

Module 3: Field research tool box

In this module you will:

- learn best practices for preparing for and carrying out participatory research exercises; and
- understand which tools you can use to gather data on gender and Climate-smart Agriculture.
- The intention of this module is for users to get inspiration from the proposed outlines and questions, rather than following each and all the questions stringently.

A. Preparing for and carrying out participatory field research

Preparatory meeting

This approach to participatory field research builds on the idea of research being done in teams. You should thus keep in mind that the process you use in preparing for and carrying out field research is just as important as the tools themselves. You will need to establish the working methods and guiding principles of the project with your fellow team members. Before commencing field work with the communities, it is recommended that you **hold a preparatory meeting** with all the team members. The meeting may last a day or less, depending on the size of the team and the experiences of the members. The purposes of the meeting include:

- a) making the team members function as a team;
- b) clarifying the roles of each team member, including agreeing on a team contract, deciding on who is to be the coordinator and who will be the note takers etc.;
- c) familiarizing team members with the approach and the importance of participation;
- d) training team members in the approach and in necessary tools; and
- e) preparing or reviewing the work plan (including timing and frequency of site visits).

Background research

Prior to visiting the community or communities to carry out your research work, it is crucial that you carry out background research. The following lists of questions on (1) institutional settings (who are the actors) and (2) environmental, economic, and social trends will help you ensure that you identify socio-economic and gender issues from the beginning of the field visit research.

Both of these lists of questions should be explored using existing information on the area to the extent it exists, including:

- statistics and reports from government departments and ministries;
- programme and project documents from agencies and NGOs;
- studies and surveys from universities and research institutions; and
- documentation from service organizations in the local area.

Note that this background information should not lead your analysis but may help inform you of key stakeholders and issues to be aware of. Answers to the following questions may not be readily available but it is important to be aware of the local context to the extent possible.

Questions on institutional settings:

- Are there local groups that are organized around environment issues (e.g. climate change, forest user groups or water user groups)? Do both women and men participate in these?
- Are there local groups that are organized around economic issues (e.g. credit, agriculture production)? Do both women and men participate in these?
- Are there local groups that are organized around social issues (e.g. health, literacy, religion, youth)?
- Are there groups exclusively for women? If so, what is the focus of these groups? What do women gain from them? Are the groups open to all women?
- Are there groups from which women are excluded? Which ones? Why? What do the women lose due to the lack of their participation?
- Are there groups exclusively for the poor separated along gender lines? If so, what is the focus of these groups? What do the poor gain from them?
- Are poor men and women excluded from any of the local groups? If so, which ones? Why? What do the poor lose due to the lack of their participation?
- Are there groups exclusively for youth and are they separated by gender? If so, what is the focus of these groups? What do youth gain from them?
- Are there groups from which young men and women are excluded? Which ones? Why? What do the youths lose due to the lack of their participation?
- What are the links between local groups or organizations and outside institutions (e.g. NGOs, political parties and government institutions)?

Questions on local trends:

- What are the most important environmental trends (e.g. drought, deforestation, erosion or other meteorological trends)?
- What are the most important trends in agricultural production and food security?
- What are the most important economic trends, e.g. jobs, wages, prices, costs of living, crop yields and livestock population?
- What are the most important demographic trends (e.g. birth rates, infant mortality, in-migration, out-migration, increases in female-headed or child-headed households and the role of HIV/AIDS)?
- Which other trends are important (e.g. governance, social changes, in for instance the household or change in government policy)?
- What are the linkages between the trends?
- Are there linkages or causes stemming from intermediate or macro levels?
- What is getting better? What is getting worse?
- Which trends impact women and men, boys and girls differently? And how?
- Which trends impact poor men and women more than richer men and women (e.g. health, access to resources etc.)?
- Are there differences in gender roles by ethnicity, class etc.?

As you explore these issues, you should keep in mind that the questions are a starting point. When entering the community, you may find that the people you speak with perceive different trends, or prioritize challenges differently to what you found during your background preparations. In

addition, it is possible that the community uses different terms or ways to express what they perceive around them. You will need to bridge language, vocabulary and conceptual barriers. In addition, you will need to be careful not to lead the discussion toward trends you have read about, but use this information only to facilitate discussions among community members.

Preparing your work plan

Your work plan will consist of a combination of the tools in the following sections. It is advised that you carry out the tools with separate groups that represent all the different socio-economic groups in the community in which you are working to avoid fatigue among the participants. If time permits you may choose to observe community dynamics before communicating gender requirements. However, given predominant gender roles, it is recommended that men and women meet in separate groups as this will allow both men and women to speak more freely, but also allow for separate discussions on diverse issues related to gender. Working in separate groups may require flexibility in order to fit in with men's and women's separate schedules and willingness to meet at an appropriate location (e.g. in the fields). The outputs from these different groups should subsequently be assessed by you and the research team. Any differences between answers and discussions in the group should be evaluated and potential reasons for such differences should be considered. It is important to capture different points of view so that you can 'triangulate'³ your findings. Throughout your work, keep in mind the importance of triangulating the information you collect (FAO, 2001a).

You should pay a preliminary visit to members of the community (i.e. village leaders, representatives of existing groups) requesting permission to conduct research, informing them of the process, setting meeting times and organizing focus groups for community women and men.

Use a gender-sensitive approach from the beginning of your planning and from your first interactions with the community. The United Nations Development Programme (UNDP) offers the following advice on addressing gender issues in Community Based Adaptation (CBA), which could also apply to work on climate change mitigation: An initial analysis of community dynamics is imperative to determine how to most effectively address gender issues. Some CBA practitioners prefer to establish women's and men's groups respectively from the beginning of a project to ensure that the participant groups represent the different segments of the community. Conversely, other CBA practitioners choose not to communicate any gender requirements initially in order to get an unbiased insight into the community's gender dynamics first. One example of this is when a CBA coordinator attended the first meeting in a community in Niger. He first noted the presence – or absence – of different groups (e.g., according gender and/or age) for his analysis. Similarly, in Jamaica, a CBA coordinator initially observed the group dynamics within the community without commenting. Then, after observing, he decided on how to approach the situation, especially if one

³ Triangulation is a way to cross-check information for accuracy. It means looking at any problem from as many perspectives as possible, but at least three. Triangulation is achieved by using different tools to gather information on the same issue and/or listening to different people with different points of view on the same topic.

group or person seemed to dominate others, and determined how to facilitate equal opportunities for all groups to participate appropriately according to their gendered roles. (UNDP, 2010.)

This guide however recommends that groups of women and men are set up separately as their perceptions and experiences with climate change adaptation and mitigation are assumed to differ. Separate group discussions are expected to flow more freely leading to more in depth findings.

You find more information about the preparation in the Module 4: Preparing for Field Work.

B. Gender and Climate Change Research Tools

There are a number of tools that can be used to support research on gender and climate change. The ten tools in the Box 3.1. are selected tools that will be described in detail:

Box 3.1. Ten gender and climate change research tools

Tool 1. Village resources map

Tool 2. Seasonal calendar Tool 3. Daily activity clocks

Tool 4. Farming systems diagram

Tool 5. Capacity and vulnerability analysis matrix

Tool 6. Venn diagram

Tool 7. Institutional profiles

Tool 8. Changing farming practices

Tool 9. Seasonal food security calendar

Tool 10. Climate-related risk management practices

The tools can be used to gather data and information of different issues. For the use of this guide we will group the tools roughly into three headings, note that some of the tools can be used in several different contexts and others may in fact not necessarily be used at all:

Climate analogues tools

- Tool 1. Village resources map (application suggestion in Module 5)
- Tool 2. Seasonal calendar Tool 3. Daily activity clocks
- Tool 4. Farming systems diagram
- Tool 5. Capacity and vulnerability analysis matrix

The objective of these tools is to better understand how and if different vulnerable groups exchange knowledge with others, the distances villagers travel, with which villages they interact with and why they have chosen to interact with these. Furthermore, the aim is to explore if and how the climate analogue approach might include gender dimensions of analogues (as well as similar cultures, languages, resource access, for example) that goes beyond similarities of local climates that the analogue principle is based on.

Weather Forecast Tool

- Tool 9. Seasonal food security calendar

The objective of collecting climate-related information is to better understand the types of weather, climate and agricultural information, such as daily and seasonal weather forecasts, available to rural women in comparison to men, and their ability to use that information. This includes understanding the opportunities and constraints in accessing and using climate information. Moreover, the objective is to better understand the degree of intra-household sharing of climate information.

Tools for Understanding and Catalyzing Gender-sensitive Climate-Smart Agriculture Initiatives

- Tool 6. Venn diagram
- Tool 7. Institutional profiles
- Tool 8. Changing farming practices (application suggestion in Module 5)

The objective of this group of tools is first to understand gender differences in access to climate-smart agricultural interventions and opportunities by exploring institutional arrangements. This will potentially provide information supporting improved access to information and benefits linked to climate change-related interventions. Secondly, the aim is to map ongoing farming practices, both climate-smart and conventional farming practices, as a means to determine how to foster climate-smart agricultural practices.

Tool 1. Village resources map

Purpose:

The Village Resources Map is a tool that helps us to learn about a community and its resource-base. The primary concern is not with cartographic precision, but with getting useful information about local perceptions of resources by men and women. Users should determine the contents of the map focusing on what is important to them. Maps may include some or all of the following:

- infrastructure (roads, houses, buildings);
- water sites and sources (drinking water, water bodies, irrigation sources, rivers, plus entitlement and utilization);
- agricultural lands (crop varieties and location);
- agro-ecological zones (soils, slopes, elevations);
- forest lands;
- grazing areas;
- shops, markets, small industries;
- health clinics, schools and religious facilities;
- waste sites; and
- special use places (bus stops, cemeteries, shrines).

A variation of this tool is: *Resources Map of Past and Present*. This tool can be used to map resources during a period in the past (for example, thirty years ago) and at present. This can then be used to facilitate discussion of any changes in resources and linkages to changes in the environment or other factors.

Process:

The Village Resources Map is a good tool to begin with during field research because it is an easy exercise that initiates dialogue among the community and PRA team members. This exercise can be carried out with representative from different groups in the community, or it could be carried out with separate groups in order to ensure their perspectives are documented (e.g. you could create a map with men and women separately or livestock keepers and farmers separately).

A large open space should be found and the ground cleared. It is suggested to start by placing a rock or leaf to represent a central and important landmark. Participants are then asked to draw other things on the map, which are important in the village. Participants should not be interrupted unless they stop drawing, in which case questions can be asked, such as whether there is anything else of importance that should be added. Use the SEAGA Questions provided below to deepen the discussion. When the map is completed, ask the participants to describe it and to discuss the features represented. Ask questions about anything that is unclear.

Finally, you may want to ask participants to indicate some things they would like to see in their village that are not currently on the map - in other words to draw a picture of what they would like the future to look like. This allows for some preliminary planning ideas and encourages people to begin contributing their thoughts at an early stage in the participatory process.

SEAGA Guiding Questions:

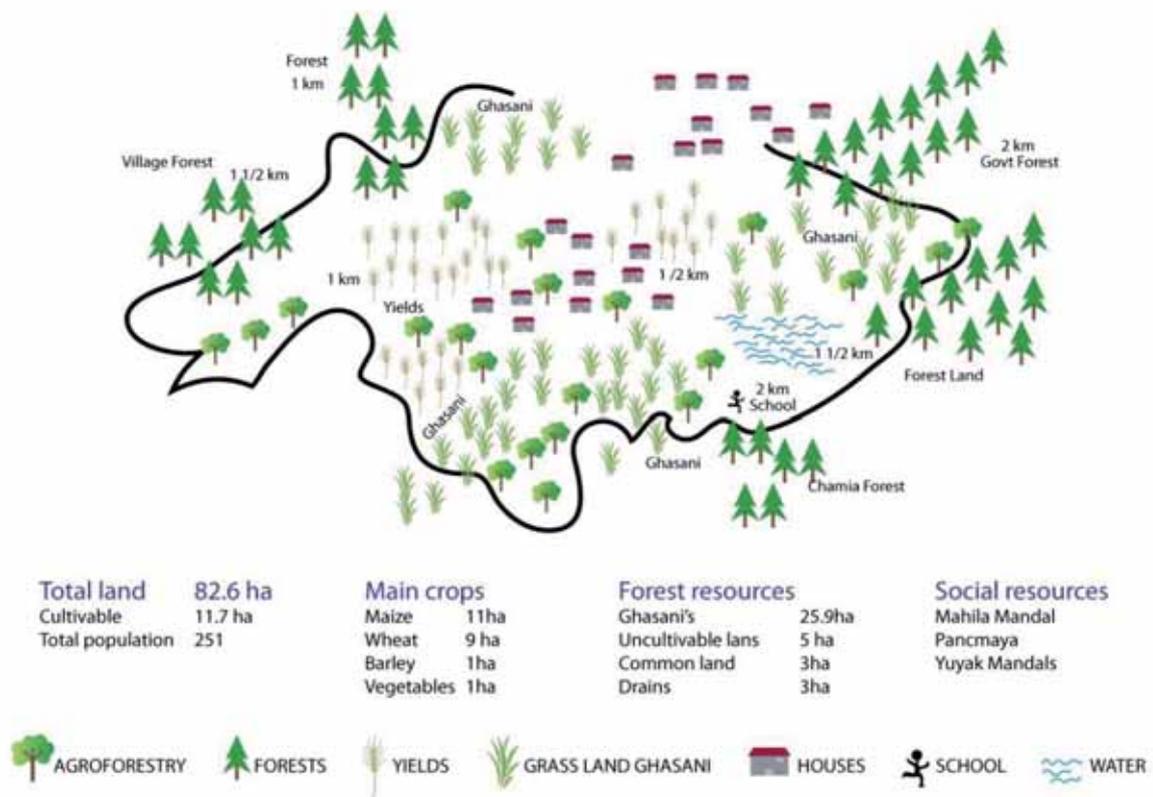
- What resources are in ample supply, which ones are in shortage? Which resources are used by men and women? Which are unused? Which are degrading or improving?
- Who makes decisions about who can use land, water and other important resources, women or men?
- Does the village have land that is held in common? Who decides how common resources will be used, women or men? Do women participate in the decision-making process?
- Where do people go to fetch water? Who collects water for the household? Women, men, girls or boys? How long does it take?
- Where do people go for firewood or other sources of fuel? Who obtains the firewood or fuel – men or women, girls, boys or both? How long does it take?
- Where are animals taken for grazing? Who manages the grazing? How long does it take?
- Are the rights of access different for women and men or for people from different ethnic or other socio-economic groups?
- Are there any conflicts over resources? Why? Who is more affected by these conflicts? Differentiate different social groups.

In addition, you can discuss the social structure of the community and record this separately, or overlay this information on the resources map. Guiding questions include:

- How many households are there? What are the sizes of households? What is the total number of people?
- Is the village growing or shrinking? Why?
- Are families polygamous or monogamous? Are living arrangements by nuclear family or by extended family? How are these defined?

- If the village has more than one ethnic group, class or religion, are they found mostly in certain areas?
- Is there a part of the village where poorer people or landless people are concentrated versus an area where the richer people are concentrated?
- What are the local definitions of 'rich' and 'poor'? Which households are rich, poor and in-between?
- How many households are female-headed? Is the number growing? Why?
- How many households are child-headed? Is the number growing? Why?

Figure 3: Example of a village resource map of Khajret – Uperli Guanguri, India



(Adapted from FAO, 2001a.)

Tool 2. Seasonal calendar

Purpose:

The seasonal calendar tool is used to guide the farmers' perceptions of typical seasonal conditions, such as rainfall amounts and timing, as well as key dimensions of food security and livelihoods. It is useful to discuss an entire year, rather than the growing season, as events over the course of the year impact each other. This tool allows for a discussion of the linkages between climate variability and specific key activities and resources that occur or are available at different points during the year. This tool can also help determine whether workloads have shifted from one season to another compared to previous years by inquiring whether the seasonal calendar has changed over time.

Process:

- Explain that you want to learn what people do in a year.
- Find two large open spaces, one for a group of men and one for a group of women. Calendars can be drawn on a large paper or on the ground or floor. Draw a line all the way across the top of the cleared space (or paper) and explain that the line represents a year – ask the participants to mark the seasonal divisions along the top of the line.
- It is usually easiest to start the calendar by asking about rainfall patterns. Ask the participants to put stones or draw circles under each month (or other division) of the calendar to represent typical amounts of rainfall (where more stones equal more rain).
- Below the rainfall, draw a line and ask the participants to fill in stones or circles indicating the amount of their labour for agriculture, with more stones equalling more labour intensive periods.
- This can be repeated with the following topics: food availability, food security (see example Tool 9. Seasonal food security calendar), water availability, income sources, expenditures, resources (e.g. information, financial such as loans, human such as labour), what is eaten, sources of food, and other key areas most relevant to your work.

SEAGA guiding questions:

- Are the overall livelihood systems fairly stable or with great seasonal variations?
- How do women's calendars compare with men's? What are the busiest periods for women? For men? For youths?
- How do resources vary over the year? Which resources are controlled by women? Which resources are controlled by men? Which resources are controlled by women and men?
- How does food availability vary over the year? Are there periods of hunger? Does this differ for men and women? Does this differ for boys and girls?
- How does income vary over the year? Are there periods of no income? Are there differences in who obtains income during the year?
- How do expenditures vary over the year? Are there periods of great expense (e.g. school fees, food purchases)? Do women and men agree on this? Who decides on these?
- Have the seasonal calendars changed over time (e.g. does planting, sowing or harvesting start earlier or later than previously)? Has the period with the biggest workload moved forward or backward?
- What are the key linkages among the different factors the participants discussed on the calendar (e.g. how do weather circumstances, such as rain fall, influence workloads, how do periods of great expense influence food availability and labour)?

Figure 4: Example of a seasonal calendar - women from Xuan Truong, Viet nam

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Rainfall		*	**	**	***	****	**** *	****	*	*	*	*
Agricultural labour	*	**	***	**** **	**** ***	****	***	**	**** **	**** **	**	****
Off-farm labour	*	*	*	*	*	*	*	*	*	*	*	*
Food availability	****	***	*				**	**	**** **	**** **	**** *	****
Water availability	*	*	**	***	**** *	**** *	**** *	****	*	*	*	*
Human diseases	*	*	*			***	***					
Animal diseases	***	***	*	*	***	***	***	*	*	*	***	***

(Each star represents a kernel of maize)
(FAO 2001b.)

Tool 3. Daily activity clocks

Purpose:

Daily Activity Clocks illustrate all of the different types of activities carried out by an (average) individual in one day. They are particularly useful for looking at relative workloads between different groups of people in the community (e.g. women, men, rich, poor, young and old). Daily Activity Clocks can also illustrate seasonal variations in workload, or the workload at particular times of the year. They can also provide a baseline of what people do now in order to understand how modifications to daily activities or farming practices may increase or decrease the tasks and work burdens of different groups.

Process:

Organize separate focus groups of women and men making sure that each group includes different age and socio-economic groups. Explain that you want to learn what participants do in a typical day. You can introduce the activity by explaining what you do in a typical day, including when you wake up, when you go to work, when you take care of your children and so forth, in order to show that you want them to describe all the activities they do in a day. Then, ask the group to draw a clock representative of what an average woman or man does in a typical day in a chosen season. **It is recommended that you focus on the daily activities during the time of year when the villagers would be implementing changes in farming practices** (e.g. the growing season or the harvest season). The clock should be representative of the average in the group, with differences between age and socio-economic groups noted. Plot each activity on a circular pie chart to look like a clock. Activities that are carried out simultaneously, such as child care and gardening, can be noted within the same spaces. If there is time, you can ask the group to perform the same exercise for a different

season. In addition, you can ask the women's group to create a clock for the average man, and ask the men's group to create a clock for the average woman. This way you can compare at a later stage men's and women's perceptions of each other's activities.

SEAGA guiding questions:

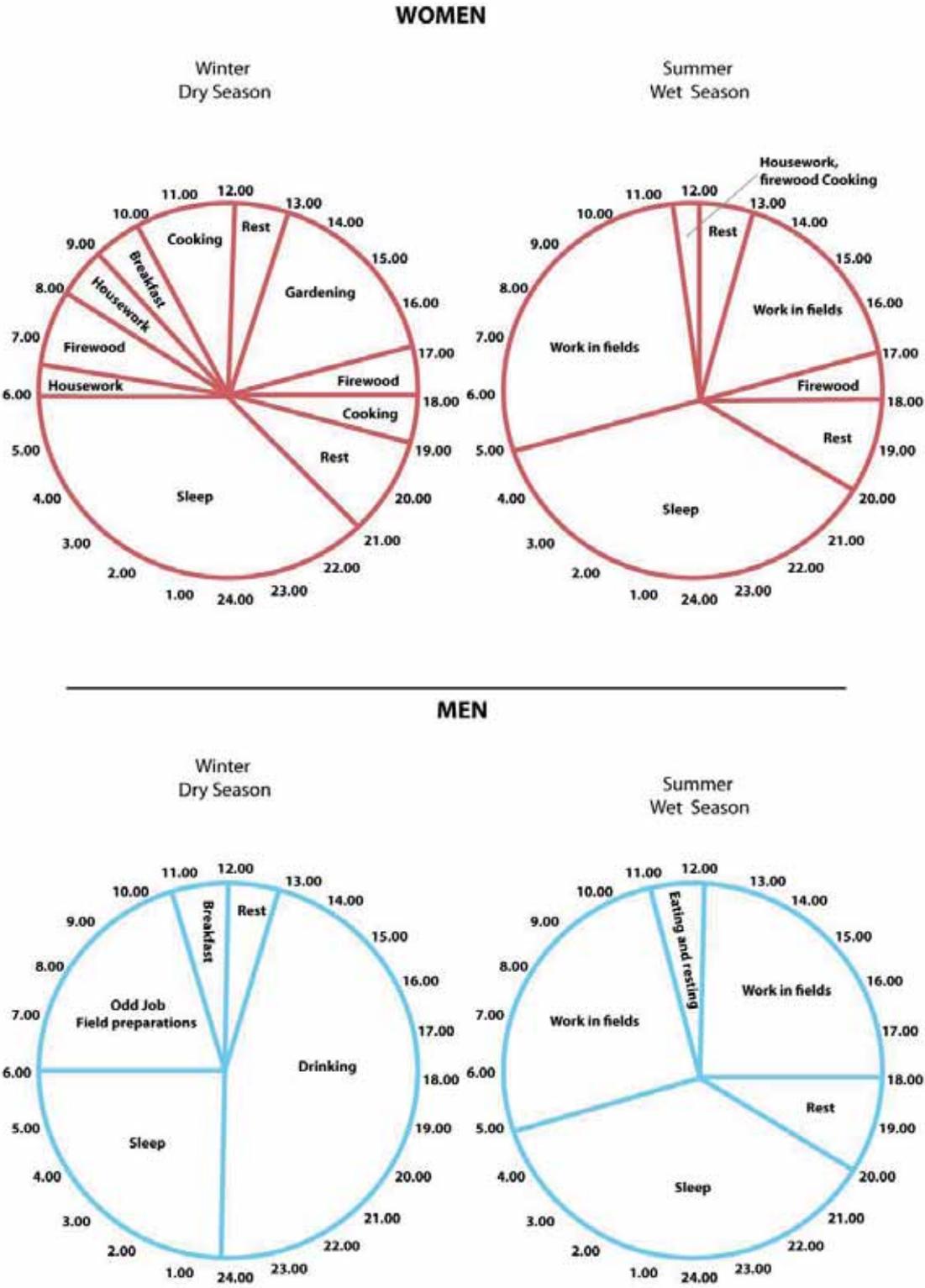
- How is women's and men's time divided? How much time is devoted to productive activities? Domestic activities? Community activities? Leisure? Sleep? How do they vary by season?
- How do the clocks from the different socio-economic groups compare?
- Where could labour time be reduced?
- Which activities involve income or remuneration?
- Who controls the income from the different activities?

The discussion can also be expanded with these questions on livelihood activities:

- What are the major agriculture activities of men and women (e.g. crop production, sowing, harvesting, ploughing, fishing, wood harvesting, livestock production, processing etc.)?
- Who is responsible for the agriculture activities – men, women, girls, boys, or a combination?
- What are the major non-agriculture livelihood activities of men and women (e.g. fuel collection, water collection)?
- Who is responsible for or spends time on the non-agriculture activities – men, women, girls, boys, or a combination?
- What are the other major income-generating activities and who carries them out (e.g. marketing, waged labour)?
- Which activities and resources contribute most to meeting the basic needs of the household?
- Which households have most diversified livelihoods? Which are most vulnerable, depending on only one or two activities or resources?
- What are key linkages between the major activities?

Regarding access to and control of resources, see Tool 1. Village resources map.

Figure 5: Example of a seasonal daily activities of women and men in Dzinavene, Chivi District, Zimbabwe



(Adapted from FAO, 2001a.)

Tool 4. Farming systems diagram

Purpose:

The Farming Systems Diagram helps clarify how rural household livelihoods are assembled. It works with input-output diagrams and stream lines. The diagram is designed to highlight the farming system, including on-farm activities, such as crop production, off-farm activities, such as fuel collection, and non-farm, activities such as marketing. The diagram also shows the flow of resources to and from the household, and who is involved, by gender.

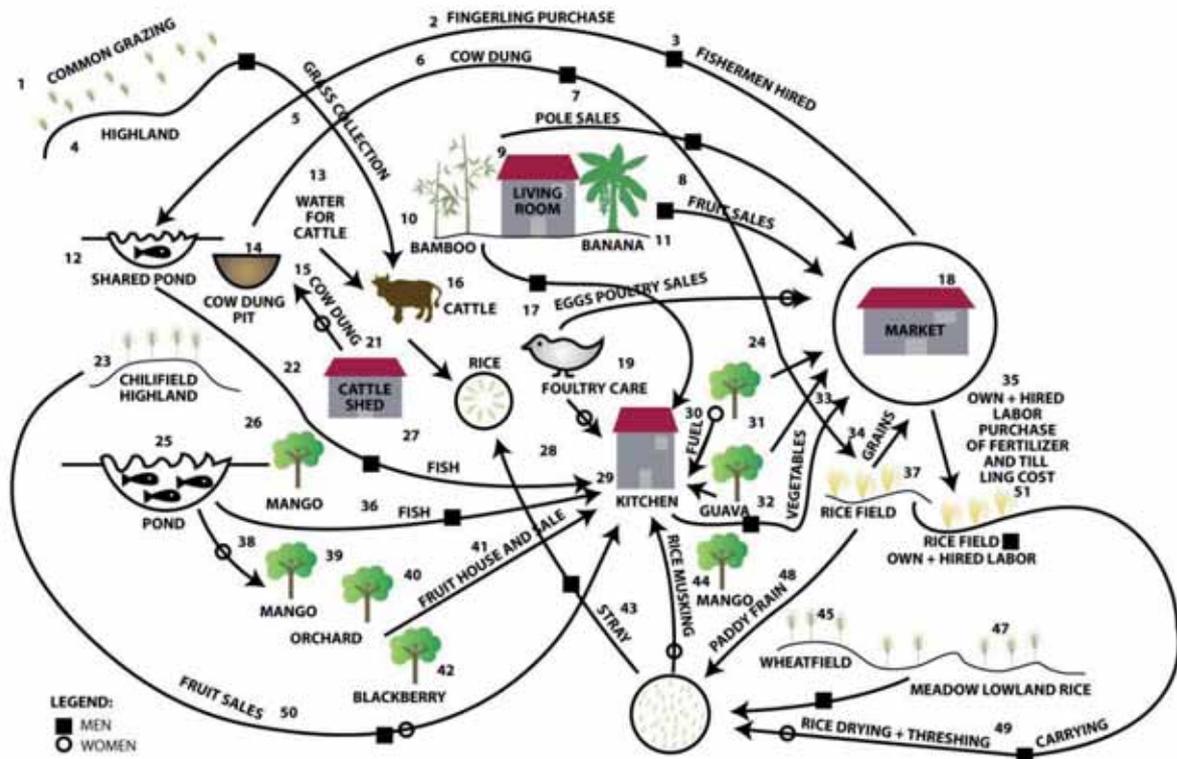
The diagram can show how livelihoods depend on different resources and where they may be vulnerable to changes in climate. The diagram can also illustrate men's and women's specialized knowledge linked to different areas of the farming system; knowledge that can be built upon for adapting to climate change.

Process:

This activity can be carried out using the map created in Tool 5, Village Resources Map, as a basis for discussion of their farming activities. Or, you can ask participants to draw a new picture depicting their farming activities. Do not forget to cover the housing area and common property areas. Be sure that the diagram shows labour and resources flows, as well as roles and responsibilities by gender. Use the SEAGA guiding questions to facilitate discussion and drawing of the diagram.

- SEAGA guiding questions (these are the same as for Tool 3. Daily activity clocks): Tool 3. Daily activity clocks What are the major agriculture activities of men and women (e.g. crop production, sowing, harvesting, ploughing, fishing, wood harvesting, livestock production, processing etc.)?
- Who is responsible for the agriculture activities – men, women, girls, boys, or a combination?
- What are the major non-agriculture livelihood activities of men and women (e.g. fuel collection, water collection)?
- Who is responsible for or spends time on the non-agriculture activities – men, women, girls, boys, or a combination?
- What are the other major income-generating activities and who carries them out (e.g. marketing, waged labour)?
- Which activities and resources contribute most to meeting the basic needs of the household?
- Which households have most diversified livelihoods? Which are most vulnerable, depending on only one or two activities or resources?
- What are key linkages between the major activities?

Figure 6: Example of a household agro-ecosystems and rural resource management, Bangladesh



(Adapted from FAO, 2001a.)

Tool 5. Capacity and vulnerability analysis matrix

Purpose:

The Capacity and Vulnerability Analysis (CVA) Matrix is used to understand the resources and needs of men and women. It also supports long-term planning to address underlying population vulnerabilities and it is an approach that can support and maximize local capacities.

Data disaggregated by sex, age, disability, health status (e.g. HIV/AIDS and malaria status), location, ethnicity or other socio-cultural factors are key to CVA; it enables a better understanding of the vulnerabilities and capacities of different socio-economic groups.

Gender analysis is embedded in CVA to make clear women's and men's roles in decision-making, their access to and control of resources and social systems of exchange.

Process:

In a CVA, three components of capacities and vulnerabilities are considered: physical and material resources; social and organizational institutions and relationships; motivational and attitudinal factors.

In using the CVA in the context of climate change adaptation, the goal is to use the matrix to make clear the capacities and vulnerabilities of different groups in the target population to the impacts of climate change. Therefore, before filling out the CVA Matrix with the target population, you must work with the participants to identify what climate conditions, such as less rainfall or a flood or

drought, they find themselves responding to. If the group is aware of longer term climate change, you could also speak about the key projected impact of climate change the participants would be responding to.

The following diagram shows an example matrix. At the top of this matrix, you can see that both capacities (what people can do, who they rely on) and vulnerabilities (what they need or lack) are listed and will thus be assessed according to gender and age. This could be simplified to include only one age group of each gender or to include another variables such as landholding (male landowners, female landowners, landless men and landless women). Listed in the left hand column are the three dimensions of capacities and vulnerabilities that are to be assessed.

Table 3.0: Capacity and vulnerability analysis matrix

	Capacities				Vulnerabilities			
	Men	Women	Boys	Girls	Men	Women	Boys	Girls
Physical and Material Resources								
Social and Organizational Institutions								
Motivation and Attitude								

The following SEAGA Guiding Questions can help you facilitate a discussion that will enable you to fill in this matrix. You do not need to go cell-by-cell in the matrix. The discussion part can be done with the women’s and men’s group together or in separate groups. The note taker should record insights from the discussion in the appropriate place in the matrix. At the end, the women’s group should produce a chart showing their views on men’s and women’s capacities and vulnerabilities, and the men’s group should produce a separate chart showing their views on men’s and women’s capacities and vulnerabilities in responding to specific climate conditions.

SEAGA guiding questions:

- What and who, women, men, girls, boys or all, is affected when there is (insert specific climate condition identified by the group (e.g. less rainfall, flooding, drought, wildfires, storm surges, salt water intrusion)?
- How are you affected? What kinds of adjustments do you make in your daily activities, including household responsibilities and work on the farm or outside the home (e.g. limit schooling, education, less employment opportunities, health status and food security decreases)?
- Do you have access to credit or savings that you rely on during this time?
- Do any of your possessions get affected, can you replace them?
- How are other members of your household affected?
- Is there anyone – a person or an organization – that helps you when you are affected by this?

- What do you not have that would help you?
- Have you ever learned techniques and processes that help you respond to this event from people in another village?
- Do you think you can cope with this change? For how long? To what extent?
- Do you have access to adequate information?
- Has migration taken place? By whom, and to where? What are the implications for agriculture and food security and for your livelihood?

Tool 6. Venn diagram on institutions

Purpose:

The Venn diagram exercise is used to document the key local groups and institutions that are utilized by the target population or that are part of providing a specific service. Moreover, it can be used to clarify linkages between different groups and institutions. It can be used on its own or serve as the foundation or a supplement for the Institutional Profiles Tool (see Tool 7).

Process:

You should organize separate groups of men and women that include a mix of socio-economic groups and ages. Ask the participants to name the various institutions, local and external, that provide services related to your area of focus (e.g. projects and activities that reduce carbon emissions related to agriculture). Encourage participants to mention informal groups too. Ask them to write the names of institutions or draw them on small cards and place them in the centre of the group, or you can write their names on a chalkboard or large piece of paper. Once the institutions are displayed for all to see, ask the participants to decide whether each organization deserves a small, medium, or large circle (to represent its relative importance). The name or symbol of each organization should be indicated on each circle of different sizes.

Ask the participants which organizations work together or have overlapping memberships. The circles should be placed as follows:

- separate circle = no contact;
- touching circles = information passes between institutions;
- small overlap = some co-operation in decision making, planning and/or implementation; and
- large overlap = a lot of co-operation in decision making, planning and/or implementation.

Ask participants to discuss and explain why they ranked the institutions the way they did. There may be much negotiation before consensus is reached. You should note down if there are any institutions from which particular groups are excluded. Deepen the discussion with SEAGA guiding questions.

SEAGA guiding questions:

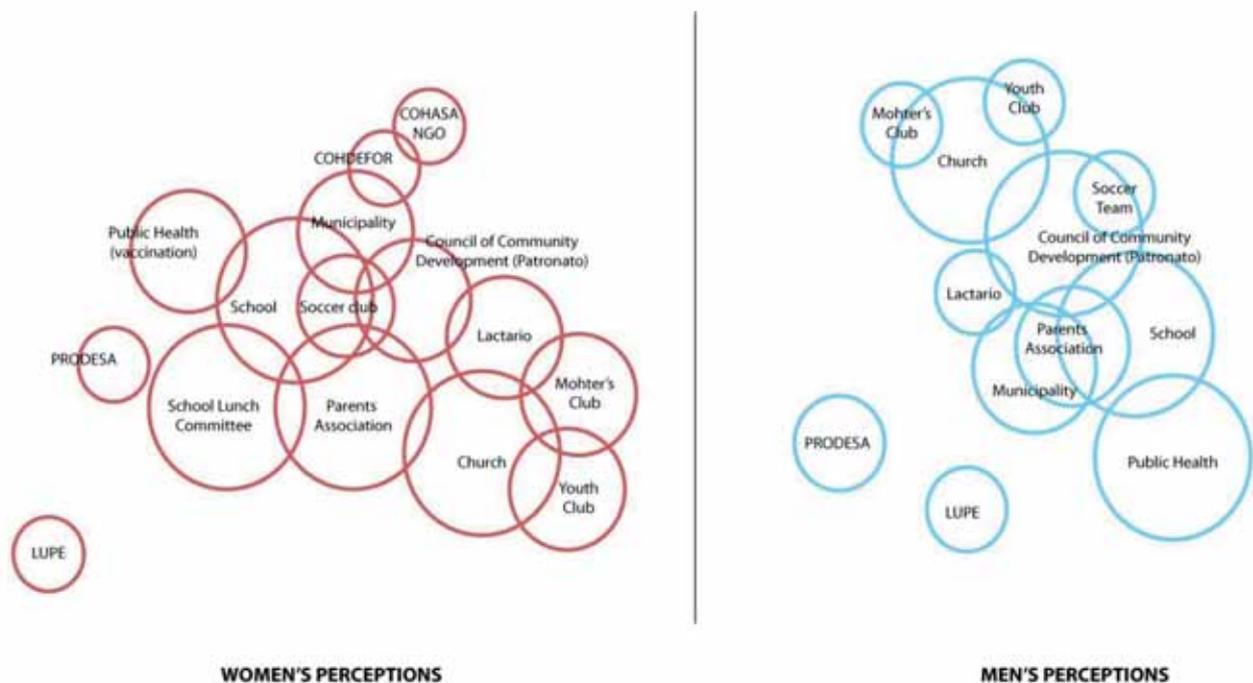
- Do women have decision making roles in the local institutions?
- Do the institutions in the Venn diagram target both men and women?
- Are there programmes specifically for women in agriculture or animal or natural resources management? If yes, what organizations are involved?

- What sources of information exist on farming practices?
- Who provides advice to men and women on taking up farming practices, such as tree planting or improved soil management techniques and cropping patterns?
- Have women provided input in institutions? If so how did the men react to it?
- Are the specific needs of young and elderly people taken into account by local institutions?

See also the SEAGA questions on local institutions and trends included in the field work preparation section in the Module 4: Preparing for field work.

The output of the exercise using a Venn diagram is a visualization of institutions present in the community. The diagram should make it clear to both participants and you as the facilitator, which institutions are central in providing specific services to the community. This can be a key tool in mapping institutions for further research and/or support to the community.

Figure 7: Example of women's and men's perceptions of institutions in El Zapote, Honduras



(Adapted from FAO, 2001a.)

Tool 7. Institutional profiles

Purpose:

The Institutional Profiles tool can help you learn about local organizations, including how they function and for what purpose. It helps clarify decision-making roles and identify any potential areas of conflict. In addition, it can be used to identify the extent to which men and women farmers can access existing institutions and identify areas of improvement.

Process:

Prepare a chart of key institutions involved in the adaptation and mitigation projects you are investigating. For each institution discuss and list at least four kinds of information: foundation date and goals, management, achievements and needs. To deepen the discussion you can ask about leadership, membership, activities, decision-making processes and interactions or conflicts with other groups or institutions.

SEAGA guiding questions:

- Who participates in the institution? What are their roles within the institution?
- Are leadership positions dominated by a particular social group?
- Do women occupy leadership positions? If so, which women?
- Who has access to the services provided by the institution? Do young and elderly people have access to the services?
- Does one group rely more on the organization than others?
- Are there areas of conflict between this organization and another?
- Which institutions have achievements related to climate change mitigation and/or adaptation?
- Which institutions have links with outside institutions? For what purpose?

Table 3.1: Example of institutional profiles of Jeded Village, Somalia

Group	Foundation and Goals	Management	Achievements	Needs
Council of Elders	<p>Founded in 1954</p> <p>Goals:..to solve community problems</p> <p>..to manage water and other community affairs</p> <p>..to develop a water schedule for nomads</p> <p>..to adjudicate disputes</p>	<p>The Council elects a Chair for a flexible term; Criteria for membership on the council include age, wisdom, and significant experience</p>	<p>..Maintaining peace in the village</p> <p>..Borehole water management</p> <p>..Sanitation</p> <p>..Education</p>	<p>..Office equipment and stationary</p> <p>..Training</p> <p>..Transport</p> <p>..Petty Cash</p>

(FAO, 2001a.)

Tool 8. Changing farming practices

Purpose:

The purpose of the Changing Farming Practices tool is to document how a change in farming practices, such as planting trees or modifying soil management and changes in external inputs,

impacts the activities of men and women. It can also foster discussion of how the change in farming practice came about, roles in decision making and access to any benefits created by the change.

Process:

Explain that you now want to understand how a change in farming practice has altered the average day of a woman or a man in their village. With the group, choose an important change in a farming practice. If there is no dominant practice, you can carry out this exercise for multiple changes. Drawing on the daily activity clock, make a list of the activities that appear on the clock. Ask the participants to describe the change that was undertaken, including how the decision was made to make the change and how the change was carried out. Then, ask the participants whether the change in farming practice led to additional activities that should be added to the list. Next, ask if the change in farming practice affected any of the activities that were already on the list. Finally, ask about how the change has affected them overall in terms of well-being, income and food security.

SEAGA guiding questions:

- What was the change that was made? Who decided to make the change, women or men?
- How did you learn about this new practice? Who provided you with information, women or men?
- Who implemented the change, women or men? What was needed to make the change? Did you need new technology? How did you go about getting what you needed to make the change? And/or was the change based on a revival of traditional knowledge systems?
- If the change required new technology, who owns the technology, women or men? Who uses it, women or men?
- Because of this new practice, did your responsibilities change at all? Did members of your household have new responsibilities?
- How did this affect the responsibilities you already had?
- Did you have more free time because of this change?
- Did you see any financial benefits or burdens from making this change? Was there an increase in income, for example? If there was income from this change, who decided what to do with it, women or men?
- Did this change impact what you ate or how much you had to eat? Did members of your household have more or less food after this change, or better or worse food?
- Did the change create any problems? For whom, women or men?
- Did you keep the change in place or return to previous practices?
- Cost-benefit analysis of the change(s).

Table 3.2: Example of categories for changing farming practices

CSA practices being pursued	Who participates? (% men, %women)	How do men and women participate?	How are benefits shared?	Constraints to participation	Strategies for empowering marginalized groups
(for example:) Tree nurseries or agroforestry initiatives					
Water management initiatives					
Soil fertility enhancement activities					
Crop or livestock productivity enhancement activities					

(CSA = Climate-smart agriculture)

Tool 9. Seasonal food security calendar

Purpose:

The purpose of the Seasonal Food Security calendar is to document connections between seasonal climate conditions and food security over the course of the year. Creating two Seasonal food security calendars, one with normal climate conditions and one with abnormal climate conditions enables you to document how food security shifts under different climate conditions. It can also be used to document coping strategies. This tool can also be used to assess whether food security has changed over time.

Process:

You can use the same calendar created in the Seasonal calendar tool. However, if the current focus group participants did not create that map, you are advised to create a new map with this group. Explain that you want to learn what people eat in a year. See example for this calendar from 52Find two large open spaces, one for a group of men and one for a group of women. Calendars can be drawn on a large paper or on the ground or floor. Draw a line all the way across the top of the cleared space (or paper) and explain that the line represents a year. Ask the participants to mark the seasonal divisions along the top of the line.

- It is usually easiest to start the calendar by asking about rainfall patterns. Ask the participants to put stones or draw circles under each month (or other division) of the calendar to represent typical amounts of rainfall (where more stones equal more rain).
- Below the rainfall, draw a line and ask the participants to fill in stones or circles indicating the amount of food available to their household in the different seasons.
- Use the SEAGA guiding questions to expand the discussion on seasonal food security. Note differences in household and individual food security.

SEAGA guiding questions, focus on food security:

- What climate conditions are necessary for you to plant your crops?
- What range of temperature or rainfall prevents you from planting what you normally plant?
- Who decides to store food or necessary assets, such as seeds? Who decides what food to buy?
- Who prepares the food?
- How does food availability vary over the year? Are there periods of hunger? Does this differ for men and women? Does this differ for boys and girls?
- Is enough fuel and water available to cook (and drink)?
- If your crops fail, where does your food come from?
- What do you do if there is not enough food to eat? What do you do if you do not have enough money to buy food? Can/do cash transfers smooth over difficult periods?
- How would you characterize the amount of food **your family** had to eat during this period? How would you characterize the amount of food **you** had to eat during this period? (Repeat these questions for different seasons.)
- How would you characterize the quality of food you had to eat during this period? Was this the same for all household members? (repeat for different seasons)
- What are your different sources of food?
- Has the amount of food available during the year changed over the past five or ten years?

Tool 10. Climate-related risk management practices

Purpose:

The aim of this tool is to capture the farmers' perceptions of cause and effect of a major past climate related events, as well as the impacts and responses, particularly with regard to food security. This tool helps to understand various risk managements strategies.

Process:

Drawing on the seasonal calendar tool results, identify a previous major climate change event with the participants, such as a severe drought or flooding. This can also be done by using a village history approach, in which older members of the community are asked to produce a timeline of major weather related events that have affected the village. Focus on the selected event and ask the participants to describe it in more detail. Ask them to describe why it was unique, the problems they faced and what kind of help was available. Discuss and list the problems/vulnerabilities and coping strategies that were employed. Have the participants draw a circle representing the major event. Have them draw lines coming off of the circle as effects of that event. Also have them note what the loss was due to these effects.

SEAGA guiding questions:

Questions related specifically to the major climate change event discussed.

- What was the effect of the event on your harvest? (This is particularly important given the difference between drought as a creeping hazard, and flood as a rapid onset.)

- When a family receives food to eat from outside, how is it distributed amongst women and men and is it sufficient for each person? Does this change during a drought?
- If food was not available, what was the alternative, what do you eat?
- Was there any change in the crops they cultivated during the major climate event (e.g. drought)?
- What happened to women during this event? What happened to men? Who was responsible for getting food, and how?
- Who was impacted the hardest, women, men, boys or girls?
- Did anyone seek alternative livelihood activities? If so, what did women do? What did men do?
- Did you change your farming activities? Did the women or men in your household change their farming activities?

Questions related to climate change events in general:

- To what extent do you think you are at risk of facing a drought or a flood (low, medium, high levels of risk perception)?
- How do you minimize risks in your family to ensure that you have food after a drought or a flood when there is a lack of food? What risk management strategies have you been using in the last five years?
- Do you have access to services such as agricultural extension, financial and/or services that you may receive from being a member of a community organization? If so, how have these services helped you manage risk and ensure access to food.
- Do you have secure land tenure? If yes, has this helped you recover from after a flood or drought? If so, how?
- How many months after a natural disaster does it take for you to feel you have enough food for yourself and your family?
- How do these risk management techniques you use maintain your food security during droughts and floods? How do they affect your income?
- In a time of weather related disaster, who is responsible for what activities in your household to cope with the disaster? Who makes decisions on what?
- What future actions do you plan to take to ensure food security?
- What is needed (differentiate male/female households and family members)?

Note: The results of the CVA Matrix can be brought in here in order to pinpoint particular areas of capacity and vulnerability which can inform adaptation and mitigation planning and interventions and help you to target key groups within the population.