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Article · January 2007

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Participatory tools working with crops, varieties and seeds

A guide for professionals applying participatory
approaches in agrobiodiversity management,
crop improvement and
seed sector development

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Participatory tools working with crops, varieties and seeds

A guide for professionals applying participatory approaches in agrobiodiversity management, crop improvement and seed sector development

Walter Simon de Boef & Marja Helen Thijssen

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Acknowledgement

Outline to the guide

Within our training programmes on local management of agrobiodiversity, participatory crop improvement and the support of local seed supply participatory tools get ample attention. Tools are dealt with theoretically, are practised in class situations, but are also applied in field study assignments. The objectives of practising participatory tools in training on local agrobiodiversity management and related to that the objectives of this guide are many. However, the current guide book has the following key objective being to provide professionals working in a genetic resources management, crop improvement and seed sector development context a kit with a diversity of tools developed for participatory learning and action that have been adapted to their specific context. In addition to this main goal, we aim to enhance those professionals' creativity and flexibility in conducting group oriented, participatory learning and action types of diagnosis, research planning and implementation, and monitoring and evaluation with agrobiodiversity, plant breeding and seed projects.

We used the handbook as developed by Frans Geilfus[1], which covers 80 tools for participatory development as an important base for this tools guide. A selection of tools from Geilfus and others have been adapted in a series of participatory instruments that can support agrobiodiversity management, crop improvement and seed sector development. The structure is basically derived from this book. The examples and selection of tools have been inspired on actual experiences during courses on participatory crop improvement, seed sector development, and local management of agrobiodiversity as organised by Wageningen International over the last 10 years. Some other tools are derived form other sources. The tools have been tested in local projects in various countries in South America (Brazil, Colombia, Ecuador, Peru and Venezuela), West Africa (Ghana, Nigeria, Cameroon and Côte d'Ivoire), Ethiopia, Nepal and India.

The guide has been designed is such a way that it is easy to use as a reference in the field. The sequence of the tools is similar to that often used in participatory analysis, starting with general tools, moving to tools providing more details on specific topics, and going up to more analytical tools that can be applied with communities, but also can assist the facilitation team in analysing (after the diagnosis) the information gathered. However, which tools to apply, what type with whom, in what sequence, depends very much on the setting and the objectives of the exercise. Please, consider this no recipe book, but rather a kit with tools you can or may use. We consider the guide an inspiration to encourage you in adapting, merging and thereby designing your own tools.

Introduction: participatory and learning orientated approaches

Walter Simon de Boef, Marja Helen Thijssen, Cecile Kusters and Karèn Simone Verhoosel[*]

In the area of agrobiodiversity management, crop improvement and seed sector development challenges exist that can not be dealt with by carrying out more formal types of research, in which professionals develop the research agenda and are primarily responsible for research implementation. When addressing complex problems that formal research alone is incapable of solving, for which various stakeholders (e.g. government, NGOs, business sector, civil society) need to contribute in finding solutions, more participatory and learning orientated approaches need to be applied. The focus of the current book emerges, being participatory and learning oriented strategies supporting agrobiodiversity management, crop improvement and seed sector development. This implies a more comprehensive and participatory approach towards the design and implementation of the research strategy. Stimulating participation of the relevant stakeholders in the different stages of research will result in more relevant, effective and sustainable impact to the challenges that will be addressed. Participation should be effectuated from the start on, with problem definition during a diagnosis, towards implementation, and through continuous monitoring and evaluation of participatory process, the latter being key to facilitate community and multi-stakeholder learning.

This introductory chapter provides a brief background on participatory and learning orientated approaches of diagnosis and research, as well as some background for the implementation of projects in the area of agrobiodiversity management, crop improvement and seed sector development. This guidebook continues with a practical description of tools that can be applied during the various phases of participatory projects. In this introductory chapter, we provide a framework in which the tools can be applied. Through this context, we would like to emphasize that "participation is not just a matter of applying participatory tools but goes with a change in attitude that is truly participatory". A vision towards the kind of change one wants to achieve through the participatory process is placed central. Thereby participatory processes will not result in just technical solutions; the factor of social learning –farmers', communities' and/or stakeholders' capabilities to solve shared problems – becomes the main result. Without this focus on social learning, the application of participatory tools can have adverse effects that may be difficult to adjust.

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Within this chapter, we discuss what we mean by participation based on our own experiences as trainers and facilitators, complemented by what innovators or 'gurus' in this field of expertise have shared and published. Those innovators have inspired us and many others in creating participatory learning and action environments that will facilitate an impact orientated research approach towards empowerment and development. We elaborate some concepts on participation and outline some principles of participation. We further provide some guidelines on how participatory learning and change processes can be facilitated.

Participation – background

Participation is about empowerment[2]. In the late 1970s and 1980s development organisations began realising the problems of non-adoption or limited impact caused by top-down and linear development approaches. Since the early 1990s, donor development agencies have put their weight behind the promotion of participatory development. "Participation includes people's involvement in decision-making processes, in implementing programmes, their sharing in the benefits of development programmes and their involvement in efforts to evaluate such programmes"[3].

Participation can serve two broad purposes. Firstly, participation can be considered an instrument, i.e. a process by which development initiatives can be more effectively implemented. Participatory methods and tools can be used to incorporate people's ideas in the development plans, and development or research activities. Secondly, participation can be considered a goal, i.e. empowering the people by helping them to acquire skills, knowledge and experience to take greater responsibility (ownership) for their development.

Many arguments exist that support the use of participatory and learning oriented approaches, but others highlight shortcomings[4]. Arguments in favour draw attention to outputs such as empowerment of the disadvantaged. When recognizing local knowledge in facing local problems, development interventions and research processes may become more effective. Communities and stakeholders become the focus in development and research processes; such focus of investment in local capabilities in resource management will often include the distribution or delegation of responsibilities. This may increase the ownership of the target group on the research and development processes, contributing to the sustainability of activities and resulting in higher impact. Emphasizing stratified actions, thus targeting specific groups, may improve the status of the disadvantaged groups like indigenous people, women and the elderly.

Often mentioned shortcomings of participatory research and development processes include the fact that these processes take much time of both professionals and rural people, and require large investments in financial resources. In situations of poverty, participation can be perceived as a luxury and only emerges upon securing poor peoples' livelihood. Participatory

Table 1 Typology of participation[5]

Typology	Components of each type
A Passive participation	People participate by being told what is going to happen or what has already happened. People's responses are not taken into account. Shared information belongs to external professionals.
B Participation resulting in information transfer	People participate by answering questions posed by extractive researchers and conservationists using questionnaire surveys or similar approaches, for example to identify selection criteria for plant breeding. People do not have an opportunity to influence proceedings, as findings, research or project design are neither shared nor checked for accuracy.
C Participation by consultation	People participate by being consulted and external agents listen to views, for example to identify breeding objectives and variety recommendation domains. External agents define both problems and solutions, and may modify these in the light of people's responses. Such a consultative process does not concede any share in decision-making and professionals are under no obligation to take on board people's views.
D Participation for material incentives	People participate by providing resources, for example labour or land, in return for food, cash or other material incentives (seeds, fertilisers). Much on-farm testing, maintenance of varieties or accessions fall into this category as rural people provide the resources but are not involved in experimentation.
E Functional participation	People participate by forming groups to meet predetermined objectives related to the project, which may involve the development or promotion of externally initiated organisations. Such involvement is not observed during early stages of project cycles or planning, but rather after major decisions have been taken. These institutions tend to rely on external initiators and facilitators, but may become self-dependent.
F Interactive participation	People participate in joint analysis, which leads to action plans, formulation of new local groups or strengthening of existing ones. Researchers use interdisciplinary methodologies that seek multiple perspectives and make use of systematic and learning processes. Learning groups take control over local decisions, and in this way people have a stake in the maintenance and further evolution of jointly created structures and practices.
G Self-mobilisation	People participate by taking initiatives independent from external institutions to change systems. Such self initiated mobilisation and collective action may or may not challenge inequitable distribution of wealth and power.

processes, if not embedded properly may unbalance existing social, political and cultural relationships within communities and among stakeholders. They are perceived to be driven by "ideological eagerness" and less concerned with securing direct benefits for poor people. Lastly, some consider them to shift the burden of driving the development process unto the poor or disadvantaged and local governments. Reflecting upon these pros and cons, it is critical to place the participatory processes within the wider socio-economic and political context. Accordingly, dissimilar (socio-political) perspectives will surely result in different analyses of the goals and outcomes of participatory processes.

When we analyze the division of roles and responsibilities among rural people and professionals we can distinguish dissimilar degrees of participation within participatory research and development processes. Such analysis provides a more comprehensible perspective, and also reflects upon the power relations in decision making for example on the directions of the development and research process, its implementation and but also on the allocation of available resources (human, physical, biological and/or financial). Table 1 outlines seven types of participation.

Participation – multi-stakeholder setting
When participation is assumed in research activities, local people should not be considered the only beneficiaries; other parties that may play a significant role in implementing the ideas from research should be considered beneficiaries as well. These stakeholders may include extension services, NGOs, the business sector and even policy makers. It is important to consider which of the stakeholders to involve during the consecutive steps of the participatory process: (i) setting the research agenda; (ii) carrying out the diagnosis and research; (iii) deciding on research and development options; (iv) implementing and learning applying these options; (v) continuous monitoring and evaluating the impact of these options and the development process on the original setting and the people's livelihood.

In order to increase impact one needs to understand which stakeholder to involve at what point in the chain of events constituting the participatory process. Within such a multi-stakeholder setting, the process goes beyond peoples' (e.g. farmers') participation at local level, a multi-stakeholder process (MSP) emerges. The design of MSPs needs to be well-structured and facilitated. Guiding questions become: "Who plays what role and why? What is the common goal and what individual gains can be met in the process?" A practical tool supporting MSP is a stakeholder analysis. It contributes to answering questions such as: "What are the characteristics of stakeholders? What types of problems do they face in e.g. service delivery? What can they offer to the project? What do they want to gain from it? And how are the relations among the stakeholders?" Insight in the possible stakeholder contributions and commitments towards a participatory process creates the

transparency needed for the conceptualization of a project. A process involving a diversity of stakeholders requires facilitation that deals with complex relationships and structures of power. Key in facilitation is to create an environment in which stakeholders are able and are willing to join forces in creating a shared learning environment. The role of a facilitator is crucial in assuming and being accepted in a leadership position within the multi-stakeholder process. Essential for the facilitator are knowledge about and skills on learning, participation, MSPs, conflict management, team work, etc.[6]

Participatory learning and action
Many participatory methods exist; they have been developed in dissimilar contexts and for a diversity of purposes. Rapid Rural Appraisal (RRA) and Participatory Rural Appraisal (PRA) were first generation applications. Since the 1990s, participatory methodologies have expanded and spread. The focus shifted from appraisal and analysis to planning, action and monitoring and evaluation. They increasingly started to be applied in an urban setting in addition to the original rural focus. The focus shifted from applications in the field addressing technical and management issues to applications in organisations, also addressing institutional issues. Their application moved from a few sectors in the rural and agricultural domain to many others such as nature management, health care and education. Topics addressed changed from 'safe' technological problems to sensitive, difficult and dangerous socio-environmental and 'political' issues. First practitioners were NGOs; now they are applied within government departments, international donor agencies and within academic research performed by research institutions and universities. This move also contributed to the formation of a critical body of theory where its origin was founded on practice. From its region of origin in South Asia participatory methods moved around the South and increasingly are used in the North. From methods they have become processes facilitating professional, institutional and policy development. In its professional reflection, the attention changed from emphasizing behaviour and attitudes to emphasizing personal change and relationships. The described gradual changes and learning in their application and theory, and above all the realization that good practice is empowering which can not be realised just by appraisal but rather by participatory actions, urged for reformulation of the common term referring to the method. The term Participatory Learning and Action (PLA) is now widely used and we will further use it in this chapter and guidebook. As a term it is often used interchangeably with other methods including PRA. PLA stands for "a growing family of approaches, methods, attitudes, behaviours and relationships that aim to enable and empower people, aim to share, analyse and enhance their knowledge of life and conditions, and aim to plan, act, monitor, evaluate and reflect"[2.] Good PLA is about empowerment.

Principles of participation
We distinguish certain principles that support participatory methods and processes. The first one is critical self-awareness and responsibility, i.e. individual responsibility and judgement exercised by facilitators, i.e. facilitators being conscious about attitudes, behaviour and relationships, embracing and learning from error and doubt, continuously trying to do better, building the own capabilities in learning and improvement in methods applied into every experience, and taking personal responsibility. Critical to this principle is changing behaviour and attitude from dominating to facilitating, gaining rapport, asking people, often 'disadvantaged', to teach us, respecting them, having confidence that they can do it, handing over the stick, empowering and enabling them to conduct their own analysis. The second principle is set around equity and empowerment, i.e. a commitment to equity, empowering those who are marginalised, excluded and deprived, often women and children, or those who are poorer. The third principle recognizes and celebrates diversity, i.e. offsetting biases (spatial, project, person - gender, elite, seasonal, professional, courtesy) and facilitating a culture of sharing of information, methods, field experiences and learning among NGOs, government and local people. The fourth and final principle relates to facilitation and enhancement of the capacities in joint or social learning. Methods need to be flexible, exploratory, interactive and inventive, thus to facilitate rapid progressive learning. They need to include reversals, i.e. learning from, with and by local people, eliciting and using their criteria and categories. Insert appropriate triangulation through using dissimilar methods, sources and disciplines, and a range of informants in various places, and cross-checking to get closer to the truth through successive approximations, however always looking for optimal ignorance and appropriate imprecision. This means not finding out more than is needed, not measuring more accurately than needed, and not trying to measure what does not need to be measured. We are trained to measure things, but often trends, scores or rankings are all that are required. Visualization techniques are used to ease through group dynamics the communication between professionals and rural participants, and also to stimulate dialogue amongst all. They include various formats, like tables or matrices, maps, flow charts and diagrams. The facilitator guides the participants in a meeting through a series of methodological stages. A group dynamic gives more trustworthy results then those which are obtained through individual interviews[7].

A blend of these methodological learning components defines a systematic learning process in which social and joint learning, the fourth principle, by the stakeholders through a system of joint analysis and interaction are central. Important is to reflect upon the various interpretations of reality and solutions for problems, thus support the emergence of multiple perspectives. This contributes to group learning processes in which group analysis and interaction are strategies to deal with this complexity. Methods

and approaches should as much as possible be designed or adapted to the local situation, preferably by the stakeholders involved, enhancing their ownership. The process of joint analysis and dialogue helps to define changes which would bring about improvement and seeks to motivate people to take action to implement the defined changes that inevitably will lead to change and improvement of the situation.

The principles assist and guide when working with a farmer family, families within a community, and other stakeholders in a participatory learning and action process. In processes involving more participants, which is in fact always the case, it is important to consider these principles because of the diversity of participants involved. This also means diversity in thinking about the importance of participation, the meaning of participation and ways to achieve empowerment. Working on the basis of these principles, which will need investment of time, will increase the impact of the process and its results.

Facilitating participatory learning and change processes
Facilitation is critical in the participatory approach. The role of the professional is to guide the process; in all matters decisions should be left to the group involved. This is often difficult as the professionals like researchers and extension workers are trained in the transfer of technology, telling the farmer how to do things, making the farmer listening instead of talking. In participatory diagnosis and research, the information flow is reversed. It should be realised that this not only requires a change of attitude of the professional. Farmers and rural people may also be used to being told what to do and therefore may be reluctant to move into another mode of communication. Transparency and explaining the objectives of the meeting will help both to start communicating in a different way.

Facilitating experts and stakeholders may have a position of outsiders; they are researchers and/or practitioners who are not members of the community or group with whom they interact. For local people, they may act as catalysts to decide what to do with the information and analysis generated. Outsiders may also choose to further analyse the findings generated by participatory learning and action or multistakeholder processes, to influence policy-making processes. If local people feel that such support is needed, the facilitating organisation need to commit themselves to assist and monitor those actions that people have decided on. Therefore, the role of the professional has changed from being an "expert" to being a "facilitator" The "qualities of a facilitator" need to be both dynamic as well as receptive; facilitation becomes a balancing act! Listening skills are an important quality. The attitude of the facilitator is crucial to success, and much more important than his or her ability to apply participatory tools. In summary, Robert Chambers provides a number of practical tips for facilitators; they are presented in Box 1.

Box 1   Tips to be a successful facilitator[8]

- Look, listen and learn. Facilitate. Don't dominate. Don't interrupt. When people are mapping, modelling or diagramming, let them get on with it. When people are thinking or discussing before replying, give them time to think or discuss. (This sounds easy. It is not. We tend to be habitual interrupters. Is it precisely those who are the most clever, important and articulate among us who are also most disabled, finding it hardest to keep our mouths shut?) So Listen, Learn, Facilitate. Don't Dominate! Don't Interrupt!
- Spend nights in villages and slums. Be around in the evening, at night and in the early morning.
- Embrace error. We all make mistakes, and do things badly sometimes. Never mind. Don't hide it. Share it. When things go wrong, it is a chance to learn. Say 'Aha. That was a mess. Good. Now what can we learn from it?'.
- Ask yourself - who is being met and heard, and what is being seen, and where and why; and who is not being met and heard, and what is not being seen, and where and why?
- Relax. Don't rush. Allow unplanned time to walk and wander around.
- Meet people when it suits them, and when they can be at ease, not when it suits us. This applies even more strongly to women than to men. Participatory methods often take time, and women tend to have many obligations demanding their attention. Sometimes the best times for them are the worse times for us - a couple of hours after dark, or sometimes early in the morning. Ask them! Compromises are often needed, but it is a good discipline, and good for rapport, to try to meet at their best times rather than ours; and don't force discussions to go on for too long. Stop before people are too tired.
- Probe. Interview the map or the diagram.
- Ask about what you see. Notice, seize on and investigate diversity, whatever is different, the unexpected.
- Use the six helpers - who, what, where, when, why and how?
- Ask open-ended questions
- Show interest and enthusiasm in learning from people
- Allow more time than expected for team interaction (I have never yet got this right) and for changing the agenda
- Be nice to people
- Enjoy! It is often interesting, and often fun.

Facilitating learning in participatory processes

Within PLA, learning is considered 'reflecting on experience to identify how a situation or future actions could be improved and then using the knowledge to actually make improvements'. This can be individual or group based, within a project or programme, at organisational level or within a wider societal context. Important is to ensure that each individual shares his or her thoughts and that others can learn from this. Jointly a comprehensive picture is created.

In the early 1970s, David A. Kolb[9] with his colleague Ronald Fry at the Weatherhead School of Management developed "The Experiential Learning Model"[10.] This model is composed of four elements, being (i) concrete experience, (ii) observation and reflection of that experience, (iii) formation of abstract concepts based upon the reflection, and (iv) testing new concepts. The next step in the model is to repeat the four elements. Kolb and Fry indicated that (deeper) learning runs through a cycle of concrete experiences, reflective observation, abstract conceptualisation and active experimentation (Figure 1). Applying lessons learned into future actions provides the basis for another cycle of learning. For example when carrying out research one must first analyse and reflect on what are the issues at stake (reflective observation), e.g. context and problems encountered in the production of seed of a certain crop in a specified locality. Once all the relevant information is collected one can start conceptualising what this means, e.g. how the methods used by farmers to process and store seeds of that particular crop can be improved
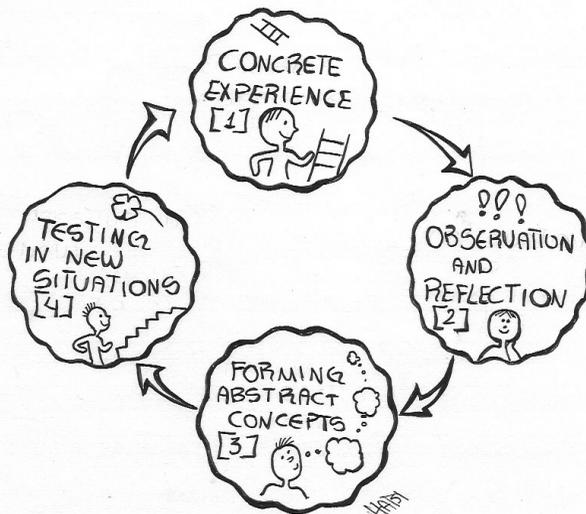
Figure 1
Kolb's experiential learning cycle [10]

under the particular conditions (abstract conceptualisation). This can then be tried out (active experimentation) to see if it really works, e.g. various experiments to find solutions to problems encountered in processing and storing seeds. Whilst undertaking this, one may discover new information or try out new ways of working (concrete experiences) that lead to better results, for example that the processing and storage needs to be differentiated for seeds of local and modern varieties of the crop. This needs to be reflected on, conceptualised etc. Basically learning is continuous process of undergoing Kolb's learning cycle (Figure 1). This can be stimulated by using different tools/methods in different situations, e.g. problem tree analysis can be used before and after a particular project for the purpose of evaluation and thus reflecting on the changes over time and deciding what has to be done in the future. Or a matrix can be used to make a decision about which crop varieties can best be introduced in a community; and a Venn diagram can be used for deciding which local organisations can facilitate learning and which other (outsider) organisations can support the participatory learning process.

Participatory tools
The guidebook describes a number of participatory tools. The diversity of tools is not prescriptive but rather serve as options one can draw from. Creativity is important for adapting the tools to the context. Remember, the starting point is not "What tool can we use?" but "What do we want to do?" or "What do we need to know?" and "Which tools can assist me in this?" The tools used range from field-based visualisation, to interviewing and group work. The common theme is the promotion of interactive learning, sharing knowledge, and flexible, yet structured analysis.

The tools in the guide are presented in a format and sequence that is similar to that often used in participatory analysis. What tools to apply, what type (map, matrix or any other), with whom, in what sequence, depends very much on the setting and the objectives of the exercise. Each tool is described first explaining when to use it, with the time and material required. We describe in steps the methodology to be followed. Most of the tools are accompanied with drawings or a table with an example from one of the trainings that we have been involved in, or from literature. The drawings have in many cases been modified and adapted to their purpose as examples and source of inspiration – being a guide - within this book.

The sequence is one that relates freely to one that can be applied in designing and conducting participatory diagnosis and research. This sequence is just based on our experience and should be modified to any setting in which the tools are used. At the start, we provide some background on semi-structured dialogues, dialogues with key persons and focus group discussions, followed by an outline for a game that we often use to address in an informal setting issues related to communication, sustainability and participation. Then we continue with the sequence of tools passing through more general,

historical and institutional tools, moving to those addressing more technical aspects of agrobiodiversity, varieties and seeds. We conclude the sequence with tools that can be used to further analyse information gathered in participatory diagnosis and research by the facilitation team with or without local partners. These analytical tools can be used to draw conclusions and identify future actions to be undertaken in the participatory learning process. While designing and applying the exercises with tools take into account the diversity of issues to be addressed and the fact that tools can continuously be adapted and modified. Be creative and flexible. We emphasize what we consider most critical in their application that for a successful learning and action process, the facilitators should remember that behaviour and attitudes are more important than the methods and the tools used.

1. Semi-structured dialogue

When to use the tool
- To obtain general information through dialogues with individuals (key persons), households or focal groups (see tool 3)
- The difference between an interview and a dialogue is that the latter is an exchange, a two way flow of information
- The technique of semi-structured dialogue tries to avoid the disadvantages of structured questionnaires such as closed topics (there is no way to discuss other topics), lack of dialogue, limited options for elaboration and further explication by the interviewees
- Its application is very broad relating to whatever topic to be addressed

Time: depending on the number and complexity of topics
Materials: small notebook and pen; if documenting in an open way, cards to document and report the discussion, even though this may limit the free flow of communication

Methodology
Step 1: Develop a guide with a maximum of 10 to 15 topics for dialogues with key informants and 5 to 7 topics for group dialogues. Indicate in key words the topics; these should not be formulated in questions, but rather serve as a checklist and flexible guide to the interviewer.
Step 2: Identify how you will select the persons or groups to be interviewed. Key issues to be considered are:
- Accessibility
- Identify informants at various levels of influence in the decision making processes
- Gender and generation - ensure the participation of man and women of different generations
- Diversity in members of a community and stakeholders - ensure that different groups are involved
- Seasonality - in timing of the dialogue you should be aware that some of the members of the community, households or stakeholders may not be available or present
- Working days and hours may influence the timing of the dialogue; consult local partners on the most suitable time
- Identify those persons and stakeholders that have an interest in the project; however, confirm this during the sessions themselves.

Step 3: Implement the dialogues/interviews. The facilitator should be aware of the following during the dialogue:

- Create trust among the participants - minimize the distance; do not appear very formal in clothing and attitude; do not show disgust or disapproval with some answers
- Keep your attention - follow the discussion well and look the participants in their faces; do not show fatigue
- Do not interrupt to change the topic of discussion
- Do not use the guide in a rigid manner - if new interesting topics emerge, investigate and embrace them
- In group dialogues ensure the participation of the different members. Use only clear and open questions; do not ask questions that can only be responded in yes or no; use questions starting with What, Why, How, When, Who, Where….?
- Probe participants to explain further with questions like Who decides on this? Tell me more about ….?
- Do not use complex questions.

Step 4: Analysis of the data.

- The analysis is based on the way the dialogue is documented, taking notes during the interview or not, working with one interviewer or with teams. It is important to write down all information directly after the interview. If you want to maintain spontaneity it is important to analyse the information directly after the interview.
- Important questions to be answered by the interviewers are the following:
  - o Did the interviewee have direct experience on the topic discussed?
  - o Did the interviewee express his or her opinion freely? Or did he/she express what we wanted to hear?
  - o Could there be a reason why the interviewee(s) did not tell the truth? What is the influence of certain persons present on the expression of opinions?
  - o Characterize the answers in facts, opinions and rumours.

Step 5: Triangulation

- Verify the information with other interviews and information gathered through the use of other tools.

2. Dialogue with key informants

When to use the tool
- This tool is not necessarily a participatory one, however, it is required to prepare any participatory dialogue in a community or with stakeholders, or may be used to complement information gathered
- Critical is that the dialogue about the community and the specific topic is informal; in this way you may get very quickly some key information
- It provides a basis for a good start of a participatory diagnosis
- It can be organised with individuals, but also with groups. However, in the later case the methodology moves more to focus group discussion or semi-structured interviews

Time: depending on the number and complexity of topics, but in general in between 1 to 2 hours per person
Materials: see the semi-structured dialogue

Methodology
Step 1: Develop a guide with a maximum of 10 to 15 topics with key informants. Follow the methodology of the semi-structured dialogue.
Step 2: Identify the key informants. They should be representatives of different groups (stakeholder, social, gender, generation) within the community where you want to work. You can identify them on the basis of a social map or a matrix with socio-economic groups. The informants should be relevant in relation to the topics addressed; verify continuously the list of key informants.
Step 3: Introduction: the purpose of the interview should be clearly explained, after which the informant should be asked if he or she wants to participate. You need to explain why the interview takes place, and why the informant has been identified. Verify the institution that he or she represents. Creating transparency and trust are critical and crucial for continuation of the work, in avoiding confusion and in avoiding creating wrong impressions.
Step 4: For implementation of the interview, follow the guidelines for the semi-structured dialogue.
Step 5: The obtained information should be compared and verified with other dialogues, interviews and discussions on the topics.

3. Focus group discussion

When to use the tool
- Focus group meetings are made up of people or stakeholders with similar concerns, who can speak comfortably together, and who share a common problem and purpose.
- Focus group discussions as participatory tool can be used to obtain knowledge shared by a certain group which is not expressed in the context of a larger gathering. This information can be compared with that generated by other groups or a larger group.
- The advantages of the focus group over other more individually oriented appraisal methods can be summarized as follows: a lot of data are generated in a short time; the data are well grounded in local situations; various perspectives can be collected, linked and cross-checked at the same time, not necessarily bringing a consensus statement; combination with data of semi-structured discussions and possibility to use other participatory tools to structure, stimulate and visualise discussions; it can link discussions, sensitisation and awareness raising to decision making on specific topics in a larger process.

Time: depending on the number of participants and complexity of topics, but in general in between 2 to 4 hours
Materials: this depends highly on the number of topics and participatory tools being used to structure the discussion

Methodology – basic principles[11]
- Instead of providing a step wise outline some basic principles related to focus group discussions are elaborated. Basically the methodology to be used should be very near to the one elaborated for semi-structured dialogue, however, with a stronger emphasis on identification of participants and designing a sequence of discussion tools that help to organise the focus group discussion.
- A list with focus or stakeholder groups needs to be compiled and analysed before deciding how these groups can be put together, either putting groups with similar interests together in one dialogue or emphasising diversity during dialogue. The result will be very different and the choice is strategic, often depending on the objective and moment of the exercise within the larger appraisal.
- Transparent flow of information. A way to start this process is to create an environment for an open dialogue between local stakeholders. From the start it needs to be clear that the consultation makes sense; participants are taken serious and there is plenty of room for local involvement.

- <u>Focus on the local situation and flexibility</u>. The aim to organise focus group discussions is to obtain data and information generated within a specific context. The consultations and discussions should enhance an understanding firstly of the local situation, secondly of a diversity of local perspectives on relevant topics making clear that no uniform perspectives at local level exist, and thirdly of local complexity. In order to cope with this complexity and heterogeneity, focus groups as a tool need to adapt to changing local situations and adapt to unanticipated perspectives. Such flexibility will enforce the quality of the information generated.

- <u>Quality and trustworthiness of information</u>. Providing room for a diversity of perspectives will create more trustworthy information. Participatory approaches through their collective nature (working in groups) as qualitative systems of inquiry provide more trustworthy data. When organising focus groups for diagnosis, the issue of representation should be taken into consideration. Who is invited? What is the representative's mandate or role? People can only 'wear one hat' creating environments based on mutual trust instead of confusion. For reaching best quality of data, focus group discussions need to be organised in various sites and various sessions within sites need to be organised. Some repetition of events is required for reaching best outputs. Finding a right balance needs to be catered for by strategically identifying sites and groups. A means to enforce quality and trustworthiness of data are methods for cross-checking and triangulation. Interviews with key persons are a simple means for verification.

- <u>Stimulating diversity in perspectives</u>. Focus groups are an effective instrument for gathering information from a diversity of participants. The choice to work with either heterogeneous or homogenous groups can be strategic in narrowing or broadening diversity within the groups. If a narrow focus is used, a series of sessions for dissimilar groups needs to be organised. Several participatory tools are available that will enforce individual inputs in a collective effort. The balance between individual and collective inputs during the discussions is critical. Recording dissimilar perspectives is thereby critical not to lose this diversity.

- <u>Cooperation</u>. When being transparent in the flow of information and embedding this information in the overall process, focus group discussion will create ownership by the participants over the entire process. A critical element to be taken into account relating to ownership is the issue of authorisation. Approaching and subsequently using information generated by farmer communities and indigenous people need to be well embedded in existing structures. A critical issue for consultation is that the organisations taking responsibility for the focus groups take a learning attitude expressing their interest to learn from local communities.

- <u>Discussion, debate or dialogue</u>. Within focus group discussions, a free flow of information is clearly required (no strict agenda). This aspect can

also become a disadvantage. No matter how small the group, a tendency exists for some individuals to dominate the discussion and thus influence the agenda and outputs. The facilitator needs to be well skilled ensuring involvement of all participants. Realising that various participants in a focus group discussion may have dissimilar perspectives, it is suggested to create an environment that should be characterised as a dialogue instead of debate. 'Smashing heads does not open minds'. Where dialogue is opposed to fighting, debate and discussion should be considered an essential component. The facilitator should create an environment in which people with either a seemingly homogenous (or focused as expressed in the name of the method) or heterogeneous background share expertise, interests, needs and concerns.

- 'The learning process to engage in dialogue is a critical output of multi-stakeholder processes'. It means that participants move from hearing to listening, thus moving beyond fighting, beyond adversarial and conflicts in interaction.

4. Bean game[12]

When to use the tool
To allow participants to experience the concept of sustainability, participation and communication in a simple and fast setting

Time:	30 minutes
Materials:	plates and beans; poster with the goal and rules of the game

Methodology
- The facilitator divides the participants in small groups of 4 to 5 persons. Each group sits in a circle. The facilitator imposes absolute silence among the participants. Each group receives a plate containing 25 beans. The facilitator shows the goal and rules of the game and asks one of the participants to read them out loudly. Questions are not allowed. When the facilitator gives the signal, the game starts. At the end of the game the total harvest per person and per group is recorded; the maximum and minimum number of beans per person and the group total is provided to the facilitator who records them.
- After the game, the following questions are discussed:
    - What did participants feel during the game?
    - What does the game show about interactions between people?
    - What does this mean regarding participation or communication between people?
    - What does the game show in relation to sustainability?

The Beans Game

- Goal: Each player's goal is to get as many beans as possible during the game
- Rules:
    - o Upon the facilitator's signal, the players take out beans from the plate – all the same time, but using only one hand. This makes one "round".
    - o The balance left on the plate is doubled after each round by the facilitator, up to the maximum of 25 beans
    - o The game is over when the plate is empty, or after 10 rounds.

5. Rich picture

When to use the tool
- A rich picture illustrates the richness and complexity of a situation
- It is a drawing of a situation that illustrates the main elements and relationships that need to be considered in trying to intervene to create some improvement
- Pictures, text, symbols and icons should all be used to graphically illustrate the situation and stimulate discussion
- It is a powerful tool to open and initiate a discussion on complex issues in which diverse groups within a community or different stakeholders may have dissimilar views

Time: 1 - 2 hours
Materials: markers, large paper sheet

Methodology
- A rich picture is best developed in a group of about 4 to 7 people.
- Have a large piece of flip chart paper. Four standard sized sheets joined together is a good rule of thumb. The more complex a situation the larger the piece of paper required.
- Put the paper on a table around which everyone is sitting or standing in a way that each person can easily draw on the picture. Make sure each person has a marker and that within the group there are different colour markers.
- Encourage everyone to contribute and make it clear that skill in drawing is not at all important.
- Use situation analysis questions (stakeholders, problems, issues, opportunities, visions, context and how these are related to each other) as a guide for developing the rich picture. Start with the physical features of the situation and main stakeholders. For example the people, organizations and aspects of the landscape that are important. Then indicate the links between these entities.
- For future reference ask the group to write a story about the picture using numbers to link the pictures to explanations.
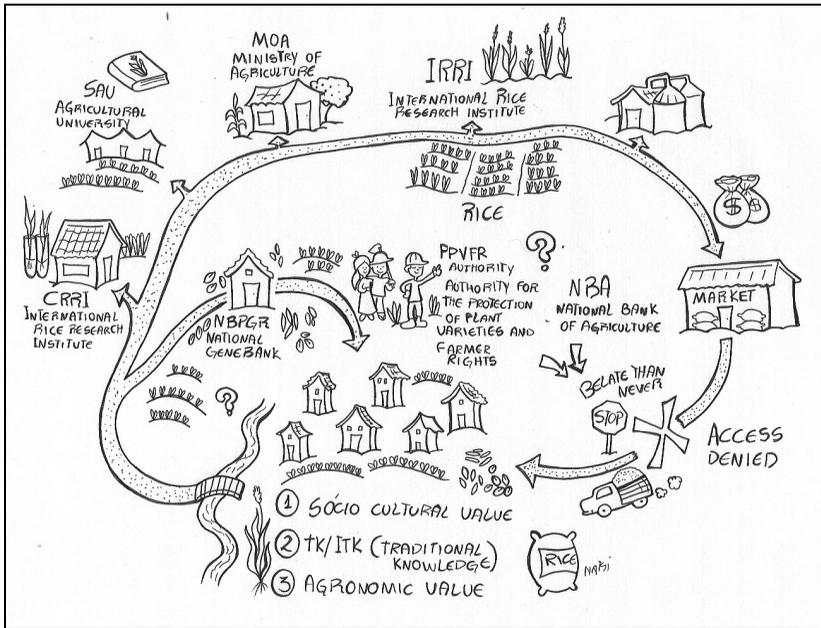
Rich picture on issues relating access to rice varieties and associated knowledge in India
Agrobiodiversity Training, Wageningen, 2006

6. Venn diagram

When to use the tool
- You want to identify with the participants (farmers or stakeholders) what are considered important internal and external stakeholders within and/or associated to the community
- You want to facilitate participants getting a better understanding of the interactions of organizations and support the division of responsibilities during planning based on the outcomes of the appraisal
- The Venn diagram will inform you on what are key stakeholders to be involved in community based activities

Time: 1 - 2 hours
Material: flip chart paper with pens; circles of paper in different sizes (at least 20 of 3 different sizes)

Methodology
The meeting should include representative people of different parts of the community. The participants can be divided in subgroups each conducting the exercise, after which results are compared.

Step 1: Begin a discussion on organisations, both formal and informal, playing a role in farmers' livelihoods and the community's social organisation.

Step 2: Ask the participants to write all organizations playing a role in the community on cards. Informal community groups are added. The discussion may begin with the question: Which institution is most important for the community's development? Participants may disagree, but the facilitator should ensure that all organisations and informal groups mentioned are recorded on cards.

Step 3: Draw a big circle on the large paper; this circle represents the community. Write the names of the most important organizations and groups in the larger circles (one per circle) and place them in the picture. Do the same with the others institutions and groups, using smaller size circles by order of importance. Institutions or groups that are considered part of or very relevant to the community can be placed within the community circle and those less relevant or considered distant to the community are located outside the circle.

Step 4: Ask the participants if relationships exist among the organizations and groups. Organise the institutions/groups in such a way that related ones are placed near one another; if this is complicated, indicate the relationships with arrows. This phase may need considerable discussions.

Step 5: The result is a diagram of inter-institutional relations in the community. In case of working in different subgroups, compare the results of the different groups.
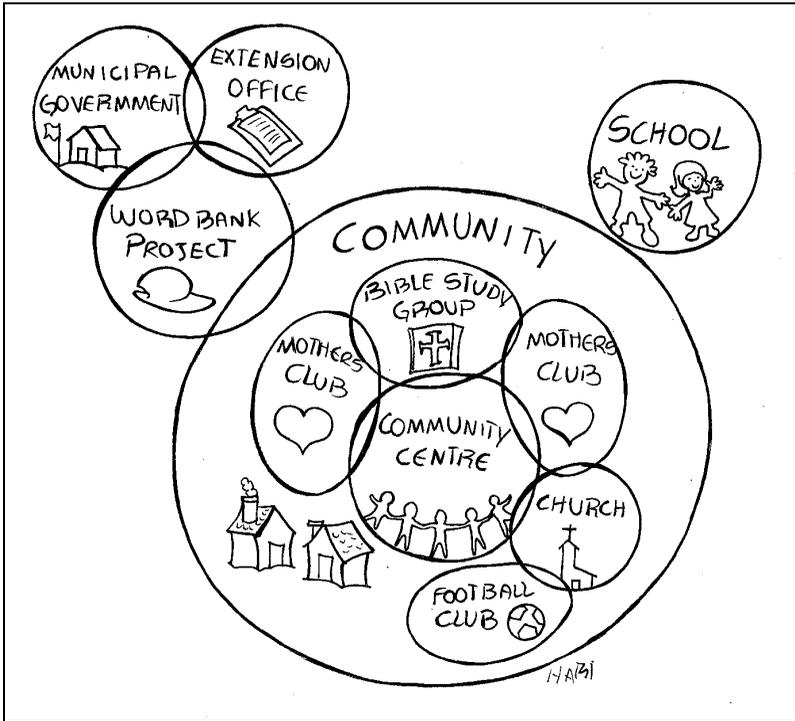
Venn diagram of the Community Campo do Rio Bravo, Agrobiodiversity Training, Brazil -2006 [13]

7. Stakeholder identification and flow chart

When to use the tool
- You want to know the stakeholders that are considered key stakeholders involved in conservation, breeding and/or the seed sector
- You want to facilitate participants getting a better understanding of the institutional framework of genetic conservation, plant breeding and seed production programmes
- You want to understand and characterize flows of germplasm, information and financial resources among stakeholders
- You want to identify the stakeholders that should be involved in future activities.

Time: 1 - 2 hours
Materials: coloured cards, markers, large paper sheet

Methodology
- During the training programme, we conduct a stakeholder analysis based on the institutional affiliations of the course participants
- A general system diagram is drawn for the stakeholders involved in the sector of genetic resources, plant breeding and seed production
- Interactions based on flows of germplasm, information and financial resources are drawn and analysed.

Step 1: Identify stakeholders and draw the system:
- Cards used by the participants to indicate their institutional affiliation during the 'getting to know each other' are put on a large paper sheet
- Similar organisations are put together in clusters
- The distance between the clusters is related to their affiliation
- Additional stakeholders in the sector are written on cards and added to the paper sheet.

Step 2: Analyze flows of germplasm, information and financial resources:
- Using a green marker flows of germplasm are drawn among the stakeholders; arrows, indicating the direction of the flow, may be in one or two directions
- Using a blue marker flows of information are drawn among the stakeholders
- Using a red marker flows of financial resources are drawn among the stakeholders
- The structure of the formal and informal plant genetic resources/seed system is discussed.
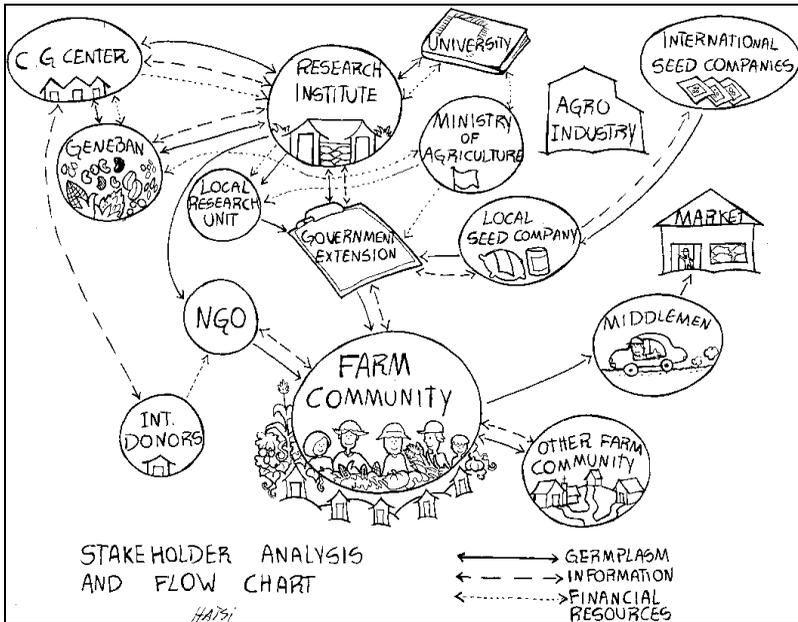
**Stakeholder identification and flow chart seed sector in Ethiopia,
Informal Seed Training Ethiopia, 2006**

8. Matrix for social stratification of community members

When to use the tool
- The tool helps you to determine the criteria used by the farmers for characterizing levels of sustainability among the households within a community
- It further facilitates understanding on how access to resources, characterizes socio-economic groups within the community.

Time: 1 - 2 hours depending on the complexity and the number of participants
Material: flip chart paper and pens

Methodology
Step 1:   Gather a group of local people, preferably from different groups in the community and explain them the objective of the exercise.
Step 2:   Determine with the participants three or four levels/ types of households. Criteria for differentiation are linked to household livelihood and/or sustainability, which can be related to household income, dependency on off-farm income, and livelihood strategy based social indicators.
Step 3:   Prepare a matrix, with the household types in the first row (use symbols).
Step 4:   Ask the participants to identify the exact differences among the household groups. Access to the different production resources such arable land, ownership, handwork availability, animals, machinery, etc. should guide the discussion. The different resources are put in the first column.
Step 5:   Try to collect quantitative data and to establish the classification in a simple matrix.
Step 6:   Once the matrix is completed, review with the participants the relevance of the information.
Step 7:   Prioritization of criteria. The different resources identified should be prioritized to see with the participants which resources they consider most important.
Step 8:   This exercise should be repeated with several groups, to complete the information.

RESOURCES	GOOD 😊 CAN CONTRACT FARM LABOURERS	ACCEPTABLE 🙂 CAN NOT EMPLOY FARM LABOURERS	BAD ☹ NEEDS TO WORK IN OTHER FARMERS
ARABLE LAND	2-3 has	1-2 has	LESS THAN 1 ha
CATTLE HEADS PER FAMILY	4-5 HEADS	1-3 HEADS	NONE
PERSONS THAT WORK ON THE FARM			
NUMBER OF PIGS	2-3	1	NONE
TRANSPORT			
ACCESS	NEAR DE ROAD		MORE THAN ½ hr WALKING
CREDIT	BANK	MIDDLE MEN	NONE
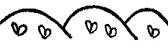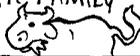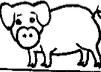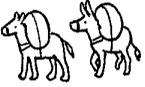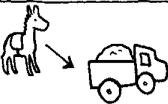
HARSI

Social groups defined on household access to resources, Prochalate, El Salvador [1]

9. Time line

When to use the tool
- The time line helps the facilitators and participants (community) to understand changes in the community's past
- It is a useful tool to start a participatory appraisal and put a diversity of issues in a historical context.

Time: 2 - 3 hours
Materials: markers, cards and paper

Methodology
The time line should return to the most distant point in the past, until the event in the past that participants do remember or recall from their ancestors. It is important that the facilitator invites people of several generations and gender in the community; the presence of senior participants is fundamental.

Step 1: Organize one or several working groups; it is important to work in groups, so that the participants agree and stimulate each other. The facilitator explains the objective of the exercise.

Step 2: The facilitator begins the discussion with questions: *When was the community founded? Who were the firsts to arrive?* Participants decide which events were important. Individual cards may be used while brainstorming and sequencing events.

Step 3: Put the events (as written on individual cards) in a vertical line that represents the time line, with the oldest events above. Sometimes it is difficult to establish the dates (particularly for events from long time ago). Participants can use important local, national or international points for reference.

Step 4: Organize comments on the events and their implications on a topic that is discussed during the participatory appraisal. It is important that these comments are not lost; the facilitator should remind them during the discussion or document them on cards using another colour.

Step 5: When the timeline is concluded, discuss trends of some kind of events, for example the use of some type of varieties (introduction of modern hybrids, changes in cropping systems, etc.).

Step 6: Subgroups can be formed to discuss dissimilar topics, which afterwards can be presented in a plenary.

Step 7: Check the result with other sources of information.
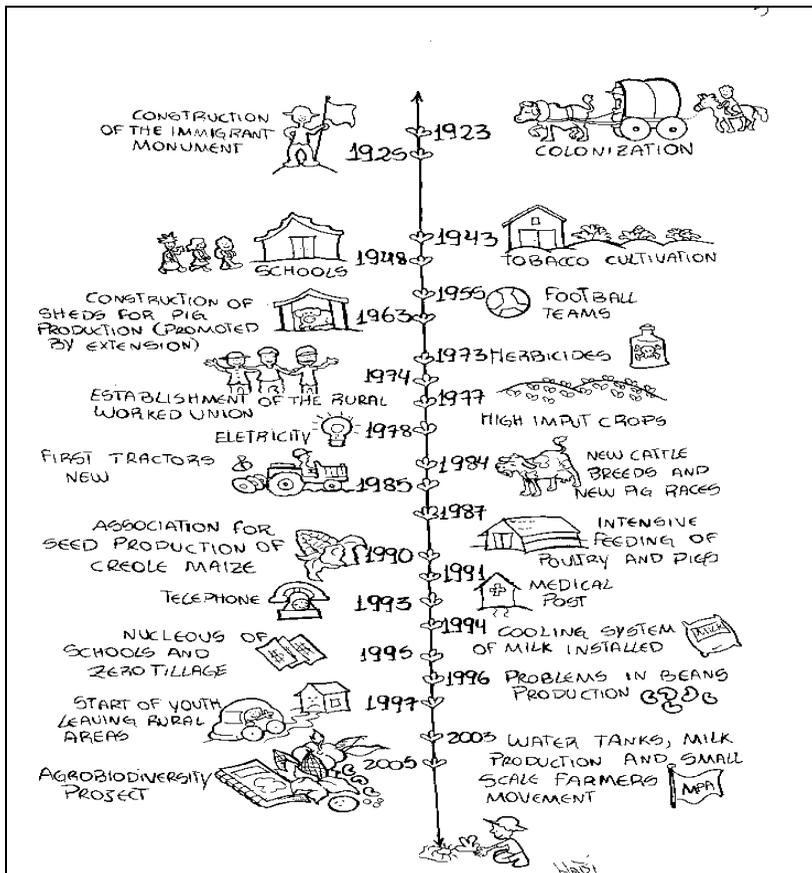
**Time line conducted in Palmitos
Agrobiodiversity Training, Brazil, 2005** [14]

10. Historic graph of the community

When to use the tool
- This tools gives you insight in specific aspects in a historical context
- It links different issues in time and helps the participants to identify logical relationships between issues related to social organization, health, production, natural resources, etc.
- The historic graph can complement exercises like the timeline.

Time: 1 - 3 hours
Materials: flip chart paper, cards, pens

Methodology
The activity may be conducted in a group composed during a larger community meeting, or can be applied with focus groups or households (farm history). The historic graph can span a relatively a short period of time (maximum 10 years), especially when quantitative data are needed.

Step 1: Organize with the participants the elements that will be discussed; use cards or other materials for visualisation during brainstorming. The identification of topics depends very much on the focus of the appraisal. Agreement among the participants on the topics is crucial; the facilitator should guide the discussion within the general focus of the diagnosis kept in mind.

Step 2: Prepare a matrix with the identified elements, with as many columns as necessary for the years involved. Check the agreement on the symbols or materials that represent the topics that are discussed; these are put in the first column of the matrix.

Step 3: For each topic, ask participants if they remember an exceptional year (for example when crops yielded exceptionally low). This year will serve as a reference. If they do not remember quantitative data, ask them for relative indications in the matrix, using symbols (see the example).

Step 4: When the matrix is completed, it can support the discussions, revealing a lot of valuable information (both qualitative and quantitative) on the annual or temporal variations and the perception of the variations by the different members of the community.

Step 5: When the graph is concluded, the facilitator stimulates the discussion (for example by asking the participants to explain the differences and the most evident changes that are visualized). The discussion and the explanations of the graph should be documented on individual cards to monitor and record these possibly important comments. The graph should also be interpreted in terms of problems and potentials.

HISTORIC GRAPH OF THE TEOSINTE COUNTY (MEXICO)

ASPECT \ YEAR	1988	1989	1990	1991	1992	1993	1994
PRODUCTION	—						
CROPPING AREA	—	20	20	36	36	35	20
FOREST COVER							
LIVESTOCK	—						
WATER							

HATSI

Historic graph of Cantón Teosinte, Mexico [1]

11. Map showing historic trends in use of crops and varieties

When to use this tool
- With these maps, a community can evaluate the changes in the natural resources
- Drawing these maps facilitates exchange of information among different generations of community members
- These maps help to understand the current problems in a historical context
- When drawing future maps, the tool is a way to jointly develop a future vision on a topic

Time: 2 - 3 hours (maximum)
Material: map and/or transect diagram; if possible old aerial photo of the area in large scale (1/20.000).

Methodology
Step 1: Organise groups of community members of dissimilar generations (senior, adults and youngsters). The senior participants should know well the past of the community. Explain the generational groups the objective of the exercise. This will be easier with participants that have been involved before in mapping and/or transect exercises.
Step 2: With the maps and transect in mind, ask the senior participants (grandparents) to draw the past, the adult participants (parents) to draw the present, and the youngsters (children) to draw their perspective on the future. Each group draws its own map.
Step 3: Compare the maps/ successive descriptions and discuss the main changes that have taken place, as well as the views on the future.
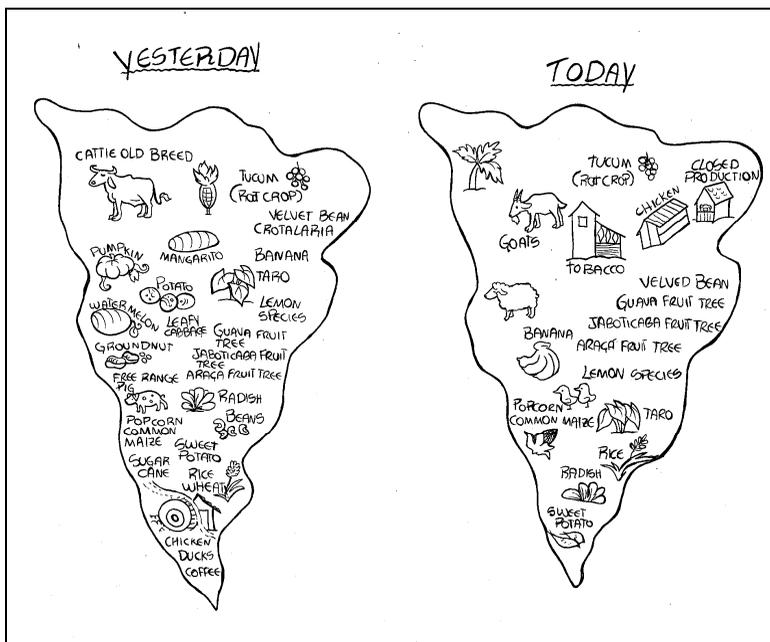
Comparing a historic and a current farm map of crop and varietal diversity of a farm in Grão-Pará, Agrobiodiversity Training, Brazil, 2006 [15]

12. Map illustrating natural resources and land use

When to use the tool
- This tool helps participants during a diagnosis to come to a shared spatial distribution and use of natural resources.
- A great diversity of maps is possible and helps during appraisals to link households, institutions, diversity, seeds and natural resources

Time: 1 - 3 hours, depending on the complexity of the resources addressed
Material: flip chart paper with markers

Methodology
Step 1:   Organize a group of community members (maximum 10 persons) and explain the objective of the exercise. If necessary divide the participants in groups by affinity (for example separate men, women, young or senior participants).
Step 2:   Discuss with the participants how the map will be drawn and the themes that should appear (rivers, highways, houses, forests, agriculture, etc.). If participants want to include many themes, it can be useful to draw several maps.
Step 3:   Help to get the exercise started (for example help in finding the first points of reference). Give the group the freedom to draw whatever they find relevant. Begin with a map identifying the main reference points like rivers, highways, etc. Once drawing has started, the facilitator should not intervene any more.
Step 4:   Presentation of the maps during a plenary discussion. Comments can be added to the maps.
Step 5:   Copy the maps and share the original with the community and the copy with the facilitator.

Note: The map can be used as the starting point for several analyses. It maybe used to guide the transect walk. It can be complemented later and/or divided into different maps for different topics or in maps of the past, present and future.
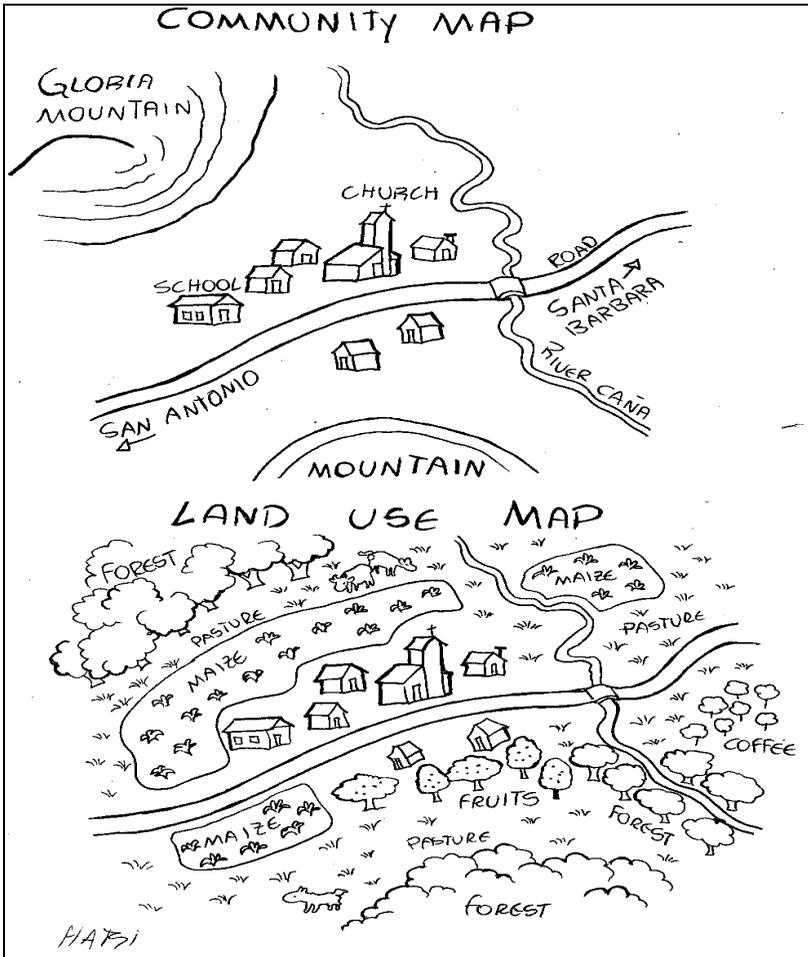
Base and land use map, Prochalate, El Salvador [1]

13. Farm map showing gender aspects

When to use the tool
- This tool facilitates the participants to mutually learn about the differentiated contributions in farm and/or agrobiodiversity management specified by gender within the household

Time: Approximately 2 hours
Material: flip chart paper with markers

Methodology
The farm map will give the participants an insight in the use of the space at farm level. It is important that the entire household including husband, wife, grandparents and children participate in the initial drawing of the farm map.

Step 1:   Explain the exercise and discuss with the participants the way to make the map. Help the participants to get started, for example by locating the first reference point. Start with a basic map with important reference points like houses, roads, etc. and add other resources to the map like fields and crops, grasslands, vegetable garden, fire wood, animals, etc.

Step 2:   Explain that the map needs to be completed with information on the contributions by different household members to the management of the specific resources, agrobiodiversity and/or seeds. Address for the indicated farm activities who decides, who is responsible and who does the work. Use symbols for addressing these aspects:
Gender:
Use different symbols for husband, wife, grandparents and children
Responsibility:
"D" for who decides. Ask the question "Who takes decisions about the resources of the farm?" E.g. the husband decides to use firewood from a certain part of the property; the wife decides to plant certain species of vegetables in her vegetable garden;
"R" for whom is responsible. Ask the question "Who is responsible for demanding certain resources?" E.g. the grandmother is responsible for indicating that there is insufficient fire wood in the house; the wife indicates she needs to plant certain vegetables in the garden
"W" for whom does the work. E.g. the husband and children are responsible for collecting the firewood; the grandmother is responsible for maintaining the seeds for the vegetable garden.

Step 3:   When the map is finished for the identified farm activities, discuss the results and analyze together the differentiated roles and functions of the farm household members. It is important for the facilitator not to express his or her opinion but to facilitate during the discussion.

LAND PROPERTY
(1 m²)

HIRED LAND
(1.5 m²)

MANGO

ORANGE
♂D ♀RT

MAIZE
(½ m²)

♂ DRT
♀ T
PASTURE

BEANS
(½ m²)

MAIZE
(1m²)

BEANS
(½ m²)

CATTLE
(2)

♂ DRT
♀ RT

SORGHUM
1m²
♂ DRT ♀RT

½ HOUR

10 MINUTES

GARDEN

♂DT
♀DRT

♀ DRT

PASTURE

♂ DRT
♀ T

♂P
♀RT
PIG

♀ DRT

HOUSE

FUEL WOOD
♂D
♀RT

CHICKEN
♀ DRT

FOREST LANDS

♂ DRT

HAISI

LEGEND

| ♂ MAN | D = DECIDE | T = HAS TO DO |
| ♀ WOMAN | R = RESPONSIBLE | THE WORK |

Farm map specified for gender roles, Prochalate, El Salvador [1]

14. Village walk and matrix characterising a transect

When to use this tool

- The village walk and transect diagram aim at raising community members' awareness on the distribution in space of natural and agricultural resources and their management
- The diagram is a starting point for discussions seeking alternatives for land and natural resource use
- The walk and transect help people to express what they know about their environment
- The walk is good for starting or initiating discussions
- The transect diagram helps to structure topics raised in discussions during the walk
- Special attention is given to areas (topography, soils, water access and natural resources) with their different uses and variations in use, associated problems and potentials for development.

Time:	Time needed will depend on the area covered being one farm up to a community. The exercise can be conducted in a few hours extending to one day. The work after the field walk should not take more than 2 hours.
Material:	Map of the area (preferably a participatory map), a notebook for documenting the discussion, paper and markers for the transect diagram.

Methodology

The concept of the transect may be a bit difficult to explain. However, once demonstrated, the method is simple and offers clear views for discussions and subsequent analysis. The basic idea is to represent the different characteristics and changes in a route through the area.

Step 1: Select a small group of informants/participants (3 to 5 persons). To explain the exercise to the group, use a practical example. Discuss the best route for visiting the farm, community or area defined; the walk does not need to be a straight line, but should come across the largest diversity possible of areas, uses, etc. It is important that based on the walk, the transect will represent well the area covered. In mountainous or hilly areas, the walk usually starts at the top of hill going to the next hill, crossing the valley and all the vegetation types. It is easier to determine the route in a village, community or farm in case a map has been previously drawn.

Step 2: Begin the route of the selected itinerary and document the basic characteristics and changes, always using the names as used by the

participants. During the route involve people in the discussions that you come across during the walk.

Step 3: Present the participants' information about the route on a big piece of paper; draw a diagram with a transect of the land, with the different zones and their denominations. Ask participants about the classifications applied. Depending on the complexity, the drawing can be done during or after the route.

Step 4: After a discussion with the participants (individually or in groups), indicate in the diagram the fundamental information about the use and current resources in each area:

- Which resources are present in each area? (specific land use, vegetation, crops, other relevant resources)
- Why these resources are present in this area?
- Who works with and who has the benefit of these resources?
- Who has access to these resources?
- Have there been important changes in the past?

Step 5: Discuss the outcome of the map and use it for consecutive steps in the appraisal or community planning process.

	HIGH STEEP	PLAIN	LOW STEEP	RIVER LOW
SOIL	POOR - SANDY	RICH BLACK SOIL	RED SOIL	~
WATER	VERY DRY	WATER AVAILABLE WHEN THERE IS SUFFICIENT RAIN	DRY	WATER AVAILABLE YEAR AROUND
CROPS AND SPECIES	FOREST GRASSLAND	MAIZE, BEANS, FRUITS	GRASSLAND	FOREST
ANIMALS	LIVESTOCK AND HORSES	PIGS AND POULTRY	HORSES	~
WHO WORKS?	COMMUNITY WOMEN LOOK FOR FIREWOOD	INDIVIDUAL PLOTS PER HOUSEHOLD	WOMEN AND CHILDREN KEEP ANIMALS	~
WHAT WAS THERE BEFORE	LOTS OF FOREST	CASSAVA AND POTATO	BEFORE FIREWOOD WAS HARVESTED	BEFORE THERE WAS MORE WATER

Transect diagram Prochalate, El Salvador [1]

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15. Map demonstrating access to natural resources

When to use the tool
- This tool helps participants and facilitators to get insight into the arrangements of the community for access to natural resources of common use (forest, pasture, water, etc.)
- With this tool it can be determined if access to natural resources differs between community members
- This information is very difficult to obtain through formal questionnaires.

Time: 2 - 3 hours
Material: flip chart paper with markers of different colours

Methodology
Step 1: Organize a meeting with a small group of community members of various households that know the community well. Explain the objective of the exercise.
Step 2: Establish a base map with some points of reference (highways, rivers, etc.). Draw the houses of the community on the map and ask for each household whether it has access to the resources that are discussed. If possible, add quantitative information.
Step 3: If other communities have access to the same resources, they should be included in the map.
Step 4: It is important to repeat the exercise with other community members, to compare the men and women, and senior and junior perceptions. If there is more than one community involved, repeat the exercise in each community.
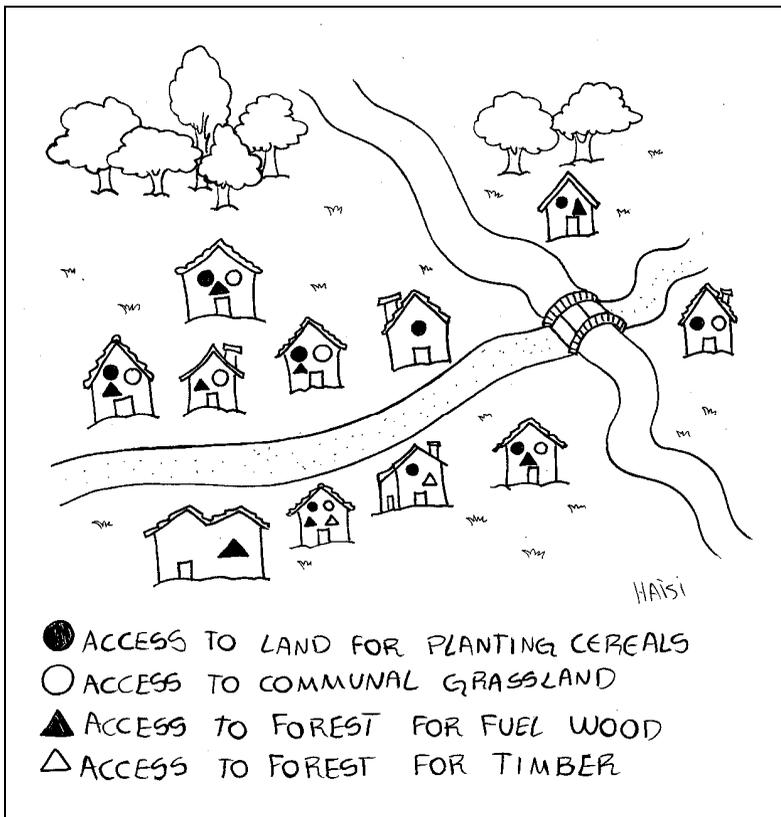
Resource access map, Prochalate, El Salvador [1]

16. Crop calendar with a focus on gender

When to use the tool
- With this tool it can be determined who at the farm, differentiated by gender, is responsible for what activities and when
- Information gathered can be critical to plan interventions.

Time: 2 hours
Material: flip chart paper with markers of different colours

Methodology
Step 1: Organize a meeting of a community or a small group of interested persons. Groups may be separated in subgroups of men and women, elders and youngsters. The division also depends on the number of participants. Explain the objective of the exercise and the function of the seasonal calendar and define what topics to address.
Step 2: Establish a time line in months at the top of the paper (first row). The sequence of the months does not have to follow the annual calendar, but may be in harmony with cropping seasons. Further separate different blocks (first column) for the activities by gender and generations (women, men, grandparents and children). Define the activities.
Step 3: For each of the activities, describe the seasonal fluctuations by drawing thick horizontal lines, however, first work with small pieces of paper or local materials like beans in order to let the group reach a consensus. Work activity by activity, only after concluding draw the line.
Step 4: Discuss the results and identify the periods that would be favourable for specific interventions. Identify the availability of the different household members.
Step 5: The calendar can be elaborated in different groups (by gender). Afterwards they can be discussed and verified.
Step 6: Make a copy of the calendar and explain what it will be used for.
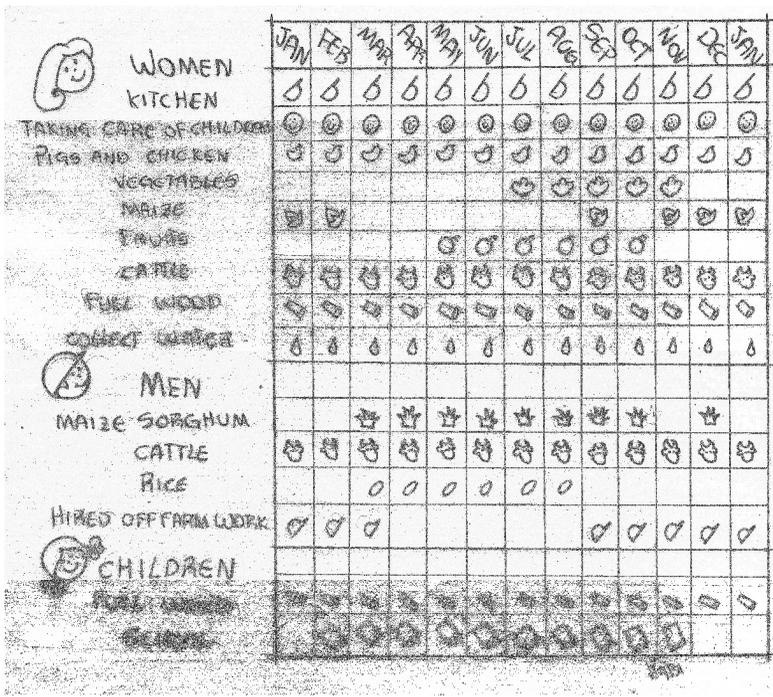
Seasonal calendar of farm activities specified by gender, Prochalate, El Salvador [1]

17. Crop and varietal diversity matrix

When to use the tool
- The matrix helps you to identify unique, common and rare varieties of crop species cultivated in a community
- It further shows the diversity available in a community or farm household
- It is a helpful tool to assess the origin, degree of exchange and specific use of varieties and seeds

Time: 2 hours
Materials: Local materials for a matrix on the floor, or a large piece of paper and markers

Methodology
Step 1: Discuss the purpose of the exercise with the participants. Participants can be members from one household, or a group of household representatives within one community.
Step 2: Draw a matrix. Indicate that the participants have to list a limited number of species (first column), with for each species the varieties available (second column).
Step 3: List for each variety the origin (year, seed source), degree of exchange with other farmers and/or specific use (first row).
Step 4: Continue with other crop types. In order to get a good overview include cash and food crops, grains, vegetables and fruits, and include self fertilizing, cross-pollinating and vegetatively propagated crops.

Note: The diversity assessment tool can be used before variety or species mapping. It can also be used as a step before four cell analysis.

CROP	VARIETIES	ORIGIN	USE
POTATO	BARONESA	FARMER UNION	HOME CONSUMPTION/SELLING
	BRANCA	FARMER UNION	HOME CONSUMPTION/SELLING
	BARO ROXA	FARMER UNION	HOME CONSUMPTION/SELLING
	MONALISA	FARMER UNION	SELLING
	ASTRID	FARMER UNION	HOME CONSUMPTION/SELLING
	BARACA	FARMER UNION	HOME CONSUMPTION/SELLING
BEAN	PRETO	ANCESTERS	HOME CONSUMPTION/SELLING
	VERMELHO	ANCESTERS	HOME CONSUMPTION
	FRADINHO	SÃO PAULO	HOME CONSUMPTION
	CARIOCA	SÃO PAULO	HOME CONSUMPTION
	BRANCO	SÃO PAULO	HOME CONSUMPTION
MAIZE	PALHA ROXA	OLD	BREAD/CATTLE/SELLING
	ASTECO	OLD	BREAD
	BRANCO	OLD	BREAD
	CRAVO	OLD	BREAD
	LOMBO BAIO	OLD	SELLING/BREAD
	HIBRIDO	FARM SHOP	FEED/HOME CONSUMPTION
	PIPOCA ROXA	OLD	HOME CONSUMPTION
	PIPOCA BRANCA	OLD	HOME CONSUMPTION
SWEET POTATO	BRANCA	～～	～～
	ROXA	～	～～
RICE		～～	～～
GROUND NUT	VERMELHO	～～	～～
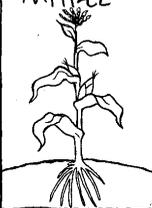
**Crop and variety list, community Rio de Prata,
Agrobiodiversity training, Brazil, 2006** [16]

18. Map illustrating crops and varietal distribution

When to use this tool
- This tool helps you to know about the distribution of specific crop species and their varieties
- It provides relevant information for analysis of seed and variety networks within the communities
- The information can be used for analysing the needs for crop improvement and/or conservation of genetic resources.

Time: 2 - 3 hours
Material: flip chart paper with markers of different colours

Methodology
Step 1:   Organize a meeting with a small group of community members of various households that know the community well. Explain the objective of the exercise.
Step 2:   Establish a base map with some points of reference (highways, rivers, etc.). Draw the houses of the community on the map.
Step 3:   Identify the key crops; this may be done on the basis of the crop and/or variety matrix. Agree on a legend for symbols for different crops and varieties. Each household indicates the diverse varieties for the crops cultivated with different symbols near its house.
Step 4:   For households that are not represented other community members may indicate the crops and varieties used by these households. This information should be confirmed though farm visits.
Step 5:   Discuss the distribution of crops and varieties among the community members. A discussion on the exchange of varieties may follow automatically.

Note: This map is required for seed network analysis and four cell analysis.
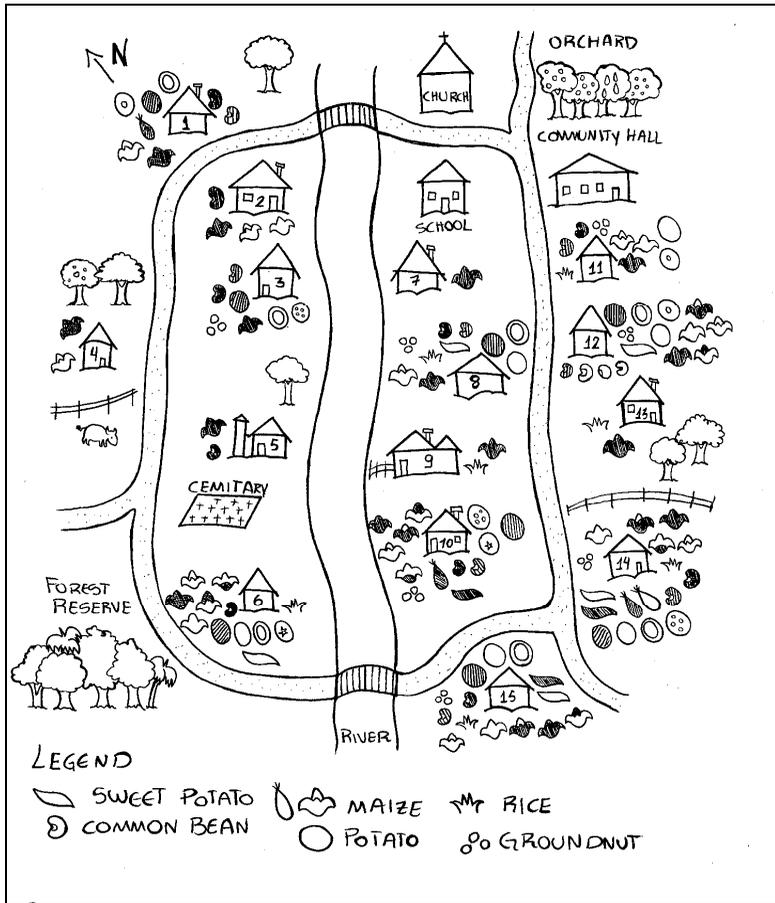
Crop and variety distribution map community Rio de Prata, Agrobiodiversity Training Brazil, 2006 [16]

19. Brain storming to identify variety characteristics

When to use the tool
- This tool facilitates community or group identification of criteria and preferences of crops and varieties
- The tool is a good start before going to matrix ranking; it may replace simple ranking within a sequence of ranking exercises discussing varieties in e.g. an experimental set-up for participatory varietal selection.
- The card technique is also helpful in collecting, using and clustering information on other issues and ideas

Time: 1 - 2 hours, depending on the complexity and the number of participants
Material: paper, cards, and pens

Methodology
See the example below on selection criteria and favourite varieties as determined by farmers' preferences.

Step 1:   Identify a group of farmers. The group can be mixed or separated by gender. Explain the objectives of the exercise.
Step 2:   Individuals: write a variety character down on one card.
Step 3:   Group: cluster the cards. The facilitator can ask the participants to hand in all cards at once, or ask each participant to hand in one card (the most important to that person) per round.
Step 4:   Group: identify the main headings for the clusters.
Step 5:   List the varieties known locally (use local names).

20. Simple ranking

When to use the tool
- Simple ranking is a tool often first used within a sequence of a set of ranking tools
- It is used to allow identification of criteria used by farmers to distinguish varieties
- It allows the understanding of choices between a set of varieties with the identification of characteristics that distinguish them
- Like other ranking tools it is often used in participatory varietal selection and participatory plant breeding.

Time: 1 - 2 hours
Material: local materials (soil, seeds, local symbols) or cards, markers and paper

Methodology:
Step 1:   Identify preferably two (or more) quite distinct varieties
Step 2:   Identify ways to compare the varieties; ask the group/respondent every time which variety they/he/she prefer(s), and the reason for the preference; these will be important criteria for variety selection.

VARIETY 1	VARIETY 2	PREFERENCE	REASON
BURUGDA	RIE	RIE	HIGH YIELD
BURUGDA	GUNAZA SIGEM	BURUGDA	GOOD FOOD QUALITY, HIGH MARKET PRICE
BURUGDA	DEMETEFA	DEMETEFA	HIGH YIELD, HIGH MARKET PRICE, GOOD SIWA QUALITY (LOCAL BEER)
RIE	GUNAZA DEMHAI	GUNAZA DEMHAI	EARLINESS, DROUGHT RESISTENCE, GOOD SIWA QUALITY

**Simple ranking of barley varieties in Tigray,
Informal Seeds Training Ethiopia, 2006**

21. Matrix ranking

When to use the tool
- Matrix ranking is a tool to compare and characterise in qualitative and quantitative manner a range of varieties
- It is used to compare local varieties, or to compare local varieties with introduced or tested varieties
- It shows how farmers evaluate varieties
- Like other ranking tools it is often used in participatory varietal selection and participatory plant breeding
- Matrix ranking is also helpful in comparing and evaluating other resources, issues and ideas.

Time: 1 - 2 hours
Material: local materials (soil, seeds, local symbols or cards), markers and paper

Methodology
Step 1: Make a matrix with the criteria in the first column; criteria have been identified through brainstorming or through simple ranking. Put the varieties in the first row (use cards or symbols)
Step 2: Criteria can be ranked by distributing a fixed number of seeds or other local materials among them. This can be done individually or as a group.
Step 3: Let participants rank the varieties for each character:
- By distributing a fixed number of seeds or other local materials for each criteria among the varieties
- If three varieties, the best variety gets three seeds, etc.
- This can be done as a group or individually
Step 4: A weighed ranking of varieties can be calculated as the product of the value for the criteria and the score for each specific variety. In that way all varieties can be compared with each other.

	CRIOLLO CACAO	FOREST CACAO	NATIONAL CACAO (ECUADOR)	TRINITARIO CACAO
AROMA	5	1	5	4
TASTE	5	3	5	4
% FAT	1	3	1	1
RESISTANCE	1	5	2	3
GRAIN INDEX	3	1	3	4
PRODUCTIVITY	1	4	2	5
MARKET VALUE	5	3	3	4

1 = LOW/BAD ; 5 = HIGH/GOOD

KATSI

Matrix ranking of cocoa types by a group of South American breeders, Participatory Cocoa Improvement Training Brazil, 2006

22. Pair-wise ranking

When to use the tool
- Pair wise ranking is a tool to compare varieties and know how farmers evaluate varieties
- During probing it is important that the facilitators record the reasons for choosing a variety when comparing them
- As ranking tools it is often used in participatory varietal selection in making decisions on varieties to continue with in the selection

Time: 1 - 2 hours
Material: local materials (soil, seeds, local symbols) or cards, markers and paper

Methodology
Step 1: Varieties can be ranked pair-wise in a table with the varieties both in horizontally in the rows and vertically in the columns; see the example below.
Step 2: Every time a participant or the group has to decide which variety has preference over the other. The informal discussion leading to the decision should be well recorded as qualitative information.

VARIETY	BUR. %	RIE %	GUN. SIG. %	DEM. %	TSAE. DEM. %	GUN. DEM. %	TSEL. DEM. %	TOTAL SCORE 8
BURUGDA %				(sketch)			(sketch)	1
RIE %	RIE		(sketch)	(sketch)		(sketch)		3
GUNAZA SIGEM %	BUR.	RIE				(sketch)		0
DEMETEFA %	DEM.	RIE	DEM.				(sketch)	2
TSAEDA DEMHAI %	TSAE. DEM.	TSAE. DEM.	TSAE. DEM.	TSAE DEM.		(sketch)		4
GUNAZA DEMHAI %	GUN DEM.	GUN. DEM.	GUN. DEM.	GUN. DEM.	GUN. DEM.			5
TSELIM DEMHAI %	TSEL. DEM.	TSEL. DEM.	TSEL. DEM.	TSEL. DEM.	TSEL. DEM.	TSEL. DEM.		6

Pair wise ranking of barley varieties by farmers in Tigray, Informal Seeds Training Ethiopia, 2006

23. Social seed network analysis[17]

When to use the tool
- The tool assists during diagnosis to obtain information on social networks
- It shows flows of seeds, varieties and information
- It is a powerful tool for identifying nodal or key farmers in a community involved with conservation, crop improvement and/or seed production

Time: 3 - 4 hours (various meetings)
Material: flip chart paper with pens

Methodology
Step 1:   Organize a meeting with representative people of different parts of the community (focus group). A (sub) group discussion is facilitated around the following questions:
- From whom do you usually get seed and associated knowledge?
- During the growing season, from whom did you obtain seed or planting materials?
- To whom do you usually provide seed and information?
- During the last growing season, whom did you give seeds and information to?
- Who usually come to you to ask for seed and information?

Step 2:   Identification of nodal farmers based on the results of step 1. They are named by the community and perceived as most experienced in the community with matters related to seed diversity, seed production, seed selection, production ecology of cultivars and uses. Nodal farmers often are research minded and willing to share knowledge and materials with fellow farmers.

Step 3:   The indicated farmers are second step respondents. They are asked the same questions as during step 1. The results demonstrate social links between individuals within and outside the community.

Step 4:   Draw network maps from the information gathered. The relationships are lines between households and institutions. Arrows pointing in both directions indicate mutual exchange of materials and knowledge.

Step 5:   Nodal farmers are identified. They can be approached for supporting community conservation, breeding or seed production activities; they can test materials, produce and share seeds, and/or become responsible for conservation.
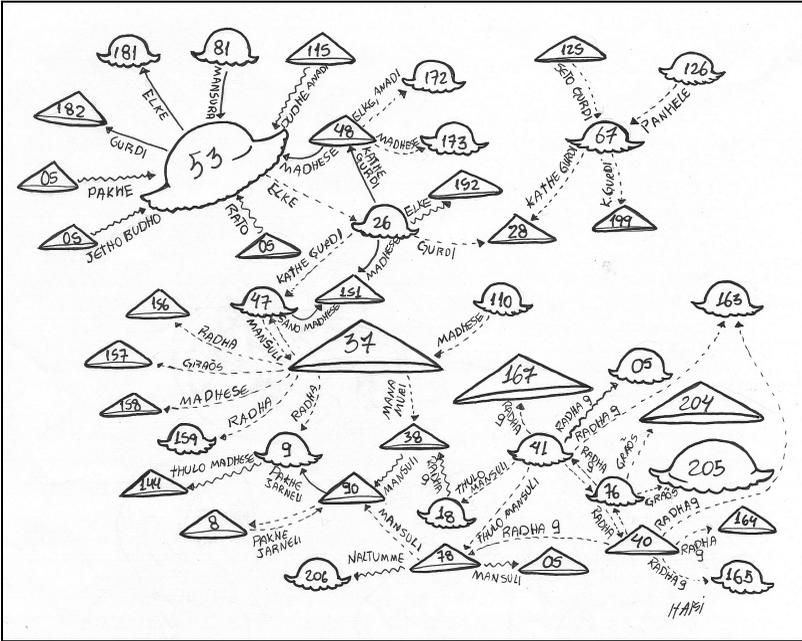
LEGEND:——→ SALE ------→ EXCHANGE ∿∿→ GIFT

Farmers' network on rice seed flow in Begnas eco-sit (Nepal) [17]

24. Identifying seed sector development options[18]

When to use the tool
- The tool assists in identifying the crops for which seed production may be possible through the development of a small-scale seed enterprise
- It links farmers' perceptions on varieties and seeds with options for profitable seed production.

Time: 1 - 2 hours, depending on the number of crops analysed
Material: paper with pens

Methodology
Step 1: Organize a meeting with a group of farmers. Explain the objectives of the exercise. Choose the crops to discuss.
Step 2: Facilitate a group discussion for each crop chosen around the questions in the matrix below.
Step 3: Repeat the exercise with different groups of farmers from different communities in the region.

Note: This exercise gives a quick impression on possible options for small-scale seed enterprise development; the follow-up is thorough business planning

Question	Column 1	Column 2	Column 3
Do farmers buy seed?	Farmers rarely buy seed	Farmers some times buy seed	Farmers often buy seed
Why do farmers buy seed?	Mainly to get new varieties	Mainly to replace seed lost during a bad season	Unable to save seed or use own seed, have insufficient seed
What do farmers think about the quality of their own seed?	Farmers are very satisfied	Farmers are a bit satisfied	Farmers are not satisfied
What do farmers think about quality of seed they buy from shops and markets or get from other farmers?	Farmers are very satisfied	Farmers are a bit satisfied	Farmers are not satisfied
Does the crop suffer from diseases found inside the seed?	Crop rarely or never suffers from 'seed' diseases	Crop some-times suffers from 'seed' diseases	The crop often suffers from 'seed' diseases
Is the crop grown for cash?	The crop is mainly or only grown for food	The crop is grown for both food and cash	The crop is mainly or only grown for cash
Total number of ticks per column	If => 3 : Don't	If = 3: Consider	If >3: Do

25. Four cell analysis[19]

When to use the tool
- The tool helps in identifying unique, common and rare varieties or crop species cultivated in a community
- It document the reasons why crop species or varieties are in a dynamic stage within a community
- It further facilitates the identification of the interventions for the conservation of a crop species or variety within a specific community.

Time: 2 hours
Materials: Four cell analyses can be done on the ground with real samples of the varieties/crops, or on a large piece of paper with cards

Methodology
Step 1:   Invite farmers and ask them to bring samples of each variety that they are growing.
Step 2:   Make a large cross on the ground and distinguish the four categories or squares:

Large area Many households	Small area Many households
Large area Few households	Small area Few households

Step 3:   The meaning of the four squares are visualized by drawing different numbers of houses and large or small fields
Step 4:   The following questions are asked to the participants to get information on varieties/crop species (name, specific traits, origin)
- What varieties/crops are cultivated in large areas by many households?
- What varieties/crops are cultivated in large areas by few households?
- What varieties/crops are cultivated in small areas by many households?
- What varieties/crops are cultivated in small areas by few households
Step 5:   The participating group discusses the result, with special focus on the varieties in grown in small areas and held by few households; these are the threatened varieties. The group discusses actions to increase cultivation.
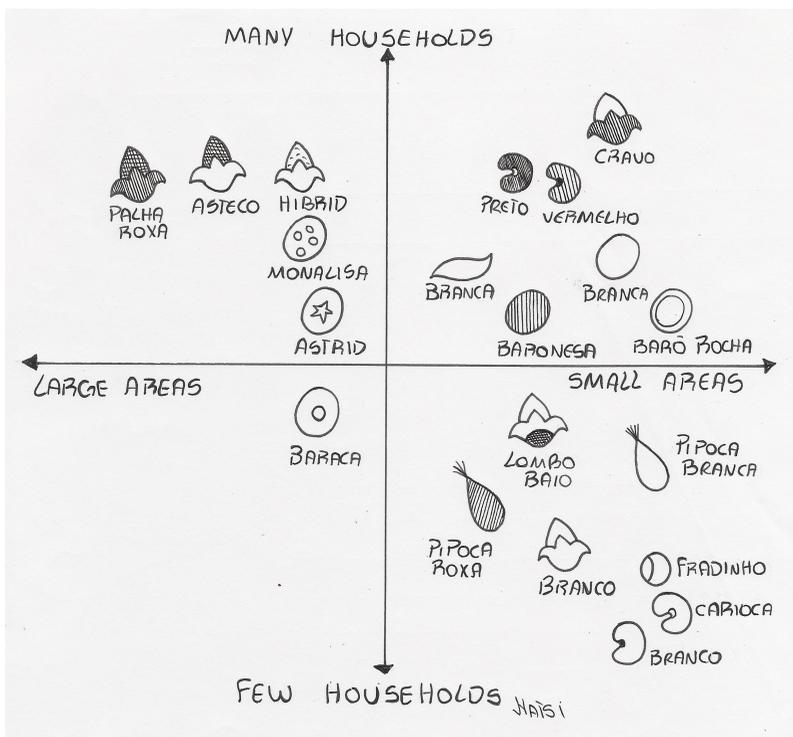
Four cell analysis of varieties of three crops in the Community Rio de Prata, Agrobiodiversity Training Brazil – 2006 [20]

26. Problem tree and objectives tree analysis

When to use the tool
- The tool helps to identify a core problem and its effects and root causes
- It helps to come to an agreement on core objectives and necessary activities to tackle the problem
- With the tool you can initiate the process of producing or revising an existing log frame matrix in a participatory and understandable way
- The problem tree and objectives tree are core tools in the Logical Framework Approach.

Time: Several meetings of several hours, depending on the complexity of the problem
Materials: large paper sheets, markers, cards

Methodology
Step 1: Start with a brainstorm on all major problems existing within the framework of the situation. With the group, decide which is to be the starter problem. This does not mean discarding the others but simply selecting one as a core problem. This is often formulated in quite general terms, for example, 'deforestation' or 'lack of seeds'.
Step 2: Draw a tree and write the starter problem on the trunk. If you want to look at more than one problem, then you will need to draw one tree per problem. Each tree requires considerable time.
Step 3: Encourage people to brainstorm on the causes of the starter problem. Ask for major problems that cause the starter problem. Alternatively, to avoid a few people dominating, hand out three to five blank cards per person and ask everyone to write down one idea per card. Present the cards and use them as the basis for the discussion on prioritising problems.
Step 4: To focus on the root causes of the problem, discuss the factors that are possibly contributing to it. Examine each factor in relation to each of the other factors and ask, 'Is it caused by or a cause of the other factor?' If it is caused by the other factor, draw a line with an inward arrow between the pair. If it is the cause of the other item, draw a line with an outward arrow between the pair. Draw the arrow only in the direction of the strongest effect. Do not use two-way arrows. If there is no interrelationship do not draw a line between them at all. When you are finished, the factors with the most outward arrows will generally be the factors that will drive change - the root causes.
Step 5: Focus attention on these root causes and write them onto the roots of the 'tree'.

Step 6: For each root cause, write down its causes on roots lower down. Use the brainstormed ideas for this.

Step 7: Following the same procedure as in Steps 2 and 3, look at what the effects/impacts of the problem are and write down the primary effects on the branches of the tree.

Step 8: For each effect, write down its secondary effects on secondary branches higher up to obtain cause-effect chains.

Step 9: Taking the problem tree as your base, invert all the problems in order to make them into objectives. This process then leads into an 'objectives tree' with the central objective simply being the inverse of the central problem.

Step 10: Ask participants then to look at these objectives and discuss which of these can be tackled by the project.

Notes: The two 'trees' provide a comprehensive though simplified view of cause and effect relationships. In this way, the process of creating a logical framework can become more accessible to primary (and other) stakeholders, making it easier to involve them in revising the project design or developing their own activities.

Problem tree analysis in the María Trinidad Sánchez community, Dominican Republic [21]

27. SWOT analysis

When to use the tool
- To identify the Strengths, Weaknesses, Opportunities and Threats (SWOT) of a situation.

Time: 1 – 2 hours
Materials: large sheet of paper and marker

Methodology
Step 1: Invite a group of people who have a stake in the situation to discuss.
Step 2: Make a matrix on paper and distinguish five categories related to the situation:

	Positive (+)	Negative (-)
Internal: (within your span of control)	**Strengths:** - - - -	**Weaknesses:** - - - -
External: (as a result of developments outside your control)	**Opportunities:** - - -	**Threats:** - - -
	Other relevant issues:- - -	

Step 3: Ask the participants about the Strengths of the situation: something that is working well and that they are positive about; what are they proud of (e.g. farmers' organisation, infrastructure of the community, fertile land, etc.). Put these in the Strengths category.
Step 4: Ask the participants about the Weaknesses concerning the situation: what is not working well, what needs improvement or needs to be developed.
Step 5: Ask the participants about the Opportunities for the situation: What are positive developments which are occurring, which could be of benefit to improving the situation and could help in achieving the goals (e.g. local market developments, cooperation, etc.).
Step 6: Ask the participants about the Threats for the given situation: what are negative developments which are occurring, which could harm/threaten the situation and make it difficult to achieve the goals.

Step 7: Identify other relevant issues, i.e. other developments or issues which are relevant but for which it is not always clear whether they have a negative or positive influence (or have a positive or negative effect).

Step 8: The participating group discusses the result, with special focus on options for actions or activities which will help to overcome the weaknesses and enables to make use and benefit of the opportunities.

STRENGTHS 😊	WEAKNESSES 🙁
☆FARMERS WILLING TO WORK WITH ALOE ☆BASIC GERMPLASM AVAILABLE ☆WELL ESTABLISHED RESEARCH ORGANIZATION ☆FUNDING AVAILABLE FOR RESEARCH ACTIVITIES ☆FAIRLY WELL DEVELOPED INFRASTRUCTURE	☆LACK OF PRODUCTION PACKAGES ☆LACK OF STRUCTURED MARKETS AND MARKETING CHANNELS ☆LACK OF GOVERNMENTAL POLICY ON PRODUCTION AND TRADE ☆LACK OF MARKET INFORMATION
OPPORTUNITIES 😊	THREATS 😣
☆LOCAL + EXPORT MARKETS AVAILABLE ☆LAND AVAILABLE FOR COMMERCIAL PRODUCTION ☆PROCESSING OF ALOE INTO COMERCIAL PRODUCTS	☆COMPETITION FROM OTHER PRODUCING AND EXPIRING COUNTRIES E.G IN SOUTH AFRICA AND ASIA ☆UNFAVOURABLE GOVERNMENT POLICY ☆INTERNACIONAL STANDARDS AND REGULATIONS/MARKET REQUIREMENTS ☆INTRODUCTION OF MORE PROFITABLE COMMERCIAL CROPS
OTHERS DEVELOPMENT OF SYNTHETIC COMPOUNDS	

Participatory integration and commercialization of Aloe into farming systems in central and Rift valley regions of Kenya, Regional Agrobiodiversity Training, Ethiopia, 2005

28. Prioritizing coping strategies

When to use the tool
- This tool facilitates the group development of a strategy for improving a situation
- The tool makes maximum use of the strengths and opportunities of the situation, with least risks related to problems that occur.

Time: 1 – 2 hours
Materials: large sheet of paper and marker

Methodology
Step 1: Look at the vision for the project
Step 2: Look at the stakeholder analysis of the project
Step 3: Carefully examine the Strengths, the Weaknesses, the Opportunities and the Threats identified in the SWOT analysis.
Step 4: Formulate a maximum of 7 coping strategies which will help to overcome the weaknesses of the problem, enabling making use and benefit of the opportunities. Coping strategies are options for action or activities. Think in terms of strategies rather than in terms of solutions.
Step 5: Select an effective coping strategy through ranking. The ranking of the coping strategies could e.g. be based on:
  - Can we make as much use as possible of the Strengths
  - Reduce the risks as much as possible considering the Threats
  - Expected/estimated contribution to the target or Vision
  - Other criteria? (e.g. social benefit, agrobiodiversity benefit etc.)
  - Distribute the points within the column. The coping strategy which uses as much as possible the Strengths gets the highest number of points.

Note: The coping strategy with the highest total score is probably the most effective and suitable strategy. However, it is useful to consider also no 2 and no 3 and discuss these with relevant stakeholders (or the resource persons). Decide on which coping strategy to concentrate.

Coping strategy	Maximum use of the strengths	Least risk in relation to threats	Effective contribution to target	Other criteria ??	Total points
Total (e.g.)	10	10	15	?	

COPING STRATEGIES	MAXIMUN USE OF MY STRENGTHS (20 POINTS)	LEAST RISK IN RELATION TO THREATS (10 POINTS)	EFFECTIVE CONTRIBUTION TO TARGET (30 POINTS)	SUSTAINABILITY (10 POINTS)	POLICY ON LAND AND MARKETING (5 POINTS)	TOTAL POINTS	RANK
BASELINE DATA COLLECTION	2	1	1	0	0	4	6
GERM PLASM COLLECTION/MULTIPLICATION/CHARACTERIZATION AND CONSERVATION	5	3	6	2	0	16	2
DEVELOPMENT OF TEACHING MATERIALS	3	3	2	0	0	8	5
PARTICIPATORY GERMPLASM PROMOTION	6	0	7	2	2	17	1
PRODUCT DEVELOPMENT AND PROMOTION	1	1	4	2	1	9	4
MARKET IDENTIFICATION/LINKING FARMERS TO MARKETS	1	0	5	2	1	9	4
POLICY	2	2	5	2	1	12	5
TOTAL SCORES	20	10	30	10	5	75	

Selecting a coping strategy: participatory on-farm Aloe production, germplasm conservation and commercialization in ASAL regions of Kenya, Regional Agrobiodiversity Training, Ethiopia, 2005

29. Social analysis CLIP [22]

When to use the tool
- This tool facilitates in the development of a project or intervention in the identification of critical partners for making the project a success
- Since the tool is quite complex and supports an analysis of stakeholders, it should be exercised with a core group of community members or by the facilitation team during the analysis of participatory diagnosis results
- The assessment of the stakeholders should be conducted by a group that is well-informed.

Time: 2 - 3 hours
Materials: large sheets of paper and markers, and the results of Venn diagram, stakeholder analysis and other more social and institutional tools

Methodology
Step 1: Explain the objective of the exercise to the participants. Define the very specific context of the exercise (for example the cultivation and commercialisation of medicinal plants by a women group).
Step 2: Identify who are the stakeholders in the topic. Take a rare with perspective involving local and other level stakeholders.
Step 3: Explain the following definitions:
- <u>Power (P):</u>   Is the ability to use the resources you control to achieve your goals. These resources include:
  - o   Economic wealth
  - o   Political authority
  - o   Ability to use force or threats of force (+/-)
  - o   Access to information (knowledge & skills)
  - o   Means of communication.
- <u>Interests (I):</u>   Are the gains (+) and losses (-) that you will experience based on the results of existing or proposed actions. These interests (gains/losses) affect your access to power, legitimacy, or social relationships (collaboration). For example, a farmaceutal industry working with plant extracts may prefer one type of primary materials collected only a few times a year.
- <u>Legitimacy (L):</u>   Is the degree to which other parties recognize the stakeholders' rights and responsibilities by

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law or customs (exercised with determination and knowledge).

- The definitions are complex; however, exercising will make participants convenient working with them.

Step 4: Complete the table below elaborating the profile of the stakeholders. However, it is easier to characterize for each definition the stakeholders, and then to characterize the stakeholders with all characters. Use the following way for qualitative characterization:

- Power (P): (+) high; (+) middle; (-) low/none
- Interest (I): (++) high gains; (+) middle gains; (0) low/none; (-) middle losses; (--) high losses
- Legitimacy (L): (+) high; (±) middle; (-) low/none

SH	Power			Interest					Legitimacy		
	+	±	-	++	+	0	-	--	+	±	-
SH 1											
SH 2											
SH 3											
SH X											

SH: Stakeholder

Step 5: Draw the social map according the graph below.
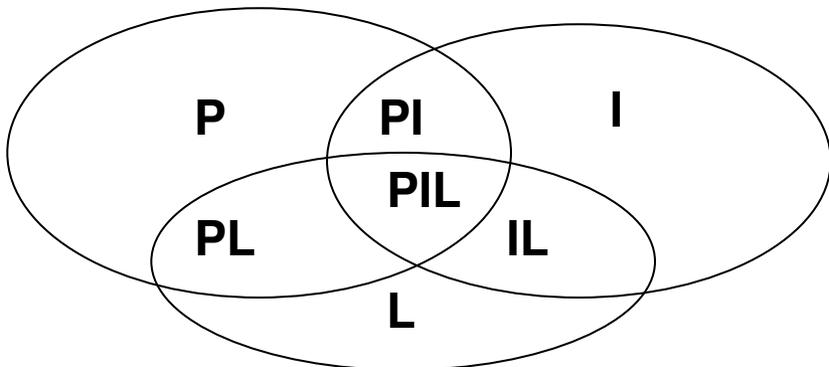
Step 6:   Define the profile of stakeholders using the following table:

| Categories	High / medium ratings	Low/ no ratings
Dominant	P+, I++/+, L+	
Forceful	P+, I++/+	L-
Influential	P+, L+	I -/--
Dormant	P+	I -/--, L-
Respected	L+	P-, I--/-
Vulnerable	I++/+, L+	P-
Marginalized	I++/+	P-, L-

Step 7: Interpret the social actor CLIP analysis and map the stakeholders, and draw some conclusions on the stakeholders to be identified to join in the project. Note that the PIL stakeholders should be the key stakeholders. For improving the intervention you should target those stakeholders identified as marginal and vulnerable moving more to the centre of the figure.

STAKEHOLDERS

STAKEHOLDERS	POWER			INTEREST					LEGITIMACY		
	+	++	−	++	+	◎	−	=	+	++	−
LOCAL GOVERNMENT	🌿					🌿			🌿		
EXTENSION OFFICE		🌿			🌿				🌿		
WOMEN MEDICINAL PLANTS CLUB			🌿	🌿					🌿		
MIDDLEMEN	🌿						🌿			🌿	
IBAMA - ENVIRONMENTAL PROTECTION AGENCY	🌿						🌿		🌿		
NATURA - COSMETIC COMPANY	🌿						🌿		🌿		

JHATSI

CATEGORIES / TYPOLOGY

CATEGORIES 📖	TYPOLOGY 🔦
DOMINANT 🌿	NATURA 🔋
FORCEFUL 🌿	MIDDLEMEN 🐾
INFLUENTIAL 🌿	LOCAL GOVERNMENT
DORMANT 🌿	IBAMA 🌳
RESPECTED 🌿	EXTENSION OFFICE
VULNERABLE 🌿	WOMEN CLUB 🌸
MARGINALIZED 🌿	～～～

HATH
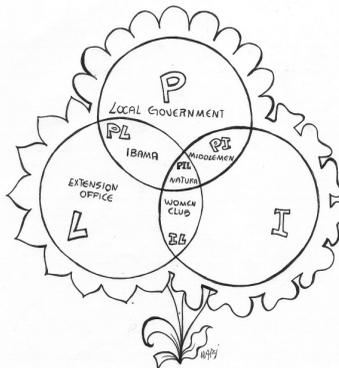
CLIP analysis realised during the planning of a project to stimulate the collection and cultivation of medicinal plants by women clubs in São Bento do Sul, Agrobiodiversity Training Brazil, 2006

30. Visioning

When to use the tool
- This tool facilitates the formulation of a shared vision of what a group would like the outcome of a project or evaluation exercise to be
- This tool helps people think creatively and let go of immediate problems
- It is also a way of finding common ground between conflicting interests

Time: 1 hour or longer related to the number of participants
Materials: large sheet of paper and/or cards and markers

Methodology
Ask people to describe how they would like things to be in the future. This can be written individually on cards, or jointly drawn on paper. It is also possible e.g. to ask people to imagine they are giving a presentation at some point in the future (e.g. 5 years from now) describing why their project has been successful. This can be done with from one individual up to a large group and the time taken varies accordingly.

FARMERS	RESEARCHERS	EXTENSIONISTS	COMPANIES AND ORGANIZATIONS
A SYSTEM OF PARTICIPATORY SELECTION FUNCTIONING	SUPERIOR TREES SELECTED IN A PARTICIPATORY MANNER	SUPERIOR TREES SELECTED	IDENTIFICATION AND CHARACTERIZATION OF HIGH QUALITY LOCAL COCOA VARIETIES AND CLONES
1 CLONAL GARDEN FUNCTIONING IN EACH COMMUNITY	GENEBANK ESTABLISHED	A SYSTEM OF PROPAGATION	IDENTIFICATION, SELECTION AND PROPAGATION OF THE ELITE TREES
INVESTIGATION, COLLECTION OF ANCESTRAL CLONES	COMMUNITY CLONAL GARDENS AND NURSERIES FUNCTIONING	EXPERIMENTAL FARMERS FUNCTIONING	ESTABLISH OF 14 EXPERIMENTS OF SELECTED MATERIALS
INCLUDING THE ANCESTRAL FACTOR IN THE PLANTATION OF CLONES	DEMONSTRATION PLOTS WITH SUPERIOR TREES IN THE FARMERS	LOCAL AND REGIONAL EXPERIMENTAL PLOTS	ESTABLISHMENT OF 20 CLONAL GARDENS IN THE PROVINCE
INCREASE OF THE AREA PLANTED UP TO 5 HA/HOUSEHOLD	RESEARCHERS, EXTENSIONISTS AND FARMERS TRAINED IN PARTICIPATORY SELECTION	FARMER FIELD SCHOOLS ESTABLISHED	PROPAGATION AND DISTRIBUTION OF SELECTED MATERIALS TO THE FARMERS

**Ten year vision for a participatory cacao improvement,
Sierra Nevada, Colombia,
Participatory Cocoa Improvement Training, 2007**

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