6=experts; 7=other (please specify); 99=n/a.	c. Person information is shared with: 0=spouse; 1=non-spouse relative; 2=friend; 3=neighbor; 4=leader; 5= village official; 6="experts"; 7=other (pls specify); 99=n/a.	d. When do you share this information ? (see codes below)
Information about what crops to plant				
Information on when to plant crops				
Information about when to move large-stock;				
Information on when to move small-stock				
Information about where to graze				
Scientific information about the climate				
Traditional information about climate				
Other information (please specify)				
Other (please explain):				

Codes a: 01-At village meetings; 02-At the village chief's office; 03-At NGO sponsored meetings/trainings; 04-At the market; 05-At traditional meetings; 06-In the village center/near shops; 07-At their homes-I seek them out; 08-At my home, if they come visit; 09-At women's associations/groups; 10-At men's groups; 11-At farmers co-ops; 12-Sports groups; 13-Over the radio; 14-Via SMS; 15-Via written notice; 16-other

Codes d: 01-as soon as I learn about it; 02-when it is convenient; 03-when I get home; 04-when it comes up in conversation; 05-during meetings; 06-when I see the person I want to share the information with; 07-when I coordinate with others; 08-when I remember; 09-other (please specify).

7. Where (to whom) do you turn when you need advice on challenges related to your agriculture or climate changes? (**Note to enumerator** – mark yes for those listed, do not prompt or read through the whole list. Add as many "others" as needed). (01: yes; 00: no).



	Key:	
a.	Village leader	a. []
b.	Traditional leader/healer	b. []
C.	Child or relative who has been educated	c. []
d.	Village official (village government member, committees etc.)	d. []
e.	District government representative	e. []
f.	NGO staff	f. []
g.	Researcher	g. []
h.	Government agriculture extension agent	h. []
i.	"Expert" farmer	i. []
j.	Wealthy farmer in the community	j. []
k.	Neighbor	k. []
l.	I do not usually seek out someone for further information	l. []
m.	Religious/spiritual leader	m. []
n.	Other (please specify):	n. []
0.	Other (please specify):	

Section IV: Use of Information (Generally) and Perceived Impacts

This section tracks changes to agricultural and pastoral activities asking for the motivation for the change (to connect it to climate services) and the perceived impact of this change. The questions in this section intentionally neglect to ask about CS directly in order to validate answers in the next section.

What is being assessed:

Changes in planting time and other livelihood patterns (and reasons for those changes) as indicators of actual use (behavior change) as a result of climate services.

Perceptions of impacts of these changes as an indicator of actual impacts.

1. Did you make any changes to the timing of your planting this year? (farmers and agro-pastoralists only) (Enumerator, fill in answers using the table below)

a. Crop type (see codesheet)	b. When did you plant this crop last year? (estimate the month and week if possible)	c. When did you plant this crop this year? (estimate the month and week if possible)	e. Was your planting time this year early, late, average/usual timing (early=01; late=02; average=00)	f. This year, if this planting was early or late, can you explain why?



- Did you make any other significant changes to your agricultural activities last year?
 a. If yes, what were they?
 b. If yes, why did you decide to make those changes?
 c. What do you believe the impact of this change has been?

a. Nature of the change	b. Reason for the change	c. Impact of the change



- 3. Have you made any significant changes to your livestock management practices (for pastoralists and agro-pastoralists only). (Enumerator, fill in answers using the table below)
 - a. If yes, what were they?
 - b. If yes, why did you decide to make those changes?
 - c. What do you believe the impact of this change has been?

a. Nature of the change	b. Reason for the change	c. Impact of the change

Section V: Use of Climate Information (Specifically) and Perceived Impacts

This section assesses whether or not climate information has been reaching people, with what frequency, and to what effect.

What is being assessed:

Kinds of climate information/training received and frequency of information as indicators of the availability of information.

Changes in livelihoods practices as an indicator of the ability to act on climate information.

The perceived impact of behavioral changes as an indicator of actual impact.

Note: this section purposefully comes toward the end so as not to bias the previous questions in favor of climate information.

- 1. Have you received scientific climate information in the last year? (01: yes; 00: no).
 - a. If yes, what kinds of climate information have you been receiving?
 - b. How did they influence decision-making? (Use the table below to collect this information)
 - c. What were the specific impacts of using this information?



Type of information rec	eived	a. Which climate information have you been receiving? (01=Yes, 00=No)	b. How often do you receive this info? 01-daily 02=weekly 03=monthly 04=seasonally	c. From whom/how did you receive the info? List up to three	d. How much time ahead of forecast event did you receive this info? 01= months, 02= weeks, 03= days, 04= a few hours	e. Who usually receives the information in the household? 01=Husband, 02=Wife 03=Both, 04= Child 05= Other family member (specify) 06=all the above	f. Did information come with advice on how to use the information in your farming? (01=Yes, 00=No)	g. Were you able to use the advice? (did you apply the advice?) Why/ why not? (note details) (01=Yes, 00=No	✓ h. What specific agriculture practice did you change after receiving the information?	i. Which specific impacts have you noticed following this change of practice?
Forecast of an extreme event (e.g: heavy rains, storm, dry spell, strong winds, cyclone, tidal surge, other)	RKEX	[]	[]	[] [] []	[]	[]	[]	[]	[]	[]
Forecast of the start of the rains (onset)	FCRN	[]	[]	[] []	[]	[]	[]	[]	[]	[]
Forecast of the rains for the following 2-3 months (seasonal forecast)	FCMN	[]	[]	[] []	[]	[]	[]	[]	[]	[]
Forecast of the weather for today and/or next 2-3 days	FCDY	[]	[]	[] []	[]	[]	[]	[]	[]	[]
Forecast for parasites or plant/animal diseases	RKPD	[]	[]	[] [] []	[]	[]	[]	[]	[]	[]
Notes										

Codes c: 01-Radio; 02-Television; 03-Gov't ag/vet extension; 04-NGO project officers; 05-friends; 06-relatives; 07-neighbors; 08-Meteorological office; 09-teachers in local schools; 10-newspaper; 11-traditional forecast/indigenous knowledge; 12-your own observation; 13-local farm group/co-op; 14-local village meetings; 15-local social events; 16-religious organization; 17-cell phone (SMS); 18-internet; 19-other (explain below). Codes h. 01-land management; 02-field location; 03-crop type; 04-crop variety; 05-soil conservation; 06-water conservation; 07-planting regiment (intercropping, mono-cropping); 08-other (please specify). Codes i: 01-improved yields; 02-less pest damage; 03-less crop damage; 04-soil health improvement; 05-agro-forestry; 06-intercropping; 07-terracing; 08-green manures; 09-livestock manures; 10-fertilizers; 11-pesticides; 12-permaculture practices; 13-zero grazing livestock; 14-improved breeds (livestock); 15-improved seeds; 16-other (specify). Codes i: 01-improved yields; 02-less pest damage; 03-less crop damage; 04-soil health improvement; 05-other (specify)

- 2. Over the last year, have you received more or less climate information for agriculture or pastoral activities than in the past? (00: decreased; 01: stayed the same; 02: decreased).
 - a. If your access to information has increased, please describe this change in more detail (more frequent information, different kinds of information,



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3.	Have you attend traini	ng about climate	e information in	the past year?	(01: yes; 00: no)	[]
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If yes, what material was covered?

4.	Did you modify yo	ur activities after this	s training? (01:	yes; 00: no) [
				, , , <u></u>

- If yes, please provide an example of how you changed your activities in response to this training.
- If not, why not?

5. If you could receive five types of climate information to enable you to better manage climate-related risks in your farming activities, what would these five types of climate information be? Please mention what format you would prefer to receive the information in, from whom and by when. Finally, please rank

them by importance: [1^{st=}most important—5^{th=}least important]

a. Type of Information (key)	b. Lead time (by when do you wish to receive this information)	c. Format (key)	d. Who (Messenger)	e. Rank: type of information
i.				
ii.				
iii.				
iv.				
V.				

Guidelines for -Type of Information: 1 Forecast on rainfall expected over the season (seasonal rainfall outlook)- specify whether total rainfall quantity needed or distribution over the season: 2: Forecast on onset; 3: Forecast on end of the rainy season; 4: Number of days of rainfall; 5: temperature forecast (specify average or extremes); 6 monthly update of climate forecast; 7. Daily and weekly weather forecast; 8. Real time weather information (daily rainfall and temperature); 9: probability of extreme weather events (heavy rainfall events or dry spells occurring); 10: other (please specify). Key for Lead time: 1: at beginning of season (mention exact month/period desired); 2: a month before forecast events; 3: a week before forecasters know; 4: as soon as forecasters know. Key for-format: 1:sms in cell phones; 2:voice message in cell phone; 3:radio message; 4: television program; 5:extension agents visits; 6:visit from NGO; 7:word of mouth; 8:newspaper 9:advertisement; 10: village communicator; 11: village elder; 12: other (specify) Key for - Who: 1: central weather station, 2: local extension agents, 3. Local weather station 4: Traditional forecaster, 5: Traditional leaders, 6: Expert farmers; 7:NGO workers, 8: Friends, relative, 9: other (pls specify))

Section VI: Gender and Access to Climate Information

This section is important for monitoring whether climate services are both men and women, and for determining whether both have equal opportunity to act on that information. The yes/no questions provide a quick response that can be assessed in relation to other variables, while the follow-up allows for more contextual information.

What is being assessed:

Ability to seek climate advice as an indicator for equal gender access



Ability to act on that information (for men and women) as an indicator of gender equality.

1.	Do men have the ability to seek advice or instruction to explain things they do not understand in their farming related to climate and weather challenges? (01) yes; 00: no) [] a. If yes, where do they generally go? b. If no, what prevents them from seeking this advice?
2.	Do women have the ability to seek advice or instruction to explain things they do not understand in their farming related to climate and weather challenges? (01: yes; 00: no) [] c. If yes, where do they generally go? d. If no, what prevents them from seeking this advice?
3.	Do men and women have equal access to climate information? (01: yes; 00: no) [] e. If not, why not?
4.	Do men and women have equal ability to act on climate information? (01: yes; 00: no) [] a. If not, why?

5. Who controls the following means of production in the community?

Resource / means of production	Who <u>controls</u> each of the following resources? (not specific names of people-e.g. husband, wife, male child, female child, other relative, outsider, village government, etc.)	Can women <u>access</u> this resource equally? 01=yes; 00=no	Can women <u>own</u> this resource? 01-yes; 00-no	Is this resource <i>most utilized</i> by 01=women; 02=men; 03=equally/both
Farm land				
Seeds				
Fertilizer				
Pesticide / fungicide				
Cart & traction (bullocks /				
horse)				
Farming equipment				
Labor (hired)				
Fodder				
Grazing areas				
Traditional medicinal plants				
Construction material				
Livestock				
Credit				



Resource / means of production	Who <u>controls</u> each of the following resources? (not specific names of people-e.g. husband, wife, male child, female child, other relative, outsider, village government, etc.)	Can women <u>access</u> this resource equally? 01=yes; 00=no	Can women <u>own</u> this resource? 01-yes; 00-no	Is this resource <i>most utilized</i> by 01=women; 02=men; 03=equally/both
Training/capacity building				
Markets (output for)				
Farm related information				
Climate related information				
Other (explain):				

Section VII: Impacts

What is being measured:

- HH crop and livestock production as an indicator of climate service impacts on agricultural yields
- External sources of support as a measure of impact on household self-reliance

1. Please answer the following questions about your HH food supply for this past year (12 months)

a. Did you produce enough staple food for the entire year?	Yes=01;
	No=00 [
c. If it is not enough, how do you cover the gap? (fill in codes	[]
below)*	
d. Is your supply increasing, decreasing, fluctuating, or constant year to year from your own farm?	
e. What factors contribute to these changes and why?	

2. Has the household received any of the following kind of support in the past 12 months?

Type of support	In last 12 months (01: yes; 00: no)	In last 36 months (3 years)? (01: yes; 00: no)		
Food Aid				

^{*}Codes: 1=sell assets (specify, land, livestock, jewelry etc.); 2=get food from relatives; 3=purchase food using cash from nonagricultural resources; 4=obtain food aid; 5=other (please specify)



Subsidized fodder for livestock	
Subsidized seeds	
Subsidized fertilizer (
Subsidized farm tools and machinery	
Food price discounts	
Other (please specify)	

3. Enumerators: please fill out this table about respondent's Total Crop Production per season

(farm yields income production costs)

	(latifityleids, income, production costs)									
0	٠,	1.Area (acres)	Intercropped	3.Production/	4.Yield normal	5. Enumerator: please indicate	8. Production	9. yield amount/production	10. Yield/ production used	
Crop type*			(yes/no)	Yields last year (kg or in	(average) year (kg or	(fill in) equivalent between 1 kg	consumed (kg or	used for gifts (kg or local	for other purposes (in kg or	
code sheet)			,					unit)	local unit)	
						1 local and	loodi diiit)		loodi dinity	

4. Total Livestock Production (yields, income, + production costs):

Farm animal and/or fish* (see code sheet)	 	c. Sale price (per animal)		e. Purchase price (per animal)	f. Number consumed by household	g. Number given in	h. Number given out	i. Number dead
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