PART 2

How to do participatory policy development

This Part describes a process you can follow to ensure that local people contribute to developing policies that promote sustainable agriculture and rural development. There are five steps in this process. Each step consists of several sub-steps.

1. Get organized
2. Select the focus area
3. Analyse the current situation
4. Identify scenarios for the future
5. Identify recommendable policy changes

The examples used to illustrate the steps come from Honduras, Mali and the Philippines. They are taken from case studies conducted by the SARD-FSE project in these countries.

There is no one “right” way to do participatory policy development. Adapt the procedure described here to suit your own situation and needs. You may have to spend more time on some steps so that participants can contribute effectively to the process. You may have to repeat some steps – for example, hold meetings or conduct workshops in several places so that different groups of people can attend. Or you may be able to skip some steps altogether if you already have the information you need – e.g. if a development project in your area has already generated this information.

Make sure you document the results of each step. This is important so that other people (such as managers in another ministry or staff of a development project) can learn what has been said and done. If you do not document and disseminate the results, do not be surprised if they ignore your work! You may want to report the activities and findings in the order that you do them: one step in each chapter of your report.

The approach here is designed to develop policies for sustainable agriculture and rural development. But the same general approach might be useful also for developing policies in other sectors – such as urban development, health or education. Feel free to adapt the process as necessary if you want to use it in these sectors.
How much time will it take to run through the process? That depends on many things: the scope and depth of the activity, the number of different locations you include, the complexity of the issues involved. It may be possible to run through a process like this in a few weeks by combining several of the workshops into one. Or it may take several months. Plan accordingly!

How does the whole process begin? The kick-start is generally a political decision taken by the government or by the regional or local authorities. Such a decision can be instigated or suggested by donors. Generally, the concern is twofold:

- To understand a specific problem, such as: a social conflict in a marginal area that lacks development prospects; soil erosion in a given watershed that provokes frequent landslides or floods; accelerating deforestation in an arid zone that needs to be tackled to fight desertification; or declining farmers’ income linked to the farm-gate prices of a cash crop or staple food.
- To involve stakeholders, and particularly the poor, in the search for relevant policy measures. The purpose is also to make sure that rural communities and households take an active, substantial part in implementing the recommended policies and programmes.

Generally, the authorities may delegate the responsibility for carrying out the participatory policy analysis process to a specific governmental institution or other partner. This can be a university, an NGO, a private firm, etc. This manual is primarily directed to them.

1 GET ORGANIZED
It is important to be well organized in order to conduct an effective participatory policy development process. There are many ways of organizing. The approach described here is one possibility. Adapt it to suit your own situation.

You will need the following:

- A small core team of people to manage and implement the policy development process.
- A set of institutional partners.
- A steering committee to guide the process.
- A set of stakeholders who are involved in the process.
- An agreed approach or set of procedures.
- Sufficient resources to do the job.

Organizing is presented here as a single step, but in reality it is an ongoing activity that occurs throughout the policy development process. It is not possible to plan every detail in advance. You must be flexible, and you will need to fine-tune each activity. For example, you may discover it is necessary to hold extra meetings with key stakeholders to ensure their views are heard and decisions on roles are taken jointly. Make sure that your organization is flexible and participatory enough to deal with these needs as they arise.

Warning: Getting organized takes time. In particular, building a team, convening a steering committee and creating partnerships require detailed attention. Do not underestimate the time and effort needed.

1a Form a core team and decide on responsibilities
The core team will consist of a relatively small group which manages and implements the policy development process. How many people depend on the scale of the task. For a small region or limited scope of work, three or four people will be enough. For a larger region or scope, you will need more people – perhaps up to ten. Do not have too many people in the core team, as coordinating and managing a large group is too difficult.

Name a team leader who will have overall responsibility for managing the core team and implementing the process. The leader should be competent in policy analysis, and have facilitator skills. His/her role is that of a neutral, independent broker having the capacity to convene key players and to be credible in the eyes of government, donors and other stakeholder groups.
The **team members** should have a range of skills and backgrounds. They may include people with skills in policy and institutional analysis, farming systems, participatory approaches, and economic, social and environmental fields of rural development. At least one team member should be based in the region chosen for study (see Step 2).

The core team may be staff of a single organization, or they may be drawn from several different organizations (see Step 1c below). You may need to bring in short-term consultants to strengthen the team in particular areas, such as environment, facilitation or communication.

The team must be neutral and open to ideas – and the various groups of stakeholders must see them as such. Choose team members who are objective, open, and able to work well together. Make sure that the team includes both men and women.

Once you have identified the core team, orient them on their **tasks and responsibilities**. Make sure they have a common understanding of the overall approach, and assign an initial set of tasks to each person.

**1b Form a steering committee**

The steering committee has three main roles:

- **Guide the core team** – for example, determine the focus of the study.
- **Provide information and facilitate contacts** – for example, arrange meetings with senior government officials or identify participants in workshops.
- **Ensure “buy-in”** – ensure that their own organizations support the process, learn from it, incorporate its findings into their own work, and if appropriate, adopt or adapt the approach in the future.

The steering committee should represent the major categories of stakeholders in the process. These may include:

- **Government** – ministries or departments and their line agencies at local level in charge of agriculture, agrarian reform, environment, rural development, education, etc.
- **Local authorities** – district authorities, agricultural services, etc.
- **Civil society** – national or local NGOs, farmers’ organizations, religious groups, etc.
- **Private enterprise** – industry, input suppliers, bankers, other service providers
- **Research and development organizations** – universities, national research institutes, extension organizations.
- **International organizations** – international agricultural research institutions, UN agencies, international NGOs, donors.

How big should the steering committee be? Here are two options:

- **A small number** of highly involved participants (8–10), drawn from the groups listed above. This small group may be complemented by roundtables, regular information from and consultation with a wider group of other stakeholders.
- **A larger committee** including all relevant stakeholders, aiming to inform and involve all of them.

Identify representatives of each of the stakeholder categories, and then include a selection of them in the steering committee. Choose people who have the capacity to contribute, are interested in being involved, and have the time. Try to ensure that the steering committee is balanced in terms of gender, opinions (for example, supporters and opponents of particular policies), ethnicity, etc.

Consult the steering committee at key stages in the process, keep them informed about progress, and seek their help in solving problems that may arise.

You may also decide to ask certain influential, high-level, well-known individuals for assistance. Such people may be able to provide advice, assistance or objective reviews of your outputs. They may also be able to open doors (for example, to senior policymakers) that would otherwise remain closed to you.
1c Identify partner organizations

The core team will probably need to work closely with several partner organizations in the study areas. For example, you may want to ask a local NGO to help organize meetings with villagers in the area. Or you may need staff of a local government unit to help gather data.

If you are working in a minority area, your partners should include representatives of the minority, or at least have people who speak the local language.

You may be able to obtain these services without cost, or you may have to pay for them through a subcontract.

When choosing partner organizations, you will have to decide:

- What type of organization should be involved?
- What should their responsibility be?
- What level of “ownership” should they have in the process?
- How should the team work with the partner organization?

If appropriate, include a representative of each partner organization in the core team.

1d Identify stakeholders

Many different groups of people have an interest in, or are affected by, agricultural and rural development policies. These people are known as “stakeholders”. The participatory policy development approach tries to ensure that policies reflect their views.

Make a list of the various stakeholders at each level in the study: national, regional and farming system. First, think of the various categories of stakeholders and then identify specific organizations that represent them. You will use this list later to invite these organizations to workshops or meetings.

Note: You will not be able to identify specific organizations until you have selected your focus area (Step 2).

Table 2 shows some examples of stakeholder categories and organizations at each level. Adapt it as necessary to suit your own situation.

1e Decide on your approach

Early on, you should decide how you are going to set about managing the process of participatory policy development. You need to decide:

- Who should be involved (see Step 1d above).
- Who is responsible for what aspect of the process.
- The types of activities to undertake: workshops, consultations, surveys, etc.
- How to manage the flow of information, and make sure that it is documented appropriately.
- The overall time frame and schedule of activities.
- How to monitor progress.

You may have to fine-tune your approach several times during the process, based on your monitoring of progress. Make sure you have the flexibility to do this.

1f Ensure you have the resources you need

The amount and type of resources will depend on the scale of your task. You may have to reduce what you are trying to achieve (for example, cut down on the number of areas you include in the study, or reduce the number of workshops). Do not try to be too ambitious!

Here are some of the resources you will need:

- Mandate – A clear mandate from the government (or your organization), and support from a high level to enable you to get cooperation from other parts of the organization or from outside.
- Staff – Qualified members of the core team, and capable support staff (see Step 1a)
### TABLE 2
Examples of stakeholders at national, regional and farming system levels

<table>
<thead>
<tr>
<th>Stakeholder category</th>
<th>National</th>
<th>Regional</th>
<th>Farming system</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Government</strong></td>
<td>Prime Minister’s Office</td>
<td>Provincial government District council</td>
<td>Municipal authority Village council</td>
</tr>
<tr>
<td></td>
<td>Ministry of Agriculture</td>
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<td></td>
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<tr>
<td></td>
<td>Ministry of Agrarian Reform</td>
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<tr>
<td></td>
<td>Ministry of Rural Development</td>
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<tr>
<td></td>
<td>Ministry of Environment</td>
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<td></td>
<td>National Planning Agency</td>
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<td></td>
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<tr>
<td></td>
<td>Ministry of Finance</td>
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<td></td>
</tr>
<tr>
<td><strong>Civil society and groups</strong></td>
<td>National NGOs</td>
<td>Local NGOs</td>
<td>Community organizations</td>
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<tr>
<td></td>
<td>Religious organizations</td>
<td>District farmers’ association</td>
<td>Local cooperatives</td>
</tr>
<tr>
<td></td>
<td>National farmers’ association</td>
<td>Regional cooperatives</td>
<td>Farmers’ associations</td>
</tr>
<tr>
<td></td>
<td>Consumer associations</td>
<td></td>
<td>Consumers</td>
</tr>
<tr>
<td></td>
<td>National cooperative organizations</td>
<td></td>
<td>Informal leaders</td>
</tr>
<tr>
<td><strong>Private sector</strong></td>
<td>Industry associations</td>
<td>Medium-sized firms</td>
<td>Marginalized groups</td>
</tr>
<tr>
<td></td>
<td>Large firms</td>
<td>Input wholesalers</td>
<td>Women</td>
</tr>
<tr>
<td></td>
<td>Supermarkets</td>
<td>Transport firms</td>
<td>Youths</td>
</tr>
<tr>
<td></td>
<td>Exporters</td>
<td>Processing companies</td>
<td>Indigenous people</td>
</tr>
<tr>
<td></td>
<td>Banks</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Research, extension, education</strong></td>
<td>National research institute</td>
<td>Universities</td>
<td>Agricultural schools</td>
</tr>
<tr>
<td></td>
<td>Extension agency</td>
<td>Local extension service</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Universities</td>
<td>Development projects</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Extension agents</td>
<td></td>
</tr>
</tbody>
</table>

- **Facilities** – Office space, computers, vehicles, etc.
- **Information** – Access to relevant data and information: for example, production and trade data, information on policies, or results of research.
- **Budget** – Sufficient funds to complete the tasks.
- **Time** – A realistic timeframe and schedule.

### 2 SELECT THE FOCUS AREA
The initial focus area is generally set by the organization that commissioned the study. The governmental agency that initiates the study generally has decided on the region, farming system, or commodities to focus on. Some examples:

- A specific **farming system**. For example, what should be done to promote development in pastoralist areas? Concern in the government and among donors may lead to a university or NGO being commissioned to promote participatory policy development on pastoral farming systems.
A specific region. For example, what are the best policies to promote development in rural Northeastern Province? A local authority will naturally want to find ways to support sustainable agriculture and rural development in its own region, and may ask a research institute to assist.

A specific commodity in a geographic area. For example, what should the policies be on sugar in the central provinces: research, extension, trade, subsidies, marketing, infrastructure, etc? The Ministry of Agriculture may want to rely on a commodity association or research institute to focus on the commodity it has a mandate for.

A particular policy area. For example, what should the country’s policy be for developing sugar exports? A project to enhance competitiveness, based in the Office of the Prime Minister, may choose a consultancy firm to instigate participatory policy development.

Based on this initial general focus, there will be a need to further select and refine it. If you are studying a particular commodity, which region and farming system should you select to gather information and people’s opinions? If your focus is on a region, which farming systems and commodities are important, and in which districts or villages should you choose to gather information?

Here are some criteria to help you decide.

- Poverty and food security – Prevalence of poverty or food insecurity in a region; poverty reduction strategies, and how they affect the farming system and local people; self-sufficiency in major staple foods.
- Land type, natural resources and infrastructure – Climate and biophysical factors – for example, irrigated land, hilly uplands, remote mountain areas, arid and semi-arid lands; availability of infrastructure (roads, markets, telecommunications, irrigation, input supplies, etc.) and government services (extension, education, security, etc.).
- Commodities – Major commodities in the country or region, as a source of cash or subsistence (e.g., cotton in Mali, coffee in Honduras, rice in the Philippines); roles of these commodities in creating income and employment.
- Shocks – Major recent shocks (drought, hurricanes, conflict, structural adjustment, devaluation, HIV/AIDS, etc.) and vulnerabilities (factors that make people more likely to be affected by these shocks) that might affect the region or farming system.
- Politics – Political and economic stability of the area, causes of actual or potential conflicts, pressure from political parties or interest groups.
- Demography – Population density and trends, pressure on key natural resources (as revealed by soil erosion, water supplies, deforestation, etc.), urbanization and migration.
- Culture – Cultural diversity and indigenous values attached to the farming system, its farming practices and agricultural products.
- Economics – Roles of agriculture and the farming system for employment, added value, industry, and environmental externalities (such as watershed protection). Economic potential of the region or commodity. Overall importance of the system for rural and urban economic development (employment, income, foreign exchange generation, etc.).

Suggested procedure

The procedure below is an example applied to a particular farming system that the study sponsors have already chosen. Adapt the procedure if you are focusing on a specific region, commodity, or theme.

1. Select those criteria that are important for your situation.
2. List the sub-farming systems, commodities or regions that are relevant.
3. Gather data on these from secondary sources (e.g. planning documents; global, national and sectoral reports; surveys, databases and maps).
4. Where needed, discuss with key informants (relevant ministries, NGOs, stakeholders, researchers, etc.).
5. Rank the sub-farming systems according to your criteria and select the most important.
6 Select a region that best represents the farming system you have chosen. Choose more than one region if you suspect that there may be major differences among different parts of the country.

7 Contact the local authority in the region (or other key stakeholders, such as an NGO active there). Ask for their assistance in implementing the study.

8 With the help of the local authority or NGO, identify districts or villages where you can meet with local people to elicit their views.

Feasibility
Make sure that it is feasible to study the farming system (or commodity or region or theme) you have chosen. It may be difficult for various reasons: lack of time or money, remoteness, lack of information, or security problems in a particular area. Make sure that you can overcome these problems before deciding on a particular area.

However, do not fall into the trap of studying a particular region or topic merely because it is convenient. Areas close to the capital city are likely to have much better access to markets or government services than remote regions. Policies based on a study of an easily accessible area may not be appropriate for remote areas.

3 ANALYSE THE CURRENT SITUATION
This step has four aims:

• To find out what local people see as goals for agriculture and rural development in their area.

• To identify suitable indicators for accountability on these goals, and for monitoring and evaluation of SARD.

• To find out the current situation in agriculture and rural development.

• To diagnose the strengths, weaknesses, opportunities and threats for sustainability in the current situation.

3a Find out people’s development goals
What do people want for themselves and their village? What do they see as desirable, as a “good thing”? These development goals should be realistic and attainable, given the types of interventions and policy changes that government is able to make.

Different people face different problems and have different ideas of what is a good thing. Make sure you get the views of as many different groups as possible. Table 2 has a list of some potential stakeholders.

It is the poor, disadvantaged and vulnerable who have the fewest chances to make their voices heard. Put extra effort into getting the views of the poor, women, youths, and indigenous people.

How to get their views? Here are some options on how to proceed (see also Box 2):

- Support from local leaders – Meet with local formal and informal leaders. Inform them of the proposed work, incorporate their ideas, and secure their commitment and support.

- Stakeholder consultations – Call a meeting of representatives of the various stakeholder groups in your region. Explain the concept of sustainable agriculture and rural development
to them. Ask them to describe what they see as a desirable goal for agriculture and rural people in their area. You may find it necessary to call several meetings of different groups of people. For example, women may find it difficult to express their views if men are present. Poor, uneducated people may be reluctant to talk in the presence of senior government staff. People in remote villages may not be able to come to town. Be prepared to hold separate meetings for each group, perhaps near people’s homes so it is easy for them to attend.

• **Focus groups** – Hold a series of focus group meetings with representatives of each stakeholder group.
• **Interviews** – Interview individuals or small groups of key informants. Prepare a guide to make sure you (and other interviewers) remember to ask all the right questions.
• **Secondary information** – Projects working in the region you have chosen may have generated relevant information. Talk to project staff and ask for copies of their reports. Projects and NGOs working in the area may also be able to provide valuable contacts or help set up stakeholder meetings and discussions.
• **Survey** – If all else fails, you may need to do a survey to collect the information you need. Be warned: surveys take time, can be expensive, and there is a danger of collecting more data than you can analyse easily.

Through such techniques, the SARD-FSE project case studies identified development goals in its focus areas in Honduras, Mali and the Philippines (Box 3).

### Box 3. Goals in Honduras, Mali and the Philippines

In the SARD-FSE project, local stakeholders formulated the following goals for sustainable agriculture and rural development:

- **Honduras** – A productive and organized municipality with food security, health and capacity for marketing, diversification and profitability for sustainable life conditions.
- **Philippines** – Improved quality of life, community and family togetherness, and peace and harmony in the agriculture and rural sectors.
- **Mali** – Higher incomes, food self-sufficiency and maintenance of soil fertility.

The stakeholders identified three strategic objectives for the public, civil society and private sector to pursue:

- **Empowerment of rural people** – Providing them with a political voice, access to land and other key resources, education and training, entrepreneurial and financial capacity, and basic social services, with special attention to women and young people.
- **Production and wealth creation** – Intensification based on traditional and modern knowledge, technologies that use local resources efficiently, diversifying production and value-adding in the agri-food chain, and expanding options in off-farm employment, environmental services and rural/agri-tourism.
- **Reduced vulnerability** – Strategies to manage and recover from natural hazards, economic shocks and conflicts.

### 3b Identify and select relevant indicators

You will need a way to measure progress towards the above goals, and towards sustainable agriculture and rural development in general. Two levels of indicators might be required.

The first level is necessary for accountability with stakeholder groups. For this, a set of basic indicators are needed that reflect the aspects that people think are important. For example, in the Philippines, the total amount and value of rice produced might be a good measure of agricultural production. To measure social cohesion (“community and family togetherness, peace and harmony in the agricultural and rural sectors”), you might need data on the number of households headed by single women, permanent outmigration by men or women, the frequency of conflicts over land...
or other issues, crimes, etc. To measure the empowerment of rural people, key indicators might be the frequency of consultations between local government and stakeholder groups, land tenure data, data on investment from local initiatives, etc. Select these indicators in a participatory way, perhaps by brainstorming or through a stakeholder workshop.

You will need indicators for each of the main areas that people think are important – in other words, for their development goals. Choose enough indicators to give a reasonably complete picture of the situation over time, but do not choose too many (a dozen core indicators might be more than enough). Prioritize them!

The second level might be required by the institution that has commissioned the study, for a complete and more “technocratic” monitoring and evaluation of progress. For example you may need indicators in each of these five areas: environmental, economic, socio-cultural, technological and institutional. Depending on the scope of the problem, your indicators may also need to cover one, two or three levels: national, regional and local.

See Table 3 and Tool 1 in Part 3 for a draft list of indicators. Use these tables as a starting point, and select those indicators that are relevant for you. Adapt them or add new indicators to reflect people’s development goals and the overall monitoring and evaluation needs.

National-level stakeholders should be involved in selecting the national-level indicators, and (naturally enough) regional and local stakeholders should be involved in selecting regional- and local-level indicators.

The indicators should be:
- Meaningful and easy to explain.
- Relevant to policy and institutional analysis and action: it should be possible to draw useful conclusions from them.
- Reliable – they must reflect what they are supposed to measure, and the data must be more or less accurate (though don’t expect them to be free of errors!).
- Available – there is no point in choosing an indicator that cannot be measured, or would be too expensive to measure. You may list the indicators you have chosen in a table like this:

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Environmental</th>
<th>Economic</th>
<th>Social</th>
<th>Cultural</th>
<th>Institutional</th>
</tr>
</thead>
<tbody>
<tr>
<td>National</td>
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<td></td>
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<tr>
<td>Regional</td>
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<tr>
<td>Local</td>
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</tbody>
</table>

Once you have selected an initial set of indicators, test them to make sure that they are appropriate, and that it is possible to gather the information needed. Ask the stakeholders to assess each indicator, asking these questions:
- Are the indicators relevant and useful?
- Are data available, and if not, is it possible to generate them?
- Are any other indicators needed?

If you are conducting the study in several different areas, you may divide the indicators into three groups:
- Obligatory – It is vital to collect these data.
- Optional – Collect these data if possible or relevant.
- Local or specific – Collect these data in particular areas or situations.

The SARD-FSE study in the Philippines adapted this approach slightly. Table 4 shows the indicators chosen for monitoring and evaluation of sustainable agriculture and rural development in the Philippine study.
Analogue the national situation

You will need to link the analysis of the local situation with a review of the “bigger picture” of the problem at national and regional level, before “zooming in” on the focus area.

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The depth and scope of the national overview (and the next step, a regional overview) will depend on several factors: the capacity of the institution that has commissioned the study, the nature of the problem, the expected outputs and resources available, and factors such as donors’ views.

Gather information on the national situation from various sources, then (resources permitting) hold a workshop with key stakeholders to analyse the national situation. Here are some things to look at:

- **History, population and culture.**
- **Institutions, programmes or projects and policies** adopted (or planned) that impact on agriculture and rural development. Examples include food security and sustainable development programmes, environmental conservation activities, agricultural and rural development schemes, and poverty reduction projects.
- **Major risks and shocks** that people have to cope with (for example, AIDS and other diseases, drought and armed conflicts).
- **Government**, its characteristics, levels, services and effectiveness, and the local population’s participation in it (including disadvantaged people, women and youth).
- **Selection of the regions**, farming systems and local areas to study (if you have not already done this).
- **Identify key trends, challenges and trade-offs** for the sustainability of agriculture and rural areas at the national level.

It may be useful to compare the national context with the situation in neighbouring countries.

### 3d Analyse the regional situation

Once you have understood the national situation, you can focus on your selected region. Again, you can do this by gathering information from different sources, then convening a workshop of stakeholders to discuss the regional situation. Some items to consider (some of these are the same as at the national level):

- **Institutional landscape** at the regional and local levels, projects or policies that may affect agriculture and rural areas, and the identity and profile of various groups of stakeholders.
- **Major risks and shocks.**
- **Government characteristics and involvement of local people.**
- **Indigenous culture**, demography and social characteristics.
- **Food security** in the community.
- **Climate and biophysical factors.**
- **Environment** and natural resources.
- **Economic factors**, including extent and distribution of poverty, markets and non-farm employment, infrastructure and access to resources.
- **Criteria for selecting specific localities or farming systems** for study (if you have not done this already).
- **Sustainability of agriculture and rural areas** at the regional level. Identify key trends, challenges and trade-offs.

### 3e Analyse the local situation

You can now analyse the situation in the local area or for the farming system you have selected. Again, do this in a participatory manner. For example, you can gather information through semi-structured interviews or focus groups, and do the analysis through a stakeholder workshop.

Here are some things to check (select those that are relevant for your situation):

- **Household assets and priorities.**
- **Land tenure, land use and distribution.**
- **Agricultural, livestock, fishery and forestry** practices, management and performance.
- **Food security** at the household level, including human nutrition issues.
• **Culture** – heritage (building, landscapes, products), identification and conservation of indigenous knowledge, traditional technologies and know-how. Consider cultural diversity and social or cultural features hampering sustainable development (such as attitudes towards technology, risk, change and environment).

• **Social aspects** – equity, vulnerability or resilience of communities, management and conditions of work (wages, duration, difficulty, safety), access to information, training and basic social services (health, education, housing, sanitation), involvement in decision-making, social stability at the community level, gender balance and youth roles.

• **Economy** – household income, food grown by the household for home consumption, access to resources such as land, water, credit, inputs, infrastructure (roads, transport, water, irrigation, energy, markets), technological innovations (use of improved varieties, commercial inputs, irrigation, integrated pest management, intensification, etc.), value-adding and processing of products (post-harvest handling, diversification of products, packaging, etc.), product marketing (market access, networks and services for local markets and export), profitability of farm enterprises (income, production costs, net income per hectare, labour units, options for increased profitability), non-farm and off-farm enterprises or income sources (such as work in town), food quality and safety, economic organization of farmers and producers, outside investment, research and development, extension and information services, and linkages with other sectors (e.g., industry, tourism, services), animal well-being.

• **Environment** – status and management of renewable and non-renewable natural resources: water (quality and amount), soil fertility and erosion, biodiversity (wild and domesticated, animal and plant), air (quality, climate change), energy (consumption of fossil fuel, production or use of renewable energies), landscapes, prevention of natural hazards (fires, avalanches, floods, landslides), and environmental risks and management of their causes.

• **Sustainability of agriculture and rural areas** at the local level. Identify key trends, challenges and trade-offs for the sustainability of agriculture and rural areas.

### 3f Analyse strengths, weaknesses, opportunities and threats
Now you have gathered the information, you can work with the stakeholders to analyse the strengths, weaknesses, opportunities and threats (SWOT) in agriculture and rural development in your region and location. See Part 3 Tool 9 (SWOT analysis) for how to do this.

You may choose to do a SWOT analysis just for the local area, or for the local and regional levels, depending on the nature of the problem.

The SWOT analysis provides a basis for planning strategies in subsequent stages of the process.

### 4 IDENTIFY SCENARIOS FOR THE FUTURE

#### 4a Identify long-term trends in the locality or farming system
The aim of this step is to trace how the locality or farming system has changed over time and to identify the trends and forces that have caused this change (see also Box 4). Changes may be:

• **Structural** – land use, availability of natural, human and financial resources, assets, type of production.

• **Operational** – farm practices, animal management and forestry techniques, use of inputs and management levels, land management, etc.

• **Functional** – use of products and processing, proportion of production sold, market location (local, distant, exported), yield and profits, use of credit, amount of income or savings, linkages with non-agricultural and urban activities.
**TABLE 5**

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Technological-economic</strong> – Both crops are used for food security and for social, economic and cultural reasons. The region is endowed with fertile, clayey soils, and both crops are managed in a rotational and integrated system. Family labour is extensively used. The “quetzungual” agro-forestry system performs well as an option to traditional slash-and-burn.</td>
<td><strong>Technological-economic</strong> – Water resources are adequate for home consumption and production. Irrigation projects are starting with profitable crops such as vegetables, plantains and pineapples. A dynamic land market is developing with remittances sent from abroad. The region has potential for commercial development due to its proximity to an attractive market in El Salvador and tourists’ demand for handicrafts. The mountainous terrain has potential for providing environmental and rural/agri-tourism services. The “quetzungual” system is ready for up-scaling because it improves the yield, viability and sustainability of the maize-bean system.</td>
</tr>
<tr>
<td><strong>Political-institutional</strong> – The municipality is gaining experience with strategic community and economic planning. Producer training and skill development programmes are gaining in strength. The rather lengthy cropping period keeps family labour on farms. Vulnerable groups, such as women and youth, are pro-active in social, cultural and productive activities.</td>
<td><strong>Political-institutional</strong> – Handicrafts are a competitive option for export development. Local people are excited about participating in the government’s decentralization process, and this augurs well for local ownership of strategies, enterprise development and a more equitable distribution of resources. The region seems attractive to public and private institutions that provide savings and credit services. The dissemination of cultural heritage through fairs, dances and foods can be accelerated with the help of government and NGOs.</td>
</tr>
</tbody>
</table>

**Weaknesses**

**Technological-economic** – Land is used more to produce for home consumption, there are issues of legal ownership and land use, lack of storage facilities for native seeds, excessive use of chemicals and residues in coffee production, and problems of with high input costs and unstable product prices. Overall production is low because of low yields and small farm size. In agriculture, job opportunities are limited, unlike in the thriving clothing industry.

**Political-institutional** – Farmers do not perceive maize and bean production as a commercial activity. Local Institutions including educational and health services are limited, and so also are the road infrastructure and public investment. The region lacks planned technical and financial assistance and storage facilities. For all the above reasons, the rural people, especially the young, are migrating to urban areas and abroad.

**Threats**

**Natural-technological** – Natural disasters in the region seem to be occurring with greater frequency: major hurricanes, flooding and landslides in 1974, 1983 and 1998; El Niño in 1997 and drought in 1999, and erratic rainfall. These have damaged coffee, livestock, food crops, roads and bridges, and basic social and family infrastructure, costing millions of dollars in direct and indirect effects. The high level of slash-and-burn agriculture and accompanying deforestation, with population pressure, threatens the long term sustainability of the maize/beans-based system.

**Political-institutional** – Up to the 1980s, inadequate health facilities resulted in serious human diseases (scarlet fever, tuberculosis, diphtheria) affecting especially children and young people. The lack of adequate education and training of rural producers and people result in high rates of illiteracy and limited capacity to participate in development of the region. 5 years of low international coffee prices have drastically affected the income of farmers, workers and others up the chain. Areas close to El Salvador were affected by the armed conflict in that country, families were disrupted, lands and production were abandoned, and tenure problems ensued.

Source: Extracted from Honduras SARD-FSE case study
Participatory policy development for sustainable agriculture and rural development Part 2 - How to do participatory policy development

This step should produce the following:

- A list of the main historical milestones in agricultural and rural development in the country and region.
- Long-term trends in the farming system over the last 50 years (or longer). This would include a summary of interventions made by various institutions over this period (both successes and failures), and their favourable or unfavourable impacts.

It is important to discover the types of changes that have occurred, how they came about, or who made the key decisions and made the change possible, what elements facilitated the changes (e.g., education, extension services, shocks or emergencies), and what has been the scale of the changes (community, region, or the whole country).

Useful techniques include review of secondary data and the literature (including historical records); semi-structured interviews with key informants such as academics and elderly farmers, multi-stakeholder workshops and focus group interviews with knowledgeable people. See Part 3 Tool 8 (Historical trends and milestones) for one way of handling this step.

4b Identify the causes of changes

What has caused these changes?

Analyse your data and ask the stakeholders to identify possible causes of the changes. These causes can be divided into two categories:

- Internal factors, which the people or government in region or location might be able to control.
- External factors, beyond their control.

Box 5 lists some potential causes of changes in farming systems.

After identifying the most important causes of change, you can investigate these causes in more detail to understand their context and sources, and their effects on the farming system.

4c Identify future scenarios: probable and desirable

The previous step identified the past and current trends in the locality or farming system. You can now ask the stakeholders to predict what is likely to happen in the future if these trends continue. Think of a point in time, from 10 to 25 years into the future. What will the area look like then, given “business-as-usual”? What will the agricultural production system be like? How about the society and economy?

You can then ask stakeholders to think of a more desirable situation for the same point in the future. This optimistic scenario should be based on their development goals (Step 3a), but it should be plausible. Ask them to describe the scenario in detail.

See Part 3 Tool 11 (Scenario analysis) for suggestions on how to do this.

Box 4. Examples of general trends in tropical farming systems

- From long fallows to short fallows, to permanent land use
- From low-intensity to high-intensity crops
- From rainfed to irrigated farming
- From natural grazing to cultivated fodder for ruminants
- From arable farming to perennial cropping
- From single to multiple cropping
- From natural regeneration of soil fertility to intensive systems of manuring and fertilizing
- From hoe cultivation to animal traction to tractorization.

Adapted from Ruthenberg (1971)
Box 5. Possible causes of changes in farming systems

Natural resources and climate
- Resource depletion and degradation (forests, water, soil fertility and erosion, biodiversity), climate, energy consumption, and landscapes.

Cultural and social
- Inter-household and community organization, cultural/indigenous values and norms, religious beliefs, concepts of wealth, gender issues, demographics, migration, class structure, etc.

Political, institutional and public goods
- Policies – fiscal and monetary, trade and exchange rate, labour and employment, investment and foreign aid, population, income and equity, property rights, agriculture and rural development, natural resources and environmental protection.
- Decentralization, people’s participation and empowerment, role of non-state actors, valuation and monitoring of the various functions of agriculture and land.
- Education and health.
- Credit, input supply, product processing and marketing.
- Research and development, extension, training, information and communication.
- Links among civil society/NGOs, community organizations, the public and private sectors, and external agencies.

Trade and market development
- Land and labour markets changes.
- Investment – public, private and external donors.
- Financial tools, e.g., credit for farm production, infrastructure and marketing.

Science and technology
- Improved germplasm, management practices, farming systems research, extension, promotion through development projects.

Disasters and vulnerability
- Droughts, storms, floods, civil disturbance, armed conflict, drug trade, violence and insecurity, access to foreign exchange, etc.

*Adapted from Dixon et al. (2001)*

Ask the stakeholders to suggest changes in policies that would help achieve the desirable scenario. These suggestions form input into the next stage in the process.
5 IDENTIFY RECOMMENDABLE POLICY CHANGES

The “business-as-usual” scenario shows where the region or locality is heading. The optimistic scenario shows where people would like it to head. What policy changes are needed in order to achieve the desirable scenario?

It is risky to recommend changes in national policies based on the analysis of a single district or farming system. So consider recommendations at a lower level – for example, changes the regional government can make.

Below is a suggested procedure to develop and prioritize a series of policy recommendations. You can do this through a stakeholder workshop (you may need several workshops so you can obtain inputs at the regional as well as the national level). The workshop participants should include national and local government staff, staff of NGOs and community organizations, private enterprise, research and educational institutions, and donor agencies.

Box 7 lists some policy areas to consider during the workshops. The participants’ experience will highlight those policy areas that are sensitive, feasible and strategic for the problem under review. Identify clearly those policy areas that are most “critical” and might deserve considering changes or specific measures.
Box 7. Policies areas of possible relevance to farming systems

General economic and social policies
- Fiscal and monetary policies
- Trade and exchange rate policies
- Income, labour and employment policies
- Investment and foreign aid
- Population policies
- Basic social services (education, health, housing and sanitation)

Policies related to agricultural and rural development
- Rural infrastructure
- Building human capital for rural sector
- Agricultural research and technology development
- Agricultural prices
- Stabilization and risks in agriculture
- Direct government involvement
- Sustainable livelihoods
- Food security, food safety and nutrition

Policies related to rural markets and property rights
- Agricultural products marketing policies
- Land tenure and other resource property rights (e.g. water, forest and biodiversity)

Policies aimed at establishing democratic and participatory processes
- Local institutional development
- Decentralization, accountability and roles of non-state actors
- People participation and empowerment

Policies focused specifically on natural resource use and environmental protection
- Direct government environmental action
- Control instruments
- Economic incentives

Adapted from Hardaker (1997)

FAO experience has demonstrated that progress towards sustainable agriculture and rural development almost everywhere requires certain common prerequisites (Box 8). Try to have the workshop participants review the extent of the “critical” policies listed in Box 7 and fulfil these requirements.
Box 8. Requirements for progress towards sustainable agriculture and rural development

**Approaches and actions**
- Involve rural communities, and different stakeholder groups, as leaders and stakeholders in decision making.
- Develop partnerships, timely and transparent information flows, and networking links among civil society, public and private sectors, in support of decision-making and policy-making processes.
- Develop and apply ways to value, monitor and evaluate the various functions of agriculture and land, as well as progress towards sustainable agriculture and rural development.
- Enhance the capacities of stakeholders and relevant groups.

**Availability and access to resources and opportunities**
- Improve and secure access to land and other resources.
- Make appropriate technical information available to farmers and other users.
- Improve access to credit and other financial instruments.
- Improve access to markets.
- Ensure political voice and influence for local people.

*Adapted from FAO (1999)*

Government agencies and other development actors can use various institutional strategies and approaches to improve their services. Box 9 lists some options to consider.

Box 9. Potential institutional strategies and approaches for improved services

- Multi-sectoral, sector-wide, multi-institutional and interdisciplinary approaches.
- Decentralization and empowerment at the regional and local levels.
- Co-management models involving government agencies with the poor, weaker or disenfranchised beneficiaries, women, youth and indigenous people.
- Technology transfer, dissemination and information networking among marginalized groups.
- Participatory and action research approaches for poor households.
- Innovative agricultural service delivery (e.g., seed and input supply, rural finance, marketing).
- Institutional services to support micro, small, and medium-size enterprises.
- Farmers’ associations to develop agricultural enterprises to strengthen farmers’ participation in the food chain, and contribute to food security and poverty reduction in rural areas.

5a Identify and prioritize strategic objectives

Ask the stakeholders to identify strategic ways to steer the local area or farming system towards the optimistic scenario. You may have done this already as part of Step 4c. If not, use brainstorming to generate a list of strategic objectives (see Part 3 Tool 2, *Brainstorming*).

Ask the participants to rank the objectives in order of importance.

Table 6 shows the results of such an exercise in the Philippines SARD-FSE study.
5b Identify specific objectives

Select the top-priority objective, and ask participants to suggest specific objectives that will help achieve it. Again, you can use brainstorming to do this. It is likely that many of the ideas will already have emerged during previous steps in the policy development process.

Box 10 lists eight specific objectives that emerged in the Philippines when participants were discussing the top-priority objective of increasing agricultural productivity.

When the participants have finished working on the top priority strategic objective, ask them to turn their attention to the second-priority strategic objective. Ask them to suggest specific objectives for this too. Repeat this procedure until you have covered all of the strategic objectives.

To save time, you can ask small groups of participants to discuss different strategic objectives, and then to report back to the plenary.

### Box 10. Example of specific objectives from the Philippines SARD-FSE study

**Strategic objective**
- Increase agricultural productivity

**Specific objectives**
1. Develop high yielding varieties of rice and other crop species and livestock breeds well-suited for rainfed lowland environments.
2. Conduct other related research on crops, livestock, and social components that will influence the agricultural productivity.
3. Develop irrigation facilities and provide alternative sources of irrigation water.
4. Identify and promote cultural management practices that improve soil fertility, with emphasis on organic production.
5. Introduce crop diversification and mixed cropping.
6. Ensure non-conversion of agricultural lands for other uses.
7. Protect and restore watershed areas.
8. Increase farmers’ access to agricultural resources and support services.

5c Identify and prioritize potential policy measures

The participants should now start to discuss each specific objective in more detail. For each of these objectives:

1. List the relevant policy measures recommended by local stakeholders (Step 4c above).
2. Ask participants to identify existing policies that are relevant to this specific objective.
3. Ask them to say whether those existing policies help achieve the objective. Are they favourable, neutral or unfavourable?
4. Ask them to identify gaps in the policies that should be filled. If the policies are unfavourable or neutral, it is likely that these gaps will be large. But even if the policies are favourable, there are still likely to be gaps. Ask the participants to identify these.
5 Ask participants to consider the local stakeholders’ recommendations and refine them in light of the existing policies and the gaps they have identified.
6 Ask participants to rank the recommendations. Tell them to consider things like feasibility and cost when they make the ranking. You can use Table 7 as a basis for this exercise.

**TABLE 7**

<table>
<thead>
<tr>
<th>Policy ranking matrix</th>
<th>Strategic objective 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Specific objective 1</td>
</tr>
<tr>
<td>Recommended policy measures of local stakeholders</td>
<td></td>
</tr>
<tr>
<td>Existing policy instruments that are relevant</td>
<td></td>
</tr>
<tr>
<td>Evaluation of existing policy instruments (favourable, unfavourable, neutral)</td>
<td></td>
</tr>
<tr>
<td>Adjusted/refined recommendations for implementation</td>
<td></td>
</tr>
<tr>
<td>Priority ranking of recommendations (high, medium, low)</td>
<td></td>
</tr>
</tbody>
</table>

Table 8 shows an example of the results of this exercise, developed by the SARD-FSE project in the Philippines. The columns in the table show three of the eight specific objectives participants identified, to achieve the strategic objective of increasing agricultural productivity (Table 6 and Box 10 above).

5d **Determine who should do what**

Who should do what in order to implement the recommendations? And how much will it cost?

Ask the stakeholders to identify the level at which each recommendation should be implemented, which organization is responsible for decision making and execution, the cost over several years, and the timeframe.

Part 3 Tool 13 (*Policy action matrix*) suggests a way of doing this.

5e **Validate the results**

Depending on how you have organized the process, it may be necessary to validate the results. This can be done through workshops during which the findings are presented and reviewed by key stakeholders, and possibly adjusted. Two groups are particularly important:

- **Local stakeholders.** Make sure that you keep them informed, and make sure they agree with what you say they said! Do not be surprised if they ask for more information and support to involve and mobilize more participation at grassroots levels.
- **National-level policy makers and donors, and senior regional policymakers.** They hold the purse-strings, and they have to approve your findings and start the bureaucratic wheels rolling to put them into action. You will have to convince them that the ideas that have emerged from the process are good ones.
### TABLE 8
Example of analysis and prioritization of three specific recommendations from the Philippines SARD-FSE study

<table>
<thead>
<tr>
<th>Specific objective</th>
<th>1. Develop high yielding varieties of rice and other crop species and livestock breeds well suited for rainfed lowland environments</th>
<th>2. Conduct other related research on crops, livestock, and social components that will influence agricultural productivity</th>
<th>3. Develop irrigation facilities and provide alternative sources of irrigation water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing policy instruments</td>
<td>AFMA, National Rice Production Programs</td>
<td>DA-BAR Research programme</td>
<td>AFMA, NIA, DA-LGU</td>
</tr>
<tr>
<td>Valuation of existing policy measures</td>
<td>Favourable</td>
<td>Favourable</td>
<td>Favourable</td>
</tr>
<tr>
<td>Policy gap</td>
<td>Strengthen breeding research at the regional level</td>
<td>Limited to national thrusts programme</td>
<td>Policy on credit with lower interest</td>
</tr>
<tr>
<td></td>
<td>On-site testing of suitable varieties and crop species</td>
<td></td>
<td>Alternative sources of irrigation water</td>
</tr>
<tr>
<td>Recommendations</td>
<td>Allocate more resources to regional breeding centre</td>
<td>Give equal importance to organic farming</td>
<td>Generate more technology on water management and utilization</td>
</tr>
<tr>
<td></td>
<td>Localize testing of appropriate varieties and crops</td>
<td>Look at the policy gaps: government has not documented community efforts on crop improvement</td>
<td>Explore other sources of irrigation water</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Research community developed seeds</td>
<td>Consider possible dislocation of communities, emerging water problems, participation of communities</td>
</tr>
<tr>
<td>Priority ranking (1 is highest)</td>
<td>3</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Key result areas</td>
<td>Adoption of new cultivars by the farmers or users</td>
<td>Adoption of organic farming technologies</td>
<td>Efficient and equitable water supply and distribution</td>
</tr>
<tr>
<td>Execution level</td>
<td>National, regional, farming system</td>
<td>National, regional</td>
<td>National, regional, farming system</td>
</tr>
<tr>
<td>Responsible stakeholders</td>
<td>Philippine Rice Research Institute, Bureau of Agricultural Research, Fruits and Vegetables Research Centre at Central Luzon State University, Bureau of Animal Industry</td>
<td>NGO, people’s organizations</td>
<td>NIA, DA, local government units, Irrigators’ Association</td>
</tr>
<tr>
<td>Time frame</td>
<td>Medium term</td>
<td>Medium term</td>
<td>Short term</td>
</tr>
</tbody>
</table>
This Part describes various tools and techniques that you can use in the participatory policy development process. Many of them were used during the SARD-FSE project in Honduras, Mali, and the Philippines.

Most of these tools are designed for use with groups of stakeholders, ranging from villagers to government officials. Select those that are suitable for your own situation, and adapt them as required.

Good facilitation is essential. The facilitator must be able to design and conduct activities that involve people and enable each person to express his or her opinion. It is important to guide the process so that it achieves its purpose, in an efficient and if possible enjoyable manner. The facilitator must be able to build trust among participants from diverse backgrounds, encourage them to share their views, and deal with difficult situations that may arise. He or she must be able to synthesize the ideas expressed in a way that motivates participants to move the process forward.

With all of these tools, try to get the participants to take control as much as possible. For example, once you have explained how to do the exercise and perhaps worked through the first round, you may be able hand over the facilitation (and the marker pen!) to one of the participants, then guide from the background. That saves you work, and allows them to feel in control of the process and results.

Many other tools can be used in participatory policy development. For example, many of the methods used in participatory rural appraisal and in participatory training sessions can be adapted for policy analysis and development. For further details, see the References after the description of each tool and in Part 4.

1 CHECKLIST OF INDICATORS FOR SUSTAINABLE DEVELOPMENT

Table 9 to Table 11 show a list of indicators that can be used to track progress towards sustainable development at various levels: national, regional and local.

These indicators fall into various types:
- **Pressure** – e.g. intensified use of a resource such as land or water
- **Status** – describes the condition
- **Impact** – the effects of previous action
- **Response** – the response to pressure, status or impact conditions.

These indicators can be measured in quantitative or qualitative terms.
Participatory policy development for sustainable agriculture and rural development Part 3 - Tools for policy and institutional analysis

<table>
<thead>
<tr>
<th>Theme/sub-theme or criteria</th>
<th>Indicators</th>
<th>Type of indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population growth and life expectancy</td>
<td>Rates of population growth over time in urban &amp; rural areas; Mortality rate of children &lt; 5 years old; Average life expectancy</td>
<td>Pressure</td>
</tr>
<tr>
<td>Poverty index</td>
<td>Number and % of families below poverty threshold, Gini index of income inequality; Human development index; % Absolute poverty</td>
<td>Status</td>
</tr>
<tr>
<td>Food security</td>
<td>Agricultural land per person (ha); food production index; annual export &amp; import of basic food staples</td>
<td>Pressure</td>
</tr>
<tr>
<td><strong>Cultural</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnic or indigenous population &amp; customs</td>
<td>% composition of ethnic population; traditional culture festivals, educational programmes, etc for promoting indigenous customs/languages</td>
<td>Status</td>
</tr>
<tr>
<td><strong>Environmental</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land use &amp; land use conversion</td>
<td>% area abandoned or converted to specific uses (residential, industrial, etc.)</td>
<td>Impact</td>
</tr>
<tr>
<td>Biodiversity</td>
<td>% forest area, arable land, permanent crop land and protected areas; protected area as % of total area</td>
<td>Status</td>
</tr>
<tr>
<td>Economic and human loss from natural disasters</td>
<td>Number of threatened species; number and type of natural disasters (typhoons, flooding, drought, earthquake, etc.)</td>
<td>Status</td>
</tr>
<tr>
<td>Water quality</td>
<td>Presence of water-borne diseases; sources of water for domestic &amp; agric purposes; agricultural pesticide use (quantity)</td>
<td>Impact</td>
</tr>
<tr>
<td>Atmosphere</td>
<td>Emission of greenhouse gases (depends on available data)</td>
<td>Impact</td>
</tr>
<tr>
<td><strong>Economic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP per capita</td>
<td>Average income, amount</td>
<td>Response</td>
</tr>
<tr>
<td>Debt/GNP ratio</td>
<td>Debt/GNP ratio</td>
<td>Response</td>
</tr>
<tr>
<td>Fossil energy use</td>
<td>Annual energy consumption per capita</td>
<td></td>
</tr>
<tr>
<td>Investment</td>
<td>Rate of investment as share in GDP</td>
<td>Status</td>
</tr>
<tr>
<td>Trade in goods and services</td>
<td>Balance of trade in goods and services</td>
<td>Status</td>
</tr>
<tr>
<td>Food exports/imports</td>
<td>Balance of food exports and imports</td>
<td>Response</td>
</tr>
<tr>
<td><strong>Institutional</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existence of national sustainable development strategy</td>
<td>Yes/no on existence; national mechanism for coordinated planning &amp; evaluation; existence of programme for national sustainable development, e.g. leading to publication &amp; dissemination of state agenda, document, report, compilation of strategies</td>
<td>Response</td>
</tr>
<tr>
<td>Ratification and implementation of global agreements</td>
<td>Number of agreements signed on sustainability-related issues, e.g. climate change, desertification, biological diversity, hazardous wastes and toxic chemicals</td>
<td>Response</td>
</tr>
<tr>
<td>Policy to protect indigenous knowledge</td>
<td>Yes/no</td>
<td>Response</td>
</tr>
<tr>
<td>Expenditure on research and development</td>
<td>Total domestic expenditure on scientific research and development as a % of GDP</td>
<td>Response</td>
</tr>
</tbody>
</table>
### TABLE 10
Regional level indicators

<table>
<thead>
<tr>
<th>Theme/sub-theme or criteria</th>
<th>Indicators</th>
<th>Type of indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Literacy rate</td>
<td>Children of school age attending school; Adult and child literacy rate</td>
<td>Status</td>
</tr>
<tr>
<td>Access to safe drinking water</td>
<td>% households with access to potable water</td>
<td>Status</td>
</tr>
<tr>
<td>Malnourished children</td>
<td>Mortality rate &lt; 5 years age/1000 population</td>
<td>Impact</td>
</tr>
<tr>
<td>Population density</td>
<td>Inhabitants/km²</td>
<td>Impact</td>
</tr>
<tr>
<td>Poverty intensity</td>
<td>% of poor</td>
<td>Pressure</td>
</tr>
<tr>
<td>Population growth</td>
<td>Population growth rate</td>
<td>Pressure</td>
</tr>
<tr>
<td><strong>Cultural</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existence of policy &amp; conservation effort of cultural heritage</td>
<td>Existence of local government policies, laws &amp; programme to protect and promote indigenous peoples, R&amp;D on their knowledge systems on agriculture.</td>
<td>Response</td>
</tr>
<tr>
<td>Ethnic &amp; indigenous population</td>
<td>% ethnic composition; existence of cultural institutes or businesses to promote indigenous customs, practices, cuisine and handicrafts</td>
<td>Status</td>
</tr>
<tr>
<td><strong>Environmental</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Area affected by erosion, degradation and salinization</td>
<td>Soil erosion rate; Area affected severe soil erosion, % of arable land; Soil fertility level</td>
<td>Impact</td>
</tr>
<tr>
<td>Deforestation / reforestation</td>
<td>Past (30 yrs back ) and present forest area; Forest as % of land area</td>
<td>Impact</td>
</tr>
<tr>
<td>Water quality</td>
<td>Water sources; Presence of water-borne diseases</td>
<td>Impact</td>
</tr>
<tr>
<td>Water resources</td>
<td>Irrigated land (% of total agricultural land)</td>
<td>Impact</td>
</tr>
<tr>
<td>Biodiversity</td>
<td>Number of crop &amp; animal species and varieties; Protected area (%)</td>
<td>Impact</td>
</tr>
<tr>
<td><strong>Economic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structure of employment</td>
<td>% employed in agriculture</td>
<td>Status</td>
</tr>
<tr>
<td>Public investment</td>
<td>Budget allocation for local government, $/capita; Number of external development assistance projects; Km on road network</td>
<td>Response</td>
</tr>
<tr>
<td><strong>Institutional</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Territorial sustainable development strategy and capacity</td>
<td>Existence of strategy; capacity to plan, execute and evaluate sustainable agriculture and rural development programmes</td>
<td>Response</td>
</tr>
<tr>
<td>Expenditure on R&amp;D and extension</td>
<td>$ per capita expended on research and extension</td>
<td>Response</td>
</tr>
</tbody>
</table>
### Table 11
Local or farming system level indicators

<table>
<thead>
<tr>
<th>Theme/sub-theme or criteria</th>
<th>Indicators</th>
<th>Type of Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to safe drinking water</td>
<td>% households with access to potable water (source)</td>
<td>Response</td>
</tr>
<tr>
<td>Ratio of the poor</td>
<td>Households by main sources of livelihood (%)</td>
<td>Impact</td>
</tr>
<tr>
<td>Organizations on women &amp; gender issues</td>
<td>Number/% of women at decision level in local organizations</td>
<td>Status</td>
</tr>
<tr>
<td>Resource tenure</td>
<td>Average farm size per household (ha)</td>
<td>Status</td>
</tr>
<tr>
<td>Literacy rate</td>
<td>% literacy</td>
<td>Impact</td>
</tr>
<tr>
<td><strong>Cultural</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural activities and indigenous issues</td>
<td>Important cultural, indigenous or religious festivals, shows, activities; economic importance of traditional handicraft, dances, foods, or other; existence of programmes, conflicts or other issues with indigenous people</td>
<td>Status</td>
</tr>
<tr>
<td><strong>Environmental</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biodiversity</td>
<td>Number of species or varieties/ha used in crops and livestock</td>
<td>Status</td>
</tr>
<tr>
<td>Water quality</td>
<td>Kg/ha/year chemical fertilizer used; Kg/ha/year pesticide used</td>
<td>Pressure</td>
</tr>
<tr>
<td>Soil &amp; water resource conservation</td>
<td>Soil fertility level; Amount of organic fertilizer/ha/year</td>
<td>Response</td>
</tr>
<tr>
<td><strong>Economic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On- and off-farm income</td>
<td>Amount of household income per source (local currency) and % of on-farm household income</td>
<td>Status</td>
</tr>
<tr>
<td>Home consumption</td>
<td>% of farm production consumed at household level</td>
<td>Status</td>
</tr>
<tr>
<td>Access to credit</td>
<td>% of farmers use formal credit; Estimated total cost of credit</td>
<td>Response</td>
</tr>
<tr>
<td>Evolution of market prices</td>
<td>Prices indexes for crops and inputs</td>
<td></td>
</tr>
<tr>
<td>Animal well-being</td>
<td>OECD agri-environmental indicators, if needed</td>
<td></td>
</tr>
<tr>
<td>Structure of export</td>
<td>Quantity and composition of exports</td>
<td></td>
</tr>
<tr>
<td>Type of farming systems</td>
<td>% of farmers with subsistence, commercial and/or export objectives; % of family income generated from farming.</td>
<td>Status</td>
</tr>
<tr>
<td><strong>Institutional</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Municipal or village participation in decision making</td>
<td>Capacity for developing, implementing &amp; monitoring strategies for sustainable agriculture</td>
<td>Status</td>
</tr>
<tr>
<td>Associations &amp; literacy centres</td>
<td>Number and types of associations and literacy centres working with farmers, women, youth, and others</td>
<td>Response</td>
</tr>
<tr>
<td>Civil society involved in production</td>
<td>Number of producer or farmer organizations involved; number of other types of NGOs</td>
<td>Response</td>
</tr>
</tbody>
</table>

References
2 BRAINSTORMING

Objectives
To generate a range of ideas, perspectives or priorities from participants. Brainstorming is often a first step in a discussion of policies and strategies. It may be followed by more formal data collection and analytical methods.

Methodology
Brainstorming can be carried out individually, in small or large groups. Here are some ground rules to make it successful.
1. Get someone to facilitate the brainstorming.
2. Define the question or issue to address. Write this on a flipchart or chalkboard so everyone can see it. The more clearly stated the problem, the better the session will be.
3. Ask each participant to think of as many ideas as she can about this topic. Give them time to think. Some participants may ask for clarification. This usually “breaks the ice”. Make sure everyone understands the problem or issue.
4. Go around the group, asking each person to briefly state one of his or her ideas. As each person speaks, the facilitator can jot down the idea on the flipchart or chalkboard so everyone can see. Ask speakers to avoid repeating ideas that someone else has already expressed. Each person should state his or her idea as briefly as possible. Other participants should listen to each idea, suspend judgement and avoid criticizing. Do not allow any discussion at this stage.
5. When you have gone round the group once, go round again to allow each person to state another idea, and so on until all the ideas have been expressed. Since the aim is a large number of ideas, try to keep the ideas flowing. Do not limit the total number of ideas. Make sure all participants have contributed their ideas before allowing any discussion.
6. Ask the participants if they need clarification of a particular item. Ask the person who stated that item to explain. (Again, do not allow discussion at this stage.)
7. Check the items you have written up to see if any are similar enough to be merged. Delete any duplicates.
8. Now you can invite discussion, comments, criticism, etc. about the items. Try to make sure that everyone participates in the discussion. Try to establish consensus among participants in terms of the scope of the issues, priorities, actions to follow, or other points of their interest.
9. If you need to identify priorities, you can ask the participants to rank the items in the list. Give each person one vote, and ask them to state which item they think is the most important. Mark their votes on the list. (Alternatively, you can give them three votes each.) The item that gets the most votes wins.

Suggestions for use
Brainstorming is effective and fun. It stimulates involvement and cross-fertilization of ideas. To prevent a few quick-thinking participants from dominating, you can ask participants to write down their ideas first on cards during Step 3 above. You can also form sub-groups to allow more interaction if there are many participants. Make sure you enforce the rule of “no comments” while people are stating their ideas.

Brainstorming is a good way to generate a lot of ideas quickly. It can also be used to generate ideas for prioritizing (Step 9).

In participatory policy development, brainstorming may be useful to list people’s problems, goals, indicators, policy options, etc.

References
IAC, undated; Mycoted, 2003; Start and Hovland. 2004.
3 DIAGRAMMING AND MAPPING TECHNIQUES

Objectives
To understand relationships among institutions, system components, processes or actors. Various types of diagrams and maps can be used in participatory policy development.

Below are some examples of using these methods in policy analysis.

Methodology

Venn diagrams for institutional analysis
Venn diagrams show how organizations, policies, programmes or services interact with each other, and the importance of their activities.

1. Make a number of ovals or circles from coloured card. Make them different sizes, ranging from about A4 to half-A4 sized.
2. Ask participants to identify all organizations that are relevant to the farming system. Write the name of each organization on one of the ovals. Choose a large oval for an important or powerful organization, a smaller oval for one that is less important.
3. Ask the participants to place the ovals on the floor or table. The position of each oval shows its relationship to the other institutions: close together or overlapping for close interaction, further away for a more distant relationship.
4. Different stakeholder groups can do their own diagrams and then see how they are different. This can reveal different perceptions and expectations of the different groups.
5. Other useful analyses are to compare how these organizations currently interact, how they should interact, and how changes, new linkages or capacity building can improve their effectiveness for achieving greater coordination and effectiveness.

You can also use rectangular cards instead of ovals. Or you can draw ovals on a large piece of paper or a chalkboard.

![Venn diagram: Proposals of producers to achieve a SARD goal (Honduras case study)](image-url)
**Cause–effect analysis of a driving factor**

Cause–effect mapping identifies and explains the causes or reasons for particular programmes or problems, and the effects or impacts of particular interventions.

1. Start by explaining what a driving factor is, and why it is important to analyse. Take time to explain so everyone understands what you mean. (Examples of a driving factor might be population growth, an improved breed or variety, falling cotton prices.)
2. Write the factor on a card and put it on the table or floor.
3. Ask the participants what happened (or happens) as a result of that factor. For example, ask them to identify events, or positive and negative changes that occurred. Write each of these consequences on a separate card and put them below the card showing the driving factor. Use sticks or short pieces of string to show the linkages between the items, or position them closer or further apart, depending on how closely they were linked.
4. Ask participants what happened as a result of these new events. Again, write the consequences on cards, put the cards below the events that caused them, and show the linkages with sticks or string. In this way, you build up a tree of causes and effects, all resulting from the original driving factor.
5. You can ask participants to explain in more detail about specific causes and effects. Such discussion can show, for example, whether the impact has been the same for different groups – perhaps women or the poor have been affected by something, but men or richer people have not.

**Flow diagrams**

Flow diagrams identify and analyse the positive and negative consequences of particular forces or policy actions.

You can construct a flow diagram using a similar series of steps as in cause–effect analysis, for example to show many other relationships: between institutions (as in a Venn diagram), the results of particular policies or actions, the flows of resources in a farming system or of money in an economy, and so on.

**Suggestions for use**

Instead of cards, you can draw a series of boxes on a large piece of paper. This allows you to draw arrows between the boxes, but it is difficult to move the boxes once you have drawn them.

You can use different types of diagrams to compare the effects on different systems, groups or time periods. Drawing the diagrams can stimulate rich discussions on how people perceive the issues.

Diagramming and mapping techniques can be simple, or as complex as you want. They are easy to construct and to understand. They can be developed by farmers and other villagers, or by highly qualified technicians. They can be developed using cards and markers, scratching with a stick in the ground, or with a mouse on a computer screen. They are excellent for building stakeholder interaction and interdisciplinary teamwork.

**References**

IAC, undated; Start and Hovland, 2004.
4 SEMI-STRUCTURED INTERVIEWS

Objective
To obtain information quickly from key individuals (or a relatively small number of people) on a specific topic.

Methodology
1. Develop a checklist of relevant topics or issues. Ensure the list is not too long, so that you can cover it in an interview in an hour or less. This list will guide the conversation. You can add new issues if necessary as you go on.
2. Pre-test the questions with a few people before conducting the real interviews so you can practise. This pre-test also helps you ensure the questions are easy to understand, relevant to the local situation, and are not politically or culturally sensitive.
3. You can interview individuals, couples (e.g. a farmer and her husband) or small groups. It is usually best to have a team of two interviewers: one to ask questions and lead the discussion, and one to take notes.
4. At the beginning of the interview, introduce yourself, and briefly describe the study and why you are doing it. Ask permission to take notes. Use simple language, and avoid jargon. Repeat questions if necessary to be certain the interviewee understands what you mean.
5. Use the checklist as a guide during the interview. It is not necessary to follow the exact order of questions, but try to cover them all. Aim for an informal, relaxed discussion.
6. Encourage the interviewees to express their opinions during the discussion. Ask questions that lead to topics that interest them.
7. At the end of the interview, ask the interviewees if there is anything they want to ask you. This can often lead to some very useful further discussions.

Suggestions for use
Open-ended questioning is more difficult and time-consuming to analyse than structured, closed-ended questions. It can be difficult to keep interviews focused, and comparing responses between groups of interviewees may be difficult – but it is usually feasible. These disadvantages are offset by the richness of the information you can obtain through this approach.

If you need to gather numerical data (for example, to do a statistical analysis), you can combine a short series of closed-ended questions with your semi-structured interviews. Or you can use semi-structured interviews to generate ideas for questions to include in a closed-ended questionnaire survey.

Conducting semi-structured interviews requires some training and practice. If you have a team of interviewers, make sure that you train them all in the correct approach so the results of their interviews will be comparable. One way to do this is to train them by observing each other during practice interviews.

References
Chambers, 2002; IAC, undated.
5 CARD SORTING

Objectives
To gather, sort and rank information. This method enables many ideas to be gathered, organized and prioritized quickly.

Methodology
There are many different ways of organizing this activity. Here is one example:

1. Identify and explain the topic or question – perhaps a problem that the community is facing. Brainstorm on it a few minutes so all understand meaning of the topic and why it is being discussed.
2. Ask the participants to think of an idea (for example, a way to solve the problem you have identified). Ask them to write it in a few words on a card or small piece of paper. Each participant writes one idea on a card. They should write large enough so it can be read at a distance.
3. Collect all the cards and lay them out on a table or the floor. Read out each card so everyone knows what is written. If something is unclear, ask the person who wrote it to explain.
4. Ask the participants to group the cards – for example, to put all of the cards that contain the same thing into a pile. They can then put piles of cards that contain similar ideas close to each other to make clusters. Get them to give a title to each cluster.
5. If meaningful, ask the participants to rank the clusters (and ideas within clusters) according to their own criteria (such as importance to the community, ease of implementation, etc.).

Suggestions for use
Card sorting is quick and easy, and fun to do. It is often used in workshops to decide what issues to focus on, or to introduce questions that require more detailed discussions and consensus building.

References
IAC, undated; Cadiz, 2004.
6 FOCUS GROUP DISCUSSION

Objectives
To clarify details and analyse an issue in depth. Focus groups can be composed of members of a particular social group (such as women farmers) or several different groups. They can be used to build consensus on specific issues among stakeholders who represent different viewpoints.

Methodology
1 Define the specific topic for the discussion. This will determine who should participate in the focus group – i.e. whether one or more groups should be represented. For example, you may wish to analyse the issue only with the group directly involved (e.g. women or youth). Or perhaps it would be better to discuss it with others who are indirectly concerned.
2 Identify five to ten people to participate in the focus group.
3 Explain the topic to ensure everyone understands.
4 Invite the participants to discuss the topic. The facilitator can stimulate discussion by asking questions or bringing up new specific issues. Intervene as little as possible, but make sure that everybody has a say. An hour should be long enough for the discussion.
5 Have a note-taker take detailed notes of the discussion.

Suggestions for use
If you have several facilitators, you can hold several focus groups at the same time, each composed of different types of people. Then compare their results. You can then mix the groups so they are composed of different types of people, and continue the discussion.

It is easy to tailor the topic and process to the types of stakeholder involved. If the groups are mixed, some people may be tense or shy: for example, women or young people may be reluctant to speak up. In such cases the facilitator must be skilled to keep the discussion going and make sure everyone’s voice is heard.

References
7 STAKEHOLDER ANALYSIS

Objectives
To understand characteristics of various groups of stakeholders: their values and attitudes, knowledge and skills, priorities and perspectives, and areas of mutual interest and potential conflict.

Methodology
1. Identify the topic or problem to be analysed.
2. Identify stakeholder groups relevant to the topic. Keep in mind the differences and potential conflicts among them.
3. Develop a strategy on how to engage the different groups. This strategy may include investigations, literature reviews, workshops, project planning exercises, and so on.
4. Organize a series of stakeholder workshops – either where all the stakeholders are involved, or perhaps one workshop for each group. These workshops should progressively analyse the similarities, differences, mutual objectives and collaboration of the various groups. It is usually necessary to hold special workshops for women and for young people to allow enough time to focus on issues they are specifically interested in.
5. Investigate how the stakeholder groups differ in their roles, interests, strengths. Study how each can contribute to addressing the topic or solving the problem.
6. Carry out further analysis to understand how certain interventions would affect specific groups. Who would lose or gain? In terms of power and influence, resources or benefits?

Table 12 may be helpful to organize and compare the characteristics and opinions of the various groups.

**TABLE 12**
Stakeholder analysis form

<table>
<thead>
<tr>
<th>Possible stakeholder categories</th>
<th>Roles and strengths</th>
<th>Priorities and incentives for participation</th>
<th>Effects/impacts of problem or project</th>
<th>Potential contributions to solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil society</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private sector</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pastoralists</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farmers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Young people</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indigenous people</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural workers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Suggestions for use
Stakeholder workshops are a good way to get members of a policy team to understand and work with each other. There may be tension across the different groups to begin with – for example, between those in control of key resources and those who have none. In such a case, it helps to work first with each group separately and then join forces. Culturally, women, young people and ordinary people may not feel at ease when men, older people or political leaders are present.

Communities often contain potential conflicts, sensitivities and jealousies, so stakeholder workshops require good facilitation skills. They also need time. It may be necessary to hold several such workshops before reaching a conclusion. Consult widely with local people and involve key players who have a positive disposition and personal commitment.

References
DFID, 2002; European Commission, 2001b.
8 HISTORICAL TRENDS AND MILESTONES

Objectives
To understand the history and causes of how rural communities, production systems and institutions evolve. Understanding how and why change has occurred helps us understand the constraints in the current situation and what is likely to happen in the future.

Methodology
1 Decide on the topic of interest, e.g. the history of the district, or of land reform in the area.
2 Identify stakeholders who should participate. Usually a small group of about six participants could start the exercise. Later on, more can join in to improve the historical trend analysis. For example, if the analysis focuses on lowland rice-based farming system, those who know and have worked with the system must be involved.
3 Set up a table with rows and columns on a blackboard or a large sheet of paper. The columns show periods of time. For example, one column might represent 10 years, so you would need 5 columns to show 50 years. Put topics in the rows. Label these as “key events”, “external events”, “internal factors”, “legislation”, “president in power”, or whatever item is relevant. Agree on the column and row headings with the participants.
4 Fill in the table with the group as far as possible based on their memory. People may disagree on the timing of events or the nature of changes, so keep probing when there are differences. After exhausting the group’s knowledge, check the literature and consult with key informants to complete and enrich the analysis of historical trends and milestones.
5 After filling the gaps and checking the accuracy of the group work, present the complete table to the group for further discussion and improvement.

Suggestions for use
Local people can contribute very well to this exercise, since they know what has happened in their community, in farming, and can point to disasters or trends that impact on their lives. Elderly people are a particularly good source of information on the more distant past. A few hours or days are needed for this exercise, and it can be enriched with information from other sources, such as official records.

The tool enables stakeholders to analyse the big picture over time. It strengthens their understanding of the driving forces in agriculture and development, and helps them identify what they themselves can do to affect the future. It is an extremely valuable first step for future scenario analysis.

References
IAC, undated.
9 SWOT ANALYSIS

Objectives
To identify Strengths, Weaknesses, Opportunities and Threats of policies, organizations, systems, programme, districts, etc., as a basis for planning strategies and actions.

Methodology
1 Identify the organization, programme, system or project to be analysed.
2 Identify a small group to carry out the exercise.
3 Work with the group to fill in the cells in Table 13. Ensure that the participants agree on each item. Strengths and weaknesses are internal to the organization or project; opportunities and threats come from outside.

TABLE 13
SWOT analysis

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Things that are working well in the organization or project; things that people are proud of.</td>
<td>Opportunities to improve or change that build on strengths and overcome weaknesses.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weaknesses</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Things that have not worked so well and need to be addressed.</td>
<td>Actual or potential problems from outside that may prevent the organization or project from performing.</td>
</tr>
</tbody>
</table>

4 Review what is in each cell in the table to ensure that there is coherence and agreement across all four cells.
5 Discuss how stakeholders can work together to address the recommendations made in the table. Try to identify who, what, how and when.

Suggestions for use
SWOT analysis is practical and easy to do. People easily understand the concepts of strengths, weaknesses, opportunities and threats. Stakeholders, in particular, find it very useful to improve their institutions, systems, etc.

The time and resources required depends on the depth of analysis or quantitative information required. A rough SWOT can be produced in less than an hour.
10 AGRI-FOOD VALUE CHAIN ANALYSIS

Objectives
To identify and analyse constraints to the production, processing and business operations in the commodity chain from farmers to consumers, and to identify commercially viable solutions.

Methodology
1. Choose a sub-sector or product: examples might be parboiled rice, dried peppers, fresh vegetables for export, or wooden furniture. Criteria for selection include potential demand for the product, its impact on growth, income and employment, international competitiveness, or the interest of the government or donors.
2. Identify all actors in the value chain: those who buy and sell from each other in order to supply the particular commodity to the final consumers.
3. Identify the constraints and opportunities at each stage in the chain: production of raw materials, input supplies, transport, food safety and quality control, management, infrastructure, finance, policy, etc. This will require a review of the literature, mapping of the sub-sector, interviews with key informants, etc.
4. Identify solutions that overcome the constraints you have identified. These solutions must be commercially viable: they may well be attractive to private sector producers or service providers. Examples might include the provision of low-cost irrigation equipment, development of markets or information systems, processing to create alternative products, use of by-products, and extension and training for new operations.
5. Prioritize the proposed solutions using criteria such as employment and income generation for the poor, potential profitability, and potential for fair treatment and equity for stakeholders in the value chain.
6. Determine the priority interventions. Do this in a participatory way with the relevant stakeholders (producers, service providers, government, donors, etc.) to leverage their commitment and resources. Obtain their agreement on operational strategies and mechanisms for implementation.
7. Develop an operational plan and timeline showing specific activities, responsibilities and targets for measuring progress and fine-tuning operations.

Suggestions for use
Value chain analysis is a good way to identify profitable enterprises for development, so is of value primarily for the private sector. For the government, NGOs and donors, it is becoming more necessary because of the need to provide an enabling environment, deliver effective programmes and provide funding to develop small businesses. Research, extension and educational institutions should be involved to introduce technologies and train people with appropriate skills.

Market-driven production systems will require more attention to value chain analysis. This analysis is complex, requires good information on all the links from farmers to consumers, and needs effective participation of the various actors in the chain. The relative bargaining power of the actors and governance issues are critical.

References
11 SCENARIO ANALYSIS

Objectives
To look into the future and predict what is likely to happen if current trends continue, and what may happen if certain policies are put into place.

Scenario analysis extrapolates from current trends (identified through an historical analysis – see Tool 8), and tries to predict what the situation will be at some point in the near future – say, 10 years from now. This is the “business-as-usual” scenario. Given current trends in, say, environmental degradation, it is often pessimistic.

It then identifies policy changes and other interventions that might steer the situation in a more desirable direction, and predicts what the effects of those interventions may be. This is an optimistic scenario.

Methodology
1 Brainstorm the focus of the scenario options, including the key themes and variables, and a checklist of issues to be analysed in each scenario.
2 Identify representatives of relevant stakeholder groups. These might include government agencies, farmers, and support or service groups in the NGO and private sectors. Ensure that women, the young and marginalized people are included if appropriate. There should be no more than about 10 in each group.
3 Meet with each stakeholder group separately to discuss the “business-as-usual” scenario. Ask them to look at the historical trends and driving forces, and predict what the situation will be at the selected time in the future. Ask the group to describe the scenario in as much detail as possible. Each of these meetings should last no more than 3 hours.
4 Meet again with each group to discuss the optimistic scenario. First, ask them to identify a desirable goal from their point of view, for their area. This goal should relate to the same time in the future as the “business-as-usual” scenario. It should be plausible, and based on changes that the stakeholders themselves can control, or decisions that the government or other actors might conceivably make. Ask the group to describe the scenario in as much detail as possible and then identify the changes that are necessary to achieve it. These meetings should also last no more than 3 hours each.
5 Pull together the draft business-as-usual and optimistic scenarios from the different stakeholder groups so they can be compared easily. Gather information from other sources to support or explain the views, assumptions and implications they contain. Involve a couple of members from each stakeholder group on the “drafting team” that does this.
6 Hold a mini-workshop with representatives of all stakeholder groups: 3–5 members from each group. This workshop reviews the draft scenarios, discusses the differences across the drafts, and reconciles them into two master scenarios: business-as-usual and optimistic. The focus is on teasing out the implications for policy and institutional strategies. The workshop output is a description of the two master scenarios, an identification of the driving factors, and a set of policy and institutional recommendations.
7 Present the results to policy makers and institutional leaders at the national level. Obtain their feedback and suggestions. Report on the scenarios and the national-level responses to the local communities and stakeholders who participated in the previous steps.

Suggestions for use
Scenario analysis can be used in a wide range of contexts: to predict economic growth, environmental damage and preservation, social changes, and so on. It can be used to analyse the results of a specific project (such as a dam or road) or a broader policy (such as removing price controls).
Scenario analysis can help different institutions, levels of government and local people to understand each other’s points of view, mandates and goals. It helps professionals who do not usually work outside their own field to think about the bigger picture and their role in it.

Various organizations have used scenario analysis. Shell used it to understand powerful forces of change, globalization and technological advance; the Intergovernmental Panel on Climatic Change applied it to describe the effects of greenhouse gases and global warming, and FAO and others used it in the Millennium Ecosystem Assessment.

Scenario analysis helps identify driving forces, policies and programmes and their interactions from the perspectives of different stakeholders. It is a good way for stakeholders to look at what is likely to happen in the future under particular assumptions, and to identify actions they can take to achieve their goals.

References
12 STAKEHOLDER NEGOTIATION ENCOUNTERS

Objectives
To promote understanding, learning, trust and consensus on sensitive issues among competing stakeholders.

Methodology
The negotiation process has three main phases.

Prepare for negotiations
1 Identify a team to plan and facilitate the negotiations.
2 Develop an initial agenda, and let stakeholders know how the process is likely to work.
3 Establish personal relationships with stakeholder groups to build their confidence, foster effective communication, and avoid resistance.
4 Identify influential players and hidden agendas so you can anticipate barriers and identify possible opportunities for agreement.
5 Anticipate the possible outcomes of negotiations so you can clarify the stakeholders’ perspectives, commitments and expectations.
6 Select a neutral venue and appropriate setting for the negotiations. Arrange logistics.
7 Collect relevant opinions, attitudes, options and facts that can help in decision making.

Conduct the negotiations
1 Initiate the process: use ice-breaking techniques to release tension, and exchange information, perspectives, etc.
2 Use leverage points, prior commitments and obligations to influence positions and alternatives.
3 Frame persuasive arguments and alternatives in order to create added value and win–win outcomes.
4 Shift the balance of forces within and across stakeholders to build momentum. Prevent “blame games”.
5 Initiate activities such as breakout sessions, side events or small group discussions to facilitate dialogue and achieve agreements in individual areas.
6 Obtain agreement on an action plan to implement recommendations.

After the negotiations
1 Assess the outcomes of the negotiations to see how the team’s performance might be improved.
2 Implement the activities in the agreed timeframes to ensure credibility and effectiveness.
3 Monitor, evaluate and communicate feedback to relevant parties.

Suggestions for use
Negotiation encounters are necessary when there are major sources of conflict between specific groups of stakeholders, e.g., between government and NGOs, landowners and landless peasants, farmers and market intermediaries, donor X and donor Y.

Such encounters take time to build confidence and trust, analyse the issues involved, and exchange perceptions. The amount of effort required (and that is worth putting in) depends on the nature of the problem. Negotiations are essential to arrive at lasting solutions acceptable to all. In business management, negotiation skills are highly prized. Success depends largely on the skills of the facilitating team, so good training for facilitators is vital.

References
Braham et al, undated; Anon., undated.
13 POLICY ACTION MATRIX

Objectives
To relate policy objectives to specific policy actions, responsibility for execution, costs and timeframes.

Methodology
Through workshops with stakeholders:
1. Specify policy objectives that are recommended by the project, and select one for further analysis.
2. Identify the specific recommendations for achieving this policy objective. Then select the most important recommendations for possible action.
3. Define at what level (local, regional or national) each recommendation would be implemented.
4. Determine who is responsible for deciding on each recommendation, and who is responsible for executing the recommendation. (These are normally different people or institutions.)
5. Determine a strategy to implement each recommendation.
6. Cost each recommendation, taking into account staffing, operational and infrastructure requirements for the next 3–5 years.
7. Decide on the time frame for execution.

Fill in Table 14 as you develop the proposed plan of action for your policy objective.

TABLE 14
Policy action matrix

<table>
<thead>
<tr>
<th>Strategic objective 1:</th>
<th>Specific objective 1</th>
<th>Recommendation 1</th>
<th>Recommendation 2</th>
<th>Recommendation 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achievement targeted</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Execution level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Local</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>• Regional</td>
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<td></td>
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<td></td>
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<tr>
<td>• National</td>
<td></td>
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<td></td>
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<tr>
<td>Responsible stakeholder for:</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>• Decision making</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>• Execution</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strategy to implement recommendations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• 2006</td>
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<td></td>
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<tr>
<td>• 2007</td>
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<tr>
<td>• 2008 +</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Timeframe for execution</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Short (1–2 yrs)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Medium (3–5 yrs)</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>• Long (5+ yrs)</td>
<td></td>
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</tr>
</tbody>
</table>

Suggestions for use
The policy action matrix works well to establish interactions among national, regional and local level stakeholders to make decisions on policy objectives, actions, costs, and timelines.
NGOs, community-based organizations, farmers and private-sector service providers can make significant inputs and decide on their roles in policy planning and implementation. With minimal guidance, all stakeholders can participate effectively in the construction of this action matrix.
14 WRITESHOPS

Objectives
To generate information materials, revise them and put them into final form as quickly as possible. Writeshops bring together various stakeholders to create a document that reflects everyone's knowledge and opinions. Because they bring everyone together to work on the same document at the same time, they can produce results in a completed, agreed, peer-reviewed document very quickly.

Methodology
Writeshops can be managed in different ways. Here is one possibility (to produce an illustrated extension manual or set of booklets).

1 Before the writeshop, a steering committee lists potential topics and invites resource persons to write first drafts on each topic. The steering committee provides them with guidelines to help them do this. These resource persons bring the drafts and various reference materials with them to the writeshop.

2 Invite participants to the writeshop. Participants should include the resource persons, users of the document, members of the intended audience, and others who are knowledgeable about the topic.

3 During the writeshop itself, each participant presents the first draft of his or her paper, perhaps using a computer projector or overhead transparencies of each page. Copies of each draft are also given to all other participants. After each presentation, the facilitator invites participants to comment on and critique the draft, and suggest revisions.

4 After each presentation, an editor helps the author revise and edit the draft. If artwork is needed (e.g. for an extension manual), an artist draws illustrations to accompany the text. The edited draft and artwork are then desktop-published to produce a second draft. Meanwhile, other participants also present papers they have prepared. Each, in turn, works with the team of editors and artists to revise and illustrate the materials.

5 Each participant then presents his or her revised second draft to the group. Again, the audience critiques it and suggests revisions. After the presentation, the editor and artist again help revise it and develop a third draft.

6 Towards the end of the writeshop, the third draft is made available to participants for final comments and revisions.

7 The final version can be completed, printed and distributed soon after the writeshop.

Suggestions for use
This process is very flexible. Here are some adaptations:

- A small group of people can follow the same general sequence to develop a project proposal or position paper. Each person writes part of the document, presents it to the others, who critique it. The authors then revise their drafts and present them a second time to the group. No editors, artists or computer staff are needed here, though a facilitator is useful to guide the process.

- It is not necessary to prepare any written drafts beforehand. The writeshop begins with a brainstorming of topics to include in the document. Each person (or pair of participants or small group) is allocated a topic to write about. They write a first draft, then present it to the plenary, which critiques it. The authors then revise their drafts and present them a second time.

Writeshops are an excellent way to promote interaction among scientists, extensionists, farmers, and policy makers, and to focus their energies on creating a document that everyone agrees to and feels is theirs. They are useful for drafting documents such as mission statements, strategy documents and future scenario analysis.
Writeshops can work with as few as five people or as many as 100, depending on the topic and type of document to be produced. They can be as short as 2–3 days, or as long as 2 weeks, depending on the scale of the task and the nature of the material to be developed.

The writeshop process was developed by the International Institute of Rural Reconstruction (IIRR) in the Philippines to produce user-friendly extension and information materials. It has also extensively been used by IIRR and other organizations in eastern Africa, Latin America and South Asia.

References
Mundy, undated.
15 PROJECT LOGICAL FRAMEWORK ANALYSIS

Objectives
To assist in designing development projects in a systematic way. The project objectives are related systematically to the expected outputs, indicators of achievement, and underlying assumptions. The logical framework, or “logframe”, later guides project implementation, monitoring and evaluation.

Methodology
1. Identify and gather key stakeholders to participate in developing the logframe. Involve them in the discussion of each of the following steps, and in filling the “logframe table” with the elements you have agreed upon. This exercise requires a facilitator who is already familiar with logframe development and analysis.
2. Determine the project goal, i.e. the long-term development impact that is desired (such as poverty reduction or food security), where, and for whom.
3. Define the specific objectives or the intended immediate effects of the project (e.g. capacity building, changes in productivity or family income, improvements in natural resources), and decide on which objectives have priority. These are shown as a–d in the table below.
4. Fill in Table 15 with the group. In this table, each objective determines the expected outputs (what the project is expected to deliver; g–k in the table), the activities that must be implemented to achieve those outputs (m–q), and the costs of implementing the activities (w–z). There may be several outputs for each objective, and several activities for each output.
5. At this stage, decisions can be made about the project scope, depth and costs.

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Expected outputs</th>
<th>Activities</th>
<th>Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>g</td>
<td>m</td>
<td>w</td>
</tr>
<tr>
<td></td>
<td>h</td>
<td>n</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>o</td>
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<tr>
<td>b</td>
<td>i</td>
<td>p</td>
<td>x</td>
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<td>j</td>
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<td>k</td>
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<td>c</td>
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<td>...</td>
<td>...</td>
</tr>
</tbody>
</table>

6. The team can now start filling in the logframe matrix (Table 16). Complete the table step by step, in the order indicated by the numbers: first, the overall goal (1), then the specific objectives (2), outputs (3) and activities (4). These are taken from Table 15. Add extra rows to the logframe for each objective, output or activity.
7. Fill in the preconditions and assumptions (5–8) that must be fulfilled in order to implement the activities, produce the outputs, and achieve the objectives and the goal. These assumptions are external factors (not controlled by the stakeholders participating in the project). For example, “continued stable government or smooth transfer of power in next election” might be necessary for the project to achieve its objectives.
8. Now fill in the indicators and sources of verification for each row in the table (9–16). The indicators must be “objectively verifiable” – they may be qualitative or quantitative, but you must be able to measure them in an objective way. The sources of verification are where to...
collect the data. For example, if your specific objective is to reduce child malnutrition, an indicator might be data on child weights, and the source of verification might be the weight records of children in health clinics.

TABLE 16
Logical framework matrix

<table>
<thead>
<tr>
<th>Project narrative</th>
<th>Objectively verifiable indicators</th>
<th>Sources of verification</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall goal</td>
<td>1</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Specific objectives</td>
<td>2</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>Outputs</td>
<td>3</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>Activities</td>
<td>4</td>
<td>Costs 15</td>
<td>16</td>
</tr>
</tbody>
</table>

Suggestions for use
Logical framework analysis is a powerful tool for leveraging participation of stakeholders. It can organize thinking, promote information exchange, enhance commitment and ownership, and improve the execution and impact of development projects. It is used in planning projects, as well as in managing and evaluating them. Many donors require a detailed logframe before they will fund a project.

References
PART 4

Resources

SARD AND SARD-FSE


IER, 2005. The evolution of cereal-root crop-based farming systems towards sustainable agriculture and rural development, A case study of Sikasso, Mali. Institut de economie rurale, Bamako, Mali 130 p


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Pretty, J. 1995. The living land and regenerating agriculture. Littlehampton Book Services, UK.

POLICY AND INSTITUTIONAL ISSUES

DECISION-SUPPORT TOOLS


UN-CSD, 2001. Indicators of sustainable development: Guidelines and methodologies. 9th session of UN Committee on Sustainable Development (CSD), April 2001.
The Sustainable Agriculture and Rural Development - Farming Systems Evolution project of FAO (GCP/INT/819/MUL) aims to strengthen the capacity of government and non-government stakeholders to improve policies and institutions to achieve sustainable agriculture and rural development. The project studied how selected farming systems in Honduras, Mali and the Philippines have evolved over the long term. Each case study identified the driving forces, current strengths and weaknesses of these farming systems, analyzed future scenarios, and identified policy priorities and actions for achieving sustainable agriculture and rural development. The project used participatory, bottom-up approaches and tools to ensure that the knowledge, priorities and views of stakeholders at all levels, including local rural communities and poor people, were taken into account. The case study integrates the cultural, social, economic and environmental dimensions in the analysis of sustainability at local, territorial and national levels. The SARD-FSE project, supported by the governments of France and Japan, was implemented with the Programme for Sustainable Agriculture on Sloping Lands of Central America (PASOLAC) in Honduras, the Institute of Rural Economics (IER) in Mali and the Asian NGO Coalition for Agrarian Reform and Rural Development (ANGOC) in the Philippines.