



Climate Information Services Module

Climate information is the relevant information for adaptation to climate change, long-term planning and early warning systems. This module hopes to identify and understand available and potential sources of weather and climate-related information in a community, how this information is disseminated, and how beliefs, access and use have changed over time. There are also tools to help evaluate national weather and seasonal forecasts in terms of understanding and use.

Tools:

This module includes a group of tools that when implemented sequentially provides us with the necessary background information for designing an agriculture programme that can integrate gender, with special consideration for vulnerable groups.

Tool	Suggested Use
Climate information ranking	Two sessions – men and women Assess different sources (both individuals and organizations) of weather and climate-related information and their credibility, legitimacy and salience.
Information networks game	Two sessions – men and women Creating profiles of access and control over information channels.
Scientific forecasting	Two sessions – men and women This questionnaire assesses levels of understanding and use of existing weather and seasonal forecasts.
Key informant interviews	Understanding institutional strategies and approaches for inclusion and engagement of marginalized groups.

Flexibility and Use:

This module can be used independently to prepare for a climate-resilient agriculture programme, or in conjunction with any other module to prepare for a programme with multiple climate change and gender objectives. If used in conjunction with other modules, the research team should take care to plan the sequential roll-out of tools so as to avoid repetition. For example, a baseline village map developed in Module 1 can be added to Module 2 to identify livelihood resources and matched with Module 3 to identify areas of with mitigation potential. The tools in this module are designed to sequentially build on each other. However, if you already have the information generated by one or more of the tools, you can easily drop them and concentrate your time and resources on the other tools.



Materials: • Poster Paper • Markers • Counters

Climate Information Ranking

Participants: Separate groups of men and women [8-10] of mixed socio-economic status and ages.



Time: 1 hr

Material Preparation

- Review the concepts of **weather, climate and probability.**

As a facilitator being very clear about the difference between weather and climate is important before discussing forecasting with your focus group. It may also be the case that you ask the focus group to define weather first! Many languages do not have a word for “weather” but refer to rains or wet and dry seasons. Weather in general refers to short term conditions such as rainfall, temperature, humidity, wind, floods, hail etcetera. A *weather prediction* therefore is about rainfall, temperature, humidity, moisture in the next **1 - 10 days**. Climate generally refers to the average patterns in weather that exists in a region over time.

Forecasts issued by the National Weather Service often use a “PoP” (probability of precipitation) statement, which is often expressed as the “chance of rain”. If there is 40% chance of rain predicted in x Province, it means that the forecasters are 40% **‘confident’** that it will rain. That also means that forecasters are 60% **‘confident’** that it will *not* rain.

- Be sensitive to local belief systems.

Anticipate this activity to bring forth **traditional knowledge** and practices of anticipating weather. There may include natural signs, myths and beliefs, or stories that have been passed down which may shape local understandings of weather and climate. Interviewers may encounter a lack of response around traditional sources initially for a number of reasons. For example:

- The information is exclusive to certain groups/ages
- The information is considered sacred/secretive
- The information is considered “backward”
- The information is in conflict with a particular identity

Changing attitudes around the validity, value or use of these beliefs should be noted and probed further if appropriate.

- Reflect on the specific climate and weather information sources that your project is interested in. What are these? _____
- If you have identified specific information sources for your project, you may choose to use them in the ranking exercise purposefully to assess perceptions of their “Credibility” and “Salience” (Step 6-8)

Activity Prep

- Arrange participants in a circle.
- Clear the ground so that a large area can be seen and used by all.



Note takers must be very aware of climate versus weather information. Focus group participants may often mix the two types of information together, but be aware to note the differences in your reporting sheets as well as in your notebook.

Step 1 - Introduce yourself and the team and then the activity.

Step 2 - Ask the participants to introduce themselves and note the name and any special information for each individual (youth, elderly, disabled etcetera)

Step 3 – What is probability? We recommend warming up the focus group by discussing local concepts of “probability”. You may find that the local concept challenges scientific forecasting. This opening discussion may prompt rich information on trust, myth, religion and science as well as shifting cultural beliefs due to increased variability of weather from climate change.

Checklist 1

Is there a local word or concept for probability? (***We suggest using the English term first so as not to pre-define the concept.**)

Can anyone explain what probability is? (not just in terms of weather)

Can anyone think of a time where they made a decision based on high or low probability of something happening?

Has anyone made such decisions based on probabilities related to the weather?

Step 4 – Now that you have defined probability, begin a discussion on weather information and climate information. Make a list of the different sources of **weather** information (short-term weather) community members use then probe each source using some of the questions from Checklist 2.

Step 5 – Repeat this for climate information (long term patterns or seasonal information, particularly related to agricultural practices).

Checklist 2

What are different sources of weather (or climate) information in this community?

Who produced that information?

What specifically did you learn last time you went to the source?

What did you do based on that information?

Who made the decision to act? Husband, wife, girls, boys? What happened?

Has your opinion on the type of information you used changed over time? Why?

Step 6 – Once your list of weather and separate list of climate information sources have been made, begin a proportional piling activity.

Starting with weather information sources, draw or write each major source on the ground or on paper, drawing a circle around each source. Distribute 100 beans or counters in the middle and ask the group which source they think is the most “credible”. Sometimes this can be described as the source that is most “trusted”.

Once the focus group has finished their proportionally piling, ask probing questions on why they piled the way they did. You can use questions like those in Checklist 1 if you choose.

Step 7 – Continuing with weather information sources only, ask the group to proportionally pile once more, based on which source is the most “salient”.

Just because a certain source is trusted, or recognized as credible, doesn’t mean that it is the most ‘salient’. Salient information is information that is actually relevant to farmer’s needs. Does the source of information give them valuable information that they are able to use? Or is it badly timed, on crops and practices that farmers are not interested in, too expensive for farmers to implement etcetera. These are all factors that affect an information source’s “salience”.

Ask probing questions to understand the rankings based on salience.

Step 8 – Repeat this process for climate information sources.

Checklist 3

‘Why is this information more useful than the others?’

‘What is it about this information that makes it less relevant to your needs?’

‘Why is there such a big gap in the levels of trust you have for the information from these sources compared to the others?’

Reporting – Climate Information Ranking

NOTE: When possible, complete this form with the entire research team—facilitator(s), co-facilitator(s), note taker(s), and anyone else who participated in some way—to produce a more complete report of the session for your database.

Venue:
Group:
Date:
Note Taker:
Facilitators:

Focus group discussion members (insert number of participants, add categories as desired)

Men	
Women	
Youth	
Elderly	
Disabled	

*Data Notebook: Insert your full transcript from the session before moving forward. **Work as a research team to record the exact words and phrases used by the participants in the session.***

Provide any observations or thoughts you have about the session in general. What biases do you think affected the session and in what way(s)? How do you think this is reflected in your data?

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Weather forecasting sources:

Source	Weather info.	Who produced it	Actions resulting	Decision-making on actions	Changes on use

Proportional piling for weather forecasting session:

Sources	Counters for legitimacy (trust)	Counters for credibility (usefulness)	Counters for salience (how needed info is)

Legitimacy of Sources:

Source 1	Narratives on legitimacy
	Narratives on credibility
	Narratives on salience

Source 2	Narratives on legitimacy
	Narratives on credibility
	Narratives on salience

Weather forecasting sources:

Source	Weather info.	Who produced it	Actions resulting	Decision-making on actions	Changes on use

Proportional piling for weather forecasting session:

Sources	Counters for legitimacy (trust)	Counters for credibility (usefulness)	Counters for salience (how needed info is)

Legitimacy of Sources:

Source 1	Narratives on legitimacy
	Narratives on credibility
	Narratives on salience

Source 2	Narratives on legitimacy
	Narratives on credibility
	Narratives on salience

What do I need more information about? What do I need to clarify? What information gathered supports or disputes information gathered with other tools? What topics were not covered that I still want to discuss?



Materials: • Flip Chart Paper • Markers

Information Flow Map

Participants: Separate groups of men and women [8-10] of mixed socio-economic status and ages.



Time: 1 hr – 1 1/2 hrs

Activity Preparation

- What sort of information will your project aim to communicate? _____
- Who (men, women, youth, most marginalized, landless?) will your project seek to focus on?

- Based on your project's audience and needs, you and your team should prepare 1 or 2 specific scenarios to map with the community.

Sample Scenarios:

Information type: Long-term seasonal information	Scenario statement: "The national meteorological service predicts a very long dry period this season."
Information type: Information targeting women of child-bearing age.	Scenario statement: "The health clinic will hold a workshop on nutrition, child and maternal health."
Information type: Specialized, time sensitive information	Scenario statement: "Oh no! A new disease is affecting livestock. Farmers will need to vaccinate livestock."
Information type: Agricultural extension information	Scenario statement: "There is a new short maturing variety of seed available for farmers."
Make your own _____	Make your own _____

- Arrange participants in a circle.
- Clear the ground so that a large area can be seen and used by all.

Facilitator Notes:

Go through one scenario at a time, starting with one “starting point” at a time. If “radio” is one starting point, map radios before moving on to “NGO meeting” or “newspaper”.

Also, It is very important to understand WHO - men, women, children, wealthy men or poor women, gets information and when. Make sure to show how different actors overlap. If women are contacted first, and then re-occur as information sharers or recipients later, make sure to loop your lines back to women every time they come up.

Step 1 - Introduce yourself (or team) and then the activity.

Step 2 - Ask the participants to introduce themselves and note the name and any special information for each individual (for example youth, elderly, disabled)

Step 3 – Explain that you will be playing a game to understand how news travels through the village.

Begin by reading out your scenario statement, and then, consider prompting a discussion by first asking, “How does this information enter a community?” Then, “From that starting point, how does the information flow between different people?” and so on.

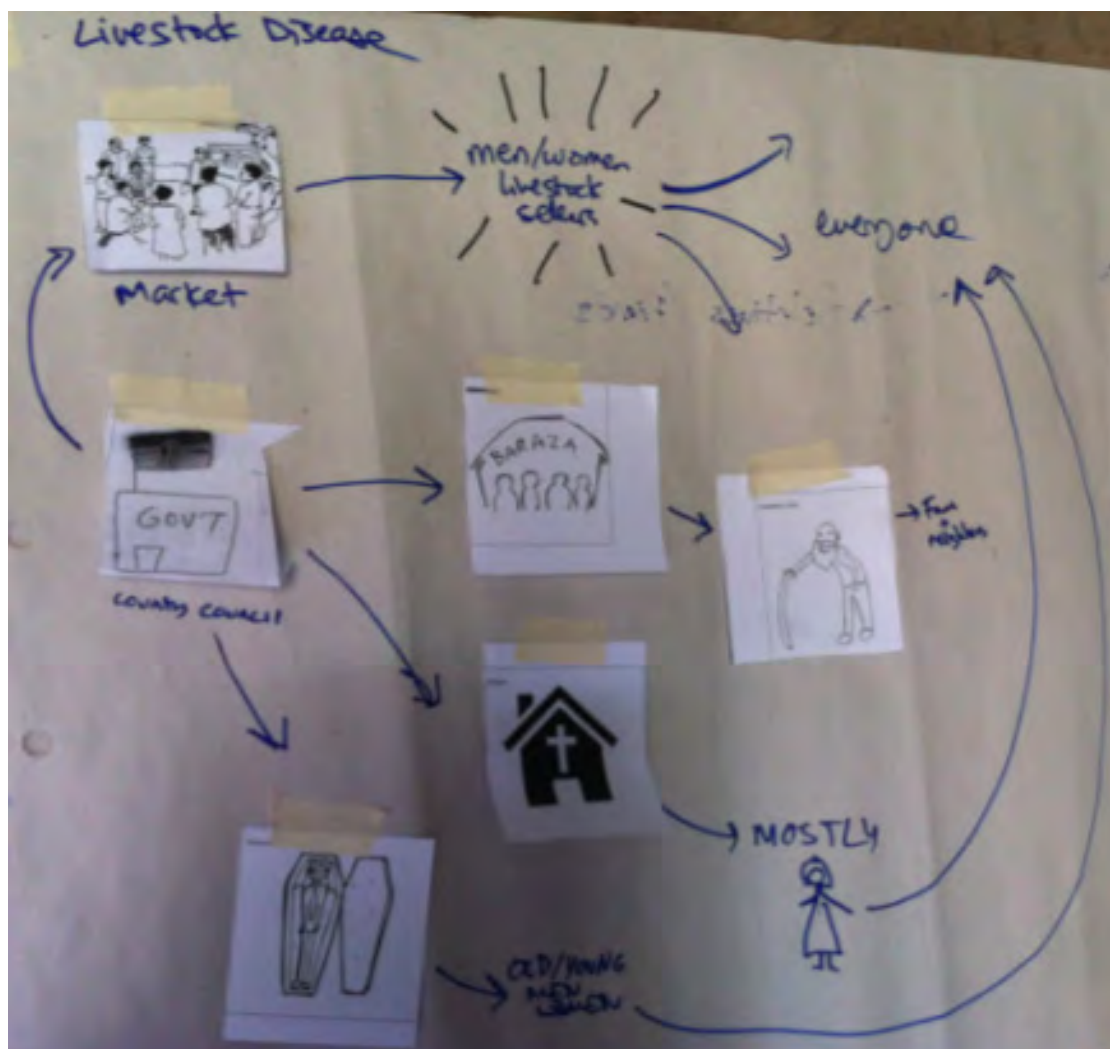
Step 4 - As you are discussing each scenario, draw a map of all the actors, technologies, places and meetings involved.

Each scenario should be mapped on its own poster

TIP: It is important to capture the information being discussed as a picture of a network. We often think of information flow as being linear, either from a source at the ‘top’ to recipients at the ‘bottom’, or up and down in the form of a feedback loop. But in a community, information most often travels through a network of places and people as nodes in that network. By visualizing that network, facilitators and participants can see how rich and complex it is, and who helps spread information and why.

Note takers:

There will be a plethora of information gathered during this game outside the parameters of the questions posed. Note down information such as perception, use and access to information specific to different social groups in additional columns as needed.



Step 5 - After reading out your scenarios, present your map back to the focus group. Use your own probing questions or those provided in Checklist 1 for more information of interest.

Checklist 1

- Who first hears about it (men, women, wealthy, poor?), why?
- Are women the first ones to receive information? Why or why not?
- Who or what group in the village is usually left or hears last about this information? Why?
- In your opinion, is access to important information equal or unequal between different people in the village? Why or why not?
- If it is unequal, how can it be improved?

Step 6 – If your project is focusing on specific technologies or platforms for information sharing, consider using the questions in Checklist 2 to better understand issues of information access, use and control.

Checklist 2

	Technology: • Who has access to this technology? Who does not? Why? • Who owns it? Is it shared? Who does not own it? Why?
Access	
Control	• Do [men/women/youth] need permission to use it? From who? Are there those who are not allowed to use it? Who? Why? • How often do [men/women/youth] use it? Why? • Is it easy or difficult to use? Why?
Use	Meetings / Platforms: • Who attends meetings? Who does not? Why? • Do [men/women/youth] need permission to attend? Can they go alone? Are there those who are not allowed to attend? Why? • Is it easy or difficult to attend? Why? • If you attend, do you get to speak or contribute to discussion?



Reporting – Information Flow Map

NOTE: When possible, complete this form with the entire research team—facilitator(s), co-facilitator(s), note taker(s), and anyone else who participated in some way—to produce a more complete report of the session for your database.

Venue:
Group:
Date:
Note Taker:
Facilitators:

Focus group discussion members (insert number of participants, add categories as desired)

Men	
Women	
Youth	
Elderly	
Disabled	

Data Notebook: Insert your full transcript from the session before moving forward. Work as a research team to record the exact words and phrases used by the participants in the session.

Insert photograph of Scenario 1

Provide any observations or thoughts you have about the session in general. What biases do you think affected the session and in what way(s)? How do you think this is reflected in your data?

Information flows:

Scenario 1	Who are the primary receivers?	Who does not hear or hears last and why?	Suggestions on improving access
Scenario 2			
Scenario 3			
Scenario 4			
Scenario 5			

What do I need more information about? What do I need to clarify? What information gathered supports or disputes information gathered with other tools? What topics were not covered that I still want to discuss?



Materials: • Notebook • Recording, printed or copy of current scientific weather and climate forecast used in the community

Scientific Forecasting



Time: 1– 2hrs

Step 1 - Introduce yourself and the team and then the activity.

Step 2 - Ask the participants to introduce themselves and note the name and any special information for each individual (youth, elderly, disabled etcetera)

Step 3 – Explain to the group you want to understand if people have ever used weather forecasts. Show the group an example of scientific forecast that is currently used in the community.

Ask them the following questions:

1. Have you ever seen or heard a forecast like this?

If yes:

2. Where do you listen/see the forecast? Who made it? When and how often do you listen/read it?

3. Do you share the information with anyone? When, where? How often? (It is more productive to ask about a specific instance rather than “in general”, for example, “The last time you used this forecast, who did you share it with? When? How often?”)

4. What would make the forecast more trustworthy?

5. Would it make a difference if you received a daily forecast by radio, TV, mobile phone and/or newspaper? Why or why not?

If no:

2. Now that you have seen what a weather forecast can look like (or heard what it can sounds like), would you want to receive this? Why or why not?

Reporting

NOTE: When possible, complete this form with the entire research team—facilitator(s), co-facilitator(s), note taker(s), and anyone else who participated in some way—to produce a more complete report of the session for your database.

Venue:
Group:
Date:
Note Taker:
Facilitators:

Focus group discussion members (insert number of participants, add categories as desired)

Men	
Women	
Youth	
Elderly	
Disabled	

Data Notebook: Insert your full transcript from the session before moving forward. Work as a research team to record the exact words and phrases used by the participants in the session.

Insert the scientific **forecast** presented and note down any additional information provided by participants regarding the weather forecast session not captured in the table above.

Provide any observations or thoughts you have about the session in general. What biases do you think affected the session and in what way(s)? How do you think this is reflected in your data?

Reporting for daily weather forecast discussion

Participants who use scientific forecasts	Participants who do not use scientific forecasts
Who uses this forecast?	Who does not use this forecast?
Who produced the forecast they use?	Would they like to receive forecasts? Why or why not?
Where and how often do they use this forecast?	
Who do they share it with?	
What factors allow them to trust or not trust this forecast?	
How can trust be improved?	
Preferred channels and factors for preference.	

What do I need more information about? What do I need to clarify? What information gathered supports or disputes information gathered with other tools? What topics were not covered that I still want to discuss?



Key Informant Interviews

Participants: Identify one or two people involved in each organization's activities (preferably one man and one woman).



Time: 20-45 mins

Activity Preparation

- Review the Venn Diagram and Changing Farming Practices Timeline results and identify the organizations that intervene with the target community in which you are interested in learning.
- Review any other organizational or institutional profiles that have already been completed in the target region, such as the CCAFS Organizational Baseline Survey.
- Make a list of organizations below about which you would like to learn, including community based organizations (CBOs), farmer groups, local women's groups, farmer associations, local NGOs, international organizations, civil society groups, local government and extension services

- Contact the organizations and make appointments for interviews.

Step 1 - Welcome the project staff member and introduce the research team and the objective of the exercise.

Your introduction can look like this:

"Thank you for participating in this interview. We are interested in learning more about the kinds of new agricultural practices that have been taken up by men and women, and how and why these changes have come about. We would like to hear about your project or the activity in which you are involved, by asking some questions that focus on the approaches, strategies and institutional arrangements you employ to share the benefits of your interventions."

Step 2 Organizational Profile - Focus first on the organization itself. You are not trying to get all the details of their projects, but rather to 'tease out' lessons regarding strategies, approaches, rules, etc. that are being employed (or not) to enhance low-income men and women's participation in, and benefits from, such initiatives. Refer to Checklist 1 for some suggested questions.

Checklist 1

- What kind of organization (e.g. CBO, NGO, public, etc.) is yours and at what level does it work (local, national, regional, international)?
- What is the purpose or focus of your organization?
- How long has it been working in the target community?
- What kinds of people in the community does your organization target? Who has access to the services provided by the organization? Do young and elderly people have access to the services? Does one group in the community rely more on the organization than others?
- What is the relative importance of climate change in the portfolio of your organization?
- What are your organization's objectives in terms of supporting climate-resilient agriculture?
- What has the organization encouraged related to climate change mitigation and/or adaptation?
- What is the organization doing well?
- What do you do in areas of climate-resilience from which others can learn?
- Are there any areas for potential expansion of climate related activities that your organization is not able to currently support?
- Considering all the organizations that are working in the target community, what do you see are areas for potential expansion?
- Which organizations are linked with yours? How? For what purpose?

Step 3 Climate-resilient agriculture activities - Next focus on the organization's activities in your target community that promote climate-resilient agriculture. You can use the following SEAGA (CAAFS-FAO 2012) guiding questions from Checklist 2.

Checklist 2

- What types of improved agricultural practices are being implemented?
- Who is participating in the project? Approximate percentage of men and approximate percentage women? Approximate percentage of youth and elderly?
- How do they participate? (for example as individuals, within groups)?
- How are benefits shared?
- In what roles do women farmers participate? Are women involved in the leadership structure or decision making?
- Do women face certain constraints to joining the project compared to men? If so, what are they?
- What interventions benefit more women compared to men? Vice versa? What, if any, approaches have you used to work toward equitable benefit sharing?
- What kinds of strategies and approaches have you used to encourage inclusive participation? (for example of low-income men and women, youth, other marginalized groups)
- What, if any, strategies have you employed to encourage marginalized groups to adopt improved agricultural and natural resource management practices?

Step 4 - Give your interviewee the opportunity to ask anything, add anything, make clarifications, or make either specific or general comments on the study issues. Thank them for coming and explain that you are excited about the information they provided.

Reporting – Key Informant Interviews

NOTE: When possible, complete this form with the entire research team—facilitator(s), co-facilitator(s), note taker(s), and anyone else who participated in some way—to produce a more complete report of the session for your database.

Venue:

Group (Organization, CBO, etc.):

Interviewee (Name & Role):

Date:

Note Taker:

Interviewer:

Data Notebook: Insert your full transcript from the interview before moving forward. Work as a research team to record the exact words and phrases used by the interviewees.

Provide any observations or thoughts you have about the interview in general. What biases do you think affected the interview and in what way(s)? How do you think this is reflected in your data?

