MODULE 3

Participation

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Overview

Participatory approaches enable Ecohealth scholars and practitioners to work with stakeholders to understand problematic situations, design strategies, and shape activities. In this way, stakeholders are empowered to investigate and resolve the complexities of health-related issues they face. These approaches take into account people’s health and their socio-economic, cultural, and environmental concerns. Participatory methods increase participants’ opportunities to apply their specific knowledge more effectively and collaboratively. Often framed in terms of participatory research, these methods open up the range of possible sources of knowledge beyond a few experts to include the experiences and knowledge of a variety of stakeholders who bring different types of expertise. These methods also link research with action, one of the important principles of Ecohealth. If handled well, they facilitate deeper knowledge, more systemic understanding, and more effective action. Participatory research, in this module, is used to refer to this broad notion that bridges the search for knowledge with action to improve problematic situations. This module introduces learners and trainers to some of the important characteristics of participation and participatory approaches.
Conceptual Map: Module 3

**Learning Objective:**
Understand the principles of qualitative and participatory approaches including their advantages and disadvantages, and how these approaches can be used for research and development activities.

**Advanced Learning Objective:**
Increase the ability and opportunity to use an action research framework to solve problems related to sustainable and community development.

**Learning Objective:**
Know how to apply participatory methods as a way of finding out about community livelihoods, needs, and aspirations as part of an Ecohealth framework.

**Activity 1:**
Interactive Activity: discuss in buzz groups, create diagrams, resource maps

**Activity 2:**
Introduce participatory tools and techniques: PRA or COPAR; triangulation

**Learning Objective:**
Learn ways to organize qualitative data and information analysis, and to synthesize and present feedback to key informants and community members.

**Advanced Learning Objective:**
Be able to plan interventions using participatory methodologies

**Activity 3:**
Short lecture; discussion; key methods of data analysis
Module Aims

This module introduces learners to concepts of participatory research and why and how participation is central to Ecohealth. Participation is essential to sustainable community development and brings a dimension to Ecohealth that many other research approaches do not include. Participation is about recognizing the role, rights, stakes, and capacities of different groups and making these central to both research questions and the way research is conducted. This module introduces Participatory Rural Appraisal (PRA) and Community-Oriented Participatory Action Research (COPAR) as well-recognized methodologies that can be used for engaging with stakeholders. It shows how PRA approaches allow researchers to investigate, analyze, and evaluate constraints and opportunities, to create sustainable solutions that involve key stakeholders, and enable informed and timely decisions regarding development projects.

The aims of this module are:

- To demonstrate why and how participation and empowerment of community members is important for understanding and managing complex Ecohealth issues.
- To build learners’ understanding of how to become trainers of participatory processes when doing Ecohealth in the field.
- To familiarize learners with ways to interact with community members and enable them to take on facilitating roles in the field.
- To encourage learners and teachers to reflect on their role in the research process and how they can collaborate with other stakeholders.

Why is this topic important?

There are many reasons why participatory approaches to Ecohealth-defined problems are important. Foremost among them are the need for a) common understandings of a problem by those who are most affected by it, and b) people learning collectively, eventually becoming able to control their own destiny. Ecohealth seeks to recognize the expertise of a range of different stakeholders, and not just privilege the knowledge and perspectives of “scientific experts” who may leave and take their knowledge with them. One of Ecohealth’s defining features is its emphasis on knowledge to action, which gives stakeholders the capacity to take ownership of the issues that affect them. Using research as a way of collective learning they can investigate and address these issues, and work through policy and other means to broaden the impacts of these actions. Participation is key to ensuring that the needs, opportunities, and strategies developed through this process engage stakeholders; the process will thus be meaningful to them, and will increase
the likelihood that the process will have sustainable (long-term) impacts. This module helps build understanding among learners about how and why they can engage people, how this in itself can be empowering, while recognizing the roles, rights, stakes, and capacities of different groups. This module also links to the Module 7: Sustainability which highlights the importance of sustainable development and how to build sustainability into research programs.

This pursuit challenges models of expert-driven, well-defined disciplinary approaches in the measurable sciences as the dominant source of solutions to ill-health. Many learners new to Ecohealth are trained in these scientific or clinical/medical backgrounds, areas where they are more familiar with collecting and analyzing quantitative data. The lived experiences of stakeholders – such as local people – are more perceptual, intuitive, traditional, and emotional, but no less important, and sometimes critical to health issues. These are the domains of qualitative analyses – a type of data often considered “soft” and not as reliable as quantitative data. This module will show how using qualitative, participatory approaches provides very different kinds of evidence and interpretations of the reality of situations. It provides some insight into how to analyze data collectively through participatory activities, a task which has its own challenges and tools.

**Key Concepts**

- Participatory research is a qualitative research approach that uses different principles, methodologies, and analytical tools from quantitative approaches.
- Participatory methods are a cumulative and flexible set of techniques to enable researchers and learners to study and work with communities, bearing in mind the complexity of socio-economic and socio-cultural conditions of the targeted communities.
- Participation is strongly related to empowerment. To empower people to participate, “outsiders” in this case could be learners, researchers, or development workers, and should also have other skills such as facilitation and communication that create a medium for collective learning, sharing, and discussing issues.
- Ecohealth research should be framed and developed in partnership with other stakeholders whose needs, solutions, and aspirations can help drive the process and sustain it in the future.
- The role of outsiders is to facilitate the development process and build capacity by creating the appropriate environment using the tools and techniques of participatory methods that allow community members to express their needs, problems, and opportunities. In return, the
outsiders are able – together with the community – to prepare an action plan for the intervention.

- The tools and techniques of participatory method serve as a medium to help researchers and learners to work with community members; the attitudes of outsiders are extremely important – a willingness to accept community members as equal partners, a willingness to listen and learn from community members, and to be patient.

### Guiding Questions

1. Who has a voice and who doesn’t have a voice in society? Why is this relevant for the concept of participation?
2. What other factors underlie the degrees of participation in a process?
3. Who is more likely, and who is less likely, to participate in a process? Who makes a decision about whether this is a problem, or even part of the problem, in an Ecohealth approach?
4. How can research address issues of participation? Why is qualitative research an approach of choice?
5. How can the formation of an inter- or transdisciplinary team contribute to an appropriate degree of participation?
6. How can participatory processes help address health inequalities that may exist within communities (such as gender, ethnic, socio-economic, age-related, or otherwise).

### Basic Learning Objectives

After completing this module, learners will be able to:

1. Understand the principles of participatory approaches, including advantages and disadvantages, and how these methods can be used for research and development activities.
2. Know how to apply participatory methods as a way of finding out about community livelihoods, needs, and aspirations as part of an Ecohealth framework.
3. Learn ways to organize qualitative data and information analysis, and to synthesize and present feedback to key informants and community members.
Advanced Learning Objectives

Advanced learners will be able to:

4. Identify opportunities to create collective learning arrangements and be able to target problems from multiple perspectives.

5. Increase the ability and opportunity to use an action research framework to solve problems related to sustainable and community development.

6. Be able to plan interventions using participatory methodologies.

Practical Notes

- Learners with a background in community development, social science, geography, agriculture, or livestock may already be familiar with some of the concepts in this module. They should be directed to the advanced learning objectives and can be put in groups with learners who don’t have this background to share their experience.

- This module can be a stand-alone of instruction materials but it is important to understand the context of Ecohealth research. It is a tool to help learners understand the needs of people in the target areas where learners will work, how to collect data and information about the interests of the community, and for the analysis, development, and implementation of an action plan.

- Beginners in the field of qualitative and participatory approaches would benefit from working with experienced trainers or instructors to guide them when starting fieldwork.

- This module is only an introduction to participatory approaches. To learn the participatory tools and techniques, participants must be exposed to field exercises. If your Ecohealth course allows, participatory tools could be practised during a site visit, and if learners are interested in using these techniques further they should be encouraged to get more training and practice. If you include field-based activities in this module, the ideal number of participants per course would be 15. Class size could be increased to 25 participants per course, but it is difficult to arrange for the fieldwork unless there are two or three good trainers and two or three sites for the field exercise.

- For a field exercise, refer to Using and Developing an Ecosystem Approach to Health Case Study in Your Teaching ecohealth.vetswithoutBorders.ca. It is
important to have preliminary visits in the target communities (such as meeting with the local authority and key persons) to arrange suitable times for the exercise. At the same time, you can collect secondary information from relevant organizations and local authorities. Bring with you flipcharts, markers, pencils, notebooks, tea, sugar, candy, candles, and, if appropriate, a token of appreciation for participants. Materials to be used for ranking and scoring for this exercise, such as dried beans, small stones, sticks, etc., can be found in the community.

**Background information**

**WHAT IS PARTICIPATION?**

The World Bank definition (1994) of participation is a process through which stakeholders influence and share control over development initiatives, decisions, and resources that affect them. Participation does not end with going to a meeting and listening to what researchers, development workers, or donors have to say, but is the continuous process of people's involvement in an intervention or development process. Participation can take different forms, ranging from information sharing and consultation methods to mechanisms for collaboration and empowerment that give stakeholders more influence and control. It is an active process where intended “beneficiaries” engage in the outcomes of the intervention programs and projects and gain personal growth. The beneficiaries can be people who are directly and indirectly affected by the intervention and they could be farmers (better off and poor or disadvantaged), local authorities (such as village head, district offices), local organizations (youth, women, and religious groups); most importantly, they should be partners of change.

It is often assumed that talking about participation refers to the act of involving physical, rural communities. However, as discussed in *Module 5: Collaboration and Transdisciplinarity*, Ecohealth approaches encourage the involvement of a range of stakeholders with different types of knowledge; the challenge of participation is to ensure they are adequately represented in the scoping, planning, analysis, and follow-up of Ecohealth projects. It is tempting to talk of communities as cohesive units, but any community consists of different individuals with a wide spectrum of viewpoints, needs, attitudes, and communication styles. Can all of these be represented in a participatory manner? Who chooses who gets represented? Communities can refer to physical, moral, religious, virtual, and other types of collectives, and how these are involved in a process may require different strategies.

When encouraging participation it is extremely important to empower people, allowing them to truly share information about the problems and opportunities of their community. Empowerment and participation are closely
Empowering people enables them to actively contribute to the generation of new knowledge and social change, while participation provides the platform for them to contribute. Empowerment and participation can be with individual, family, community, and nation up to a global level. Empowerment and participation can also be economically, socially, and politically based. Participation implies “empowering people to mobilize their own capacities, be social actors, rather than passive subjects, manage the resources, make decisions, and control the activities that affect their lives” (Cernia 1985, cited by Duraiappah et al 2005).

Participatory Rural Appraisal (PRA) and Community-Oriented Participatory Action Research (COPAR) both aim to provide the opportunity for communities to understand and react to their own problems and situations, and to allow researchers to support groups in operationalizing actions stemming from locally-owned conclusions. It is a bottom-up approach that serves to empower communities and use the researcher more as a guide than as an external force providing top-down advice. It recognizes that communities themselves have the best knowledge of problems and resources, but that research can serve to explore issues and set local perspectives within broader complex systems processes, therefore identifying underlying drivers or challenges that may have been previously unrecognized. COPAR can also be used to ensure that research is inclusive of types of knowledge (including traditional knowledge) and populations (such as indigenous groups, women, and children) that are often marginalized and omitted from top-down methods.

Three important quotes!

“Participation means different things to different people and to avoid potential conflict, disappointment or ‘burn out’ it is important to clearly state, or agree, on a common definition.” (Buchy and Hoverman 2000).

“Participation without the redistribution of power is an empty and frustrating process for the powerless. It allows the power holders to claim that all sides have been considered, but makes it possible for only some of those sides to benefit. In other words, it maintains the status quo.” (Arnstein 1969).

“Participation can stimulate an ongoing learning process, increasing the awareness of collective responsibility within the community. This should be seen as an asset by professional agencies rather than as a threat.” (Buchy and Hoverman 2000).
Although PRA and COPAR can be empowering tools for community involvement, they can be challenging to execute well and require ample skills and preparation. Effective participation means that individuals and communities need to invest their time and resources in activities, and it assumes that they have an interest in seeing research succeed and continue. To ensure that community expectations are managed, researchers need to clearly share, throughout project processes, the goals of each activity, for example, the stage of COPAR and possible outcomes. Community participants themselves should be inclusive, and this means that processes often involve groups of individuals, including marginalized populations, from a variety of cultural, social, economic, and physical backgrounds. Care needs to be taken throughout research processes to ensure that different perspectives are equally considered and that participation is inclusive of different community groups. These processes also demand that the researcher needs to be flexible to timelines and with lines of questioning (semi-structured processes are best), and considerate of community traditions and resources.

<table>
<thead>
<tr>
<th>CHECKLIST OF THINGS TO CONSIDER</th>
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<tr>
<td>• How does the process allow for increased time and administration if required?</td>
</tr>
<tr>
<td>• Will the process allow disagreement/opposition to develop?</td>
</tr>
<tr>
<td>• Will the process raise exaggerated expectations?</td>
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<tr>
<td>• Are there problems of representation and legitimacy?</td>
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<tr>
<td>• Are there strong biases or inaccuracies in the information collected?</td>
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<tr>
<td>• How should trustworthiness be maintained?</td>
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Several terms have been used for this participatory approach – Rapid Rural Appraisal (RRA), Participatory Rural Appraisal (PRA), and Participatory Learning and Action (PLA). An important theme in these approaches is that being prepared to listen and learn from local people allows the generation of knowledge. Sometimes people or groups may not want to participate, because of historical grievances, lack of understanding, lack of confidence, or other reasons. These complexities must be considered and appropriate trainers encouraged to take a leadership role. Whose agenda is your research trying to promote?
ATTITUDES REQUIRED FOR RESEARCHERS WHEN PRACTISING PARTICIPATORY APPROACHES

1. Participation
2. Respect for community members
3. Interest in what people know, say, show, and do
4. Patience, not rushing or interrupting
5. Listening, not lecturing
6. Humility
7. Empowering community members to express, share, enhance, and explore their knowledge.

Effective participation relies on respecting a number of key principles, such as those identified by Egger and Majeres (1998), cited by Duraiappah et al. 2005:

- Inclusion – of all people, or representatives of all groups who will be affected by the results of a decision or a process, such as a development project.
- Equal partnership – recognizing that every person has skill, ability, and initiative and has equal right to participate in the process regardless of their status.
- Transparency – all participants must help to create a climate conducive to open communication and building dialogue.
- Sharing power – authority and power must be balanced evenly between all stakeholders to avoid the domination of one party.
- Sharing responsibility – similarly, all stakeholders have equal responsibility for decisions that are made, and each should have clear responsibilities within each process.
- Empowerment – participants with special skills should be encouraged to take responsibility for tasks within their specialty, but should also encourage others to be involved to promote mutual learning and empowerment.
- Cooperation – cooperation is very important; sharing everybody’s strengths reduces everybody’s weaknesses.

Triangulation is commonly used in PRA and is a way of verifying the validity of qualitative data by using different tools to collect information on the same topics. Qualitative techniques that can be used include interviewing and discussing with people, field observation, and structured group activities. Groups are stronger when they are interdisciplinary and involve both
outsiders (researchers) and insiders (beneficiaries), giving equal opportunity for participation of men and women while collecting data, sometimes interviewing men and women separately.

![Triangulation Diagram](image)

**Figure 3.1 Triangulation.**

For specific details about PRA and examples of tools such as resource maps and calendars, please refer to the following Key References:

- Training Module on PRA tools (Jain and Polman 2003).

**Community-Oriented Participatory Action Research (COPAR)**

**INTRODUCTION TO COPAR**

A type of Participatory Action Research (PAR), COPAR is one methodology that can be used to apply the principles of Ecohealth to health challenges. The method recognizes that there is a need to understand levels of health in a holistic manner, grounding community research in understandings of not only natural, but also social and cultural resources, ecosystems, social systems, governance and power, and public health. For Ecohealth, the approach adds value to other PAR tools, such as a PRA, as it frames research within a community setting to support the Ecohealth field’s understanding of health as a concept that exists within links of social and physical environments, and between individuals, families, neighbourhoods, communities, and ecosystems.
PAR approaches, including COPAR, are useful for understanding complex relationships between human and environmental systems. Used in fields of health, environment, and development research, PAR approaches are useful and appropriate when the development of a collaborative relationship between researchers and targeted communities can be undertaken (see Parkes and Panelli 2001 for more detailed information on the academic foundations of PAR). PAR approaches extend beyond PRA approaches by grounding all decision-making processes in the communities themselves, letting local actors guide both research activities as well as action planning. PAR methods have two core components – action, for doing or achieving goals, and participation, with the involvement of targeted research populations being fundamental to research processes.

Introduced in academic literature as a research method that generates knowledge and processes of change as well as empowering involved communities, COPAR is “characterized by the involvement of a participatory research community in identifying and addressing a situation (or problem) through cycles of action and research” (Panelli 2002). COPAR can be used for Ecohealth research and learning for three main purposes:

- Knowledge generation (examining linkages between ecosystems, social systems, human health, and governance/power structures)
- Understanding change processes (learning about systems and challenges/influences/opportunities as they develop and are influenced by other community factors)
- Empowering communities (helping communities to identify issues and plan actions).

UNDERSTANDING COPAR

COPAR projects place the community at the centre of research agendas in both theory and practice. As with Ecohealth, the community is seen as the arena for research and as the hub for investigation. Undertaking COPAR leads researchers into cycles of participatory research, reflection, and then action, which can be limited or extended, depending on the problems assessed and the possible length of project cycles.
**Table 3.1 General COPAR phases and processes (adapted from Parkes and Panelli 2001).**

Based on the phases and processes outlined in Table 3.1, COPAR can then be summarized and applied throughout the four general stages of action shown in Figure 3.1, from research initiation, building of partnerships, collaborative initiatives, and through to further planning and future phases of research (again, see Parkes and Panelli 2001; after Panelli 2001, for more detailed discussions of COPAR stages). The initiation phase consists of first scoping issues and information, then preparing for the partnership. In practice, it is important to reflect on who leads the initiation process and how this may influence the outcomes. The phase in practice often centres on discussions on a key issue or problem that the community has already highlighted. The second phase of COPAR consists of building partnerships through developing relationships, mobilizing existing resources, and starting and continuing dialogues. This phase is when communities and researchers develop a work plan and build a stronger understanding of community issues. COPAR’s third phase is formed of collaborative initiatives, where specific investigations are undertaken and plans are developed and shared, which in practice means completing fieldwork and research. The fourth phase involves further planning of future phases of participation and action, and evaluation of overall COPAR activities.
Figure 3.2 Stages of COPAR (adapted from Parkes and Panelli 2001).

The principles of COPAR, demonstrated in Figure 3.2, reflect the diverse contexts within which the approach can be used (e.g. for development, health, resource management, systems-based research). The approach is undertaken in a community context, with multiple stakeholders. COPAR relies on knowledge exchanges and the use of existing resources in a way that is equitable and sustainable. Its cycles of research, reflection, and action rely on participation and the development of partnerships that are fostered over time and strengthened through the consideration of feedback, and problem solving and planning processes that are evaluated and reassessed. COPAR can present a variety of outcome types, from conceptual and social to structural and practical, depending on the project.

TOOLS FOR COPAR: PARTICIPATORY VULNERABILITY AND CAPACITY ASSESSMENTS (VCAs)

WHAT ARE PARTICIPATORY VCAs?

Participatory vulnerability and capacity assessments (VCAs) are community participatory processes that can be adapted to research needs to identify risks and capacity levels of individuals, households, and communities. Stemming from development work and often used in disaster management, VCAs can examine physical, social, economic, and political factors to identify immediate and root levels of vulnerability and to identify ways that communities can manage current and future changes in their systems. A number of organizations have developed training packages on VCAs; those drawn upon throughout this section include Oxfam’s Participatory Capacity and Vulnerability Analysis (PCVA) training package (2009) and the International
Federation of Red Cross and Red Crescent Societies (IFRCs) VCA training modules (2004), with terminology being used according to the United Nation’s 2004 International Strategy for Disaster Reduction (ISDR).

Vulnerability, in VCAs, is defined as a condition that reduces people’s ability to prepare for, withstand, or respond to negative changes in their systems. It is determined by physical, social, economic, and environmental factors. Capacity is defined as the resistance of a system potentially exposed to negative changes to be able to reach and maintain an acceptable level of functioning and structure. Capacity is measured relating to resilience levels, with research identifying how people cope and survive daily and during times of crisis by assessing resources that are used to prepare, prevent, and reduce risk levels.

VCAs focus on finding ways to empower communities by having the end goal of raising community capacity levels. VCAs can be undertaken in a top-down manner, but are generally designed (and are most effective and representative) to be participatory, and in a way that stimulates discussion around the assessments and planning from findings with community members and key stakeholders.

**HOW CAN VCAS BE USED FOR ECOHEALTH?**

VCAs are useful in assessing the vulnerability and capacity levels of health of community members and their environment. Their broad consideration of the systems that communities function within suits well the cyclical and compounded risks that can influence health. We can use health as an indicator of the well-being of community settings, where a setting considered “healthy” would be one with a high level of resilience and capacity and low levels of vulnerability. Identifying the definitions of healthy communities can also be part of the process. VCAs are undertaken in two stages – first an assessment, using a variety of tools depending on the research setting, and then action planning, where assessment findings are operationalized into activities to build capacity and reduce vulnerability.

VCAs can be used for three general outcomes relating to Ecohealth:

- To understand the interdependence, at a community level, of animal, human, and ecosystem health
- To build interdisciplinary models that integrate health and sustainability, that can be used to increase community resilience
- To collect information that can be used in future COPAR initiatives as baseline data.

The information presented in this section is meant to serve as an introduction to VCAs, as a type of COPAR methodology. Detailed information on planning and undertaking VCAs is available in Oxfam’s 2009 PCVA training.
pack and IFRC’s 2006 VCA training modules. Although aimed at assessing disaster risk, these resources include worksheets and templates for assessment methodologies that can be adapted for projects focusing on Ecohealth and related resources, or that can be used directly with a health impact being considered as a disaster itself (e.g. an outbreak of SARS).

**WHAT ARE THE STAGES OF VCAs?**

The first stage of a VCA, the assessment stage, examines three categories of community resources:

- Physical/material (including bio-physical, built resources, and economic resources)
- Social/organizational (including governance structures, justice and rights)
- Motivational/attitudinal (including culture).

Examples of these resources are illustrated in Table 3.2. Each type of resource has a direct or indirect influence on other resources, including levels of health.

<table>
<thead>
<tr>
<th>Physical/Material</th>
<th>Social/Organizational</th>
<th>Motivational/Attitudinal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location and type of housing/building materials</td>
<td>Family structures (weak/strong)</td>
<td>Attitude towards change, awareness</td>
</tr>
<tr>
<td>Land, water, animals, capital, other means of production (access and control)</td>
<td>Leadership qualities and structures</td>
<td>Sense of ability to affect their world</td>
</tr>
<tr>
<td>Infrastructure and services</td>
<td>Legislation, administrative structures and institutional arrangements</td>
<td>Initiative</td>
</tr>
<tr>
<td>Human capital</td>
<td>Decision-making structures and participation levels</td>
<td>Faith, determination</td>
</tr>
<tr>
<td>Environment factors</td>
<td>Divisions and conflicts</td>
<td>Religious beliefs, ideology</td>
</tr>
<tr>
<td></td>
<td>Degree of justice, equality, access</td>
<td>Dependent/independent (self-reliant)</td>
</tr>
<tr>
<td></td>
<td>Community organizations</td>
<td>Cohesiveness, unity, solidarity, cooperation</td>
</tr>
<tr>
<td></td>
<td>Isolation or connectedness</td>
<td>Orientation towards past, present, future</td>
</tr>
</tbody>
</table>

Table 3.2 VCA categories of analysis (content adapted from Turvill and De Dios 2009; IFRC 2006).
To conduct VCA assessments, a variety of tools and information sources can be used. Baseline data on resource levels can be found in existing community data and historical profiles. New sources of information can be found through semi-structured interviews and focus group discussions with communities, which also contributes to raising community awareness about potential risks and increases community ownership over developed projects. Assessments can also include tools of direct observation, transect walks, and mapping. Information on how to undertake these assessments and templates for these activities are available in Oxfam’s PCVA training pack and IFRC’s VCA resource modules. Table 3.3 presents a VCA analysis matrix that can be used to organize and assess research findings relating to the categories of analysis presented in Table 3.2.

<table>
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<th>VCA ANALYSIS MATRIX</th>
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<tr>
<td><strong>VULNERABILITY</strong></td>
</tr>
<tr>
<td>Physical/Material</td>
</tr>
<tr>
<td>• High level of poverty</td>
</tr>
<tr>
<td>• Poor water quality</td>
</tr>
<tr>
<td>• Lack of roads</td>
</tr>
<tr>
<td>Social/Organizational</td>
</tr>
<tr>
<td>• Limited community groups or involvement in decision-making processes</td>
</tr>
<tr>
<td>• Low levels of local leadership</td>
</tr>
<tr>
<td>• Lack of access to information and justice</td>
</tr>
<tr>
<td>Motivational/Attitudinal</td>
</tr>
<tr>
<td>• Lack of cooperation within community</td>
</tr>
<tr>
<td>• Little planning for the future</td>
</tr>
<tr>
<td><strong>CAPACITY</strong></td>
</tr>
<tr>
<td>Physical/Material</td>
</tr>
<tr>
<td>• Strong level of housing</td>
</tr>
<tr>
<td>• Ownership of land</td>
</tr>
<tr>
<td>Social/Organizational</td>
</tr>
<tr>
<td>• Strong family structures</td>
</tr>
<tr>
<td>• Respect and ties to neighbouring communities</td>
</tr>
<tr>
<td>Motivational/Attitudinal</td>
</tr>
<tr>
<td>• Faith</td>
</tr>
<tr>
<td>• Independent (self-reliant)</td>
</tr>
<tr>
<td>• Interest in change</td>
</tr>
</tbody>
</table>

Table 3.3 VCA findings analysis matrix.

The second stage of VCAs involves action planning based on assessment findings. Action planning can design project activities around four areas of capacity building:
- Elements at risk: Protect/raise capacity of elements at risk
- Root causes: Work to include root causes of risk in planning and development activities to mitigate/prevent their effects
- Dynamic pressures: Release pressures on communities through capacity building and empowerment
• Existing negative pressures and “unhealthy” conditions: Identify ways to manage pressures and raise health of community resources (natural and human systems).

This module provides guidelines for the participatory methods that can be used for different types of intervention in the community. However it does not provide a comprehensive overview and additional training and practice is recommended for those who will be actively using participatory methodologies. The module does require instructors to refer to other documents that provide detailed step-by-step practical instructions on how to use specific participatory tools; please refer to the module references.

Activities

Activity 1

**Learning Objective:**

• Understand the principles of qualitative and participatory approaches including their advantages and disadvantages, and how these approaches can be used for research and development activities.

**INSTRUCTIONS**

1. Provide an introduction to the module and its objectives. If participants are not familiar with each other, run an interactive activity to introduce themselves and their backgrounds, including any experience they may have with participatory approaches. This exercise could model a PRA activity. It could be simple buzz groups, or could include making a Venn diagram of the linkages between participants, drawing a resource map of the training area and people and resources in it, or drawing a social map of people’s backgrounds/disciplines. Refer also to Module 1.

2. You can refer to the Background Information section of this module to present the definition of participatory methods, their principles and relevance for research and development work by cross-referencing to topics covered in Module 2. At this time, you do not need to describe participatory methods in detail, instead encourage participants to discover the meaning of participation throughout the module. Participants should be frequently reminded about the importance their attitude and behaviour plays in allowing successful participatory processes. Refer to the resource Participation Lecture (fbli_mod3_Participation_lecture_KBorin) at: ecohealth.vetswithoutborders.ca.

3. Engage the class in small group discussions or a class brainstorm about what qualitative research means and how it differs from quantitative
research – see *Module 3 – Handout 1 – Activity 1*, for example. (Refer to Newman and Benz 1998; Fife Council 2002; Creswell 2003).

4. Two tables can be prepared:
   i. The first table is labelled “Examples of qualitative (column 1) and quantitative (column 2) approaches.” Consider surveys/questionnaires, biometric data collection, direct observation, consultation meetings, etc.
   ii. The second table is labelled “Characteristics, advantages and disadvantages of qualitative and quantitative approaches.” Consider issues like sample size, depth of understanding, power dynamics (who controls the questions and the research method), stage of research, etc.

5. The Handout “About Participatory Rural Appraisal (PRA)” can be distributed to participants if considered necessary.

**ALTERNATIVE ACTIVITY**

(if learners have experience working with communities)

Some important questions to ask learners in the class: which tools or techniques have you used in development and research work with communities? What has been the reaction from community when the project started and ended? What types of villagers benefited from your project? What were the opinions, comments, suggestions, and recommendations of villagers about the result of your project? Do you expect that the villagers could use the result of your project in the future?

Sample papers can be found in Additional References. Look for Rifkin and Kangere (2006), Mason et al. (2001), and Axner (2013).
Activity 2

**Learning Objective:**

- Know how to apply participatory methods as a way of finding out about community livelihoods, needs, and aspirations as part of an Ecohealth framework.

**INSTRUCTIONS**

1. Introduce participatory tools and techniques as examples of tools that generate broader or general information and those that generate more specific information. You can choose to focus on PRA or on COPAR tools (see Background Information). The instructions here assume a focus on PRA, but can equally be adapted to working with COPAR tools if learners are already familiar with PRA approaches. Remember that each tool has its own potential to collect specific information, but there are techniques that apply to many tools, such as facilitation, mediation, dialogue, semi-structured interview, etc.

   The following tools could be presented as examples of PRA techniques with which learners should become familiar:
   - Area/resource map
   - Seasonal activity calendar
   - Timeline
   - Transect walk
   - Scoring exercise

   Please refer to the FAO references, the handouts, and Participatory Rural Appraisal, PRA by Khieu Borin (2001) for more details.

2. Once learners are familiar with the participatory techniques, organize the learners into small groups. Each group will carry out a role play to simulate one type of PRA technique. In each group, some learners will be the interviewers/trainers, and some will be the participants/interviewees.

   **Option 1:**

   Provide the learners with a case study that will allow them to contextualize their role play. They should imagine they are using participatory techniques at the early stage of research to identify the core issues of community concern. One or two group members can act as trainer for each group, and the rest will participate in the exercise.

   Refer to a case study from one of the companion texts: Ecohealth research in Practice (Charron 2012) or Ecohealth: A Primer (Waltner-Toews 2011). Topics for the role plays could be drawn from one of the case studies used in the other modules, such as the Dengue case study from *Module 4: Using Systems Concepts in Ecohealth.*

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Option 2:  
Alternatively, you can give instructions to the whole class and each group can do the activity as participants. In this option, learners should use real-life experience rather than a role play. For example, to do a community map they should do a map of their area (either where they live individually, or of the site where they all work/study together).

Your trainers/interviewers should take notes during this exercise and present back to the rest of the class, describing how the participatory activity unfolded, what they learned from being interviewers and interviewees, how they could improve their techniques for real-life situations, and how this might be relevant for their Ecohealth work. See Recoup manual handout “Reflexivity” (Singal and Jefferey 2008). If you have time, ask some of the groups to play out the role play in front of each other.

3. If the training venue has access to practical exercise, you can organize learners in groups to test the tools they have learned in the class. For example, they could practise these techniques on other learners.

ALTERNATIVE ACTIVITY

Keep asking learners about their attitudes and behaviour when doing fieldwork. They can note these in their learning journals. How do these change as they gain more practice using these tools. How is it different being a trainer compared to being a participant of a PRA exercise? (See Recoup manual handout Reflexivity (Singal and Jefferey 2008).)
Activity 3

Learning Objective:

- Learn ways to organize qualitative data and information analysis, and to synthesize and present feedback to key informants and community members.

INSTRUCTIONS

1. Begin by delivering a short lecture on how to synthesize and analyze qualitative data. References are given in this module. Provide the class with examples of a few key methods, such as story-based methods, coding, and summarizing, and the use of triangulation.

2. The next exercise uses the data gathered during classroom PRA exercises, and, if time has allowed, from the field exercises.

3. Organize learners in groups to work on their data and consider how they would analyze and present the data. It may be best to combine learners from the earlier groups so they can bring the results from their different exercises together and consider how to combine these different types of information.

4. Identify the group leaders, note takers and presenters for presenting the results to the plenary session. In the feedback session encourage learners to formulate problem statements that take into account different viewpoints around the issues.

5. Encourage learners to discuss the importance of community participation in the analysis and interpretation of the data. They should be reminded that the outcomes of the field exercise with findings and recommendations are for both beneficiaries and the research team.

EXAMPLES (SEE REFERENCE LIST)

- Pankaj et al (2011)
- Bellon and Reeves (2002).

6. Close the session by eliciting reflections from the class on key learnings. If more time is available, a second day can be used for a field visit that includes participatory techniques. An evaluation of the module can be done using participatory techniques such as scoring/ranking. Learners and trainer can write in their learning journals.
### Sample Timetable: Module 3

<table>
<thead>
<tr>
<th>TIME</th>
<th>INTENSE SHORT COURSE (1 DAY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:00-08:30</td>
<td>Introduction to the module and class introductions.</td>
</tr>
<tr>
<td>08:30-09:00</td>
<td>Learning goal 1</td>
</tr>
<tr>
<td></td>
<td>Introductory lecture</td>
</tr>
<tr>
<td></td>
<td>Principles of qualitative and participatory research in relation to the conventional research/survey.</td>
</tr>
<tr>
<td>09:00-9:20</td>
<td>Lecture/discussion: Why is participation important in development?</td>
</tr>
<tr>
<td>09:20-09:30</td>
<td>Break</td>
</tr>
<tr>
<td>09:30-12:00</td>
<td>Learning goal 2</td>
</tr>
<tr>
<td></td>
<td>Introduction to participatory tools and techniques with group work</td>
</tr>
<tr>
<td></td>
<td>a) Area/resource map</td>
</tr>
<tr>
<td></td>
<td>b) Seasonal activity calendar</td>
</tr>
<tr>
<td></td>
<td>c) Timeline</td>
</tr>
<tr>
<td></td>
<td>d) Transect walk</td>
</tr>
<tr>
<td></td>
<td>e) Scoring exercise</td>
</tr>
<tr>
<td>12:00-13:00</td>
<td>Lunch</td>
</tr>
<tr>
<td>13:00-14:30</td>
<td>Learning goal 3</td>
</tr>
<tr>
<td></td>
<td>Organization, synthesis, and presentation of data.</td>
</tr>
<tr>
<td>14:30-15:00</td>
<td>Wrap up and evaluation</td>
</tr>
</tbody>
</table>

### Evaluation

Refer to Modules 1 and 2.
Terminology

**Beneficiaries**
Beneficiaries can be people who are directly and indirectly affected by the intervention; they could be farmers (better off and poor or disadvantaged), local authorities (village head and commune council), or local organizations (youth, women, and religious groups). They actively engage in the outcomes of the development programs and projects and gain personal growth.

**Capacity**
Capacity is the resistance of a system potentially exposed to negative changes to be able to reach and maintain an acceptable level of functioning and structure. Definition as used in Community-Oriented Participatory Action Research (COPAR).

**COPAR**
Community-Oriented Participatory Action Research.

**Trainer**
The trainer is a person with the ability to create and brainstorm the discussion and meetings to the agreeable outputs; not limited to researchers, community members can also take this role.

**Empowerment**
People are encouraged to take responsibility for tasks within their specialty, but should also encourage others to be involved to promote mutual learning and benefit.

**Outsider**
Outsiders are considered to be people who are not the residents of the intervention areas but involved in the intervention. It can be researchers, development workers, donors, etc.

**Participation**
Participation is the continuous process of people being involved in the development or intervention. Participation can take different forms, ranging from information sharing and consultation methods to mechanisms for collaboration and empowerment that give stakeholders more influence and control of the development process.

**PRA**
Participatory Rural Appraisal.

**Vulnerability**
Vulnerability, in VCAs, is defined as a condition that reduces people’s ability to prepare for, withstand, or respond to negative changes in their systems. It is determined by physical, social, economic, and environmental factors.
Key References


Participatory environmental planning and management (2001). Available at: ecohealth.vetswithoutborders.ca


Additional References


### MODULE 3 – HANDOUT 1 – ACTIVITY 1

#### Tables for Flipchart “What is Qualitative Research?”

<table>
<thead>
<tr>
<th>EXAMPLES OF RESEARCH APPROACHES</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUALITATIVE</td>
</tr>
<tr>
<td>QUANTITATIVE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHARACTERISTICS, ADVANTAGES, AND DISADVANTAGES OF RESEARCH APPROACHES</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUALITATIVE</td>
</tr>
<tr>
<td>QUANTITATIVE</td>
</tr>
</tbody>
</table>
Village Resource Map

(for Learning Goal 2) (VWB/VSF 2009)

**Description:** The Village Resource Map is a tool that helps us to learn about a community and its resource base. The primary concern is not to develop an accurate map but to get useful information about local perceptions of resources. The participants should develop the content of the map according to what is important to them.

**Objectives:** To learn the villagers’ perception of the natural resources found in the community and how they are used.

**With whom:** Female and male focus groups

**Time needed:** 2 hours

**KEY QUESTIONS**

1. What resources are abundant?
2. What resources are scarce?
3. Does everyone have equal access to land?
4. Do women have access to land?
5. Do the poor have access to land?
6. Who makes decision on land allocation?
7. Where do people go to collect water?
8. Who collects water?
9. Where do people go to collect firewood?
10. Who collects firewood?
11. Where do people graze livestock?
12. What kind of development activities do you carry out as a whole community? Where?
13. Which resource do you have the most problem with?
**HOW TO FACILITATE**

The Village Resource Map is a good tool to begin with. It is easy and fun for the villagers to do. It helps initiate discussion within the community and with the PRA team. All team members should observe the mapping exercise because it provides an overall orientation to the features of the community and its resources.

In our PRA, we would like to do this map with separate groups of men and women in the village. This is because women and men may use different resources. The women will map the resources they think are important (like water sources, firewood sources, etc). The men will map the resources they think are important (like grazing land, infrastructure, etc). Maps may include: infrastructure (roads, houses, buildings, bridges, etc.); water sites and sources; agricultural lands (crop varieties and locations); soils, slopes, elevations; forest lands; grazing areas; shops, markets; health clinics, schools, churches; special places (sacred sites, cemeteries, bus stops, shrines, etc).

1. Find a large open place to work.
2. Start by placing a rock or leaf to represent a central and important landmark.
3. Ask the participants to draw the boundaries of the locality or village.
4. Ask the participants to draw other things on the map that are important. Don’t interrupt the participants unless they stop drawing.
5. Once they stop, you can ask whether there is anything else of importance that should be added.
6. When the map is completed, trainers should ask the participants to describe it. Ask questions about anything that is unclear.

Use the key questions to guide a discussion about resources in the village. One or more trainers should ask the questions, another should take notes on what is said.

Be sure to draw a picture of the map on a piece of paper. Be sure that the final map includes direction indicators (north, south, east, west).

**MATERIALS NEEDED**

Sticks, pebbles, leaves, sawdust, flour, dung, or any other local material.
Figure 3.3: Example of Village Resource Map
Seasonal Calendar

(FOR LEARNING GOAL 2) (VWB/VSF 2009)

<table>
<thead>
<tr>
<th>Type of group:</th>
<th>Mixed group for women and men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>A seasonal calendar is a participatory tool to explore seasonal changes (e.g. gender-specific workload, diseases, income, expenditure, etc.).</td>
</tr>
<tr>
<td>Objectives:</td>
<td>To learn about changes in livelihoods over the year and to show the seasonality of agricultural and non-agricultural workload, food availability, human diseases, gender-specific income and expenditure, water, forage, credit, and holidays.</td>
</tr>
</tbody>
</table>

KEY QUESTIONS

1. What are the busiest months of the year?
2. At what time of the year is food scarce?
3. How does income vary over the year for men and women?
4. How does expenditure vary over the year for men and women?
5. How does rainfall vary over the year?
6. How does water availability for human consumption vary over the year?
7. How does livestock forage availability vary over the year?
8. How does credit availability vary over the year?
9. When are holidays and how many days in which months?
10. When is most agricultural work carried out by women?
11. When is most agricultural work carried out by men?
12. When is most non-agricultural work carried out by women?
13. When is most non-agricultural work carried out by men?
14. Which could be the most appropriate season for additional activities for men and women? What time constraints do exist and for what reasons?
HOW TO FACILITATE

1. Find a large open space for the group. The calendar can be drawn on the ground or very big sheets of paper.

2. Ask the participants to draw a matrix, indicating each month along one axis by a symbol.

3. It is usually easiest to start the calendar by asking about rainfall patterns. Choose a symbol for rain and put/draw it next to the column that participants will now use to illustrate the rainfall. Ask the group to put stones under each month of the calendar to represent relative amounts of rainfall (more stones meaning more rainfall).

4. Move to the next topic and ask people during which months the food is usually scarce. Discuss the reasons why it is scarce and make sure that the different kinds of food donations that people receive are discussed and that this information is shown in the map.

5. Go on like this, topic by topic. After finishing all the columns your matrix should have covered the following 14 topics:

   (1) Rainfall
   (2) Food scarcity (many stones means less food available, indicate during which time people receive food donations; e.g. food for work).
   (3) Income (cash and kind) for women.
   (4) Income (cash and kind) for men.
   (5) Expenditure for men.
   (6) Expenditure for women?
   (7) Water availability for human consumption.
   (8) Livestock forage availability.
   (9) Credit availability.
   (10) Number of holiday days.
   (11) Agricultural work load for women.
   (12) Agricultural work load for men.
   (13) Non-agricultural work load for women.
   (14) Non-agricultural work load for women.

7. After the calendar is finished ask the group which linkages they see among the different topics of the calendar. Encourage the group to discuss what they see on the calendar.

8. Make sure that your copy of the seasonal calendar has a key explaining the different items and symbols used on the map.
MATERIALS NEEDED

Documentation sheet, this handout, white paper for copying the seasonal calendar.

1. If drawing on the ground: soft ground, stones, sticks, and other available material to produce symbols, or

2. If drawing on paper: a large sheet of paper, pencils, markers.
Timeline

(FOR LEARNING GOAL 2) (VWB/VSF 2009)

- A record of events in the past and present
- A vision of what the future should or could be like

  e.g. types of crops growing, number of people in village trained, etc.

![Timeline Diagram]

- Maize project started:
  - School built 1985
  - NOW
  - Start micro-credit group:
  - Create goat-buying cooperative

PAST     FUTURE
About Participatory Rural Appraisal (PRA)

The history of using participatory methods began in the late 1970s with the introduction of a new research approach called Rapid Rural Appraisal (RRA), which immediately became popular with decision-makers in development agencies. Building on close collaboration with local populations, RRAs were designed to collect first-hand data from local people about their perceptions of their local environments and living conditions in rural areas. A limitation of an RRA, however, was that it was extractive; the role of the local people was limited to providing information, while the power of decision-making about the use of this information remained in the hands of others.

Later a new terminology of Participatory Rural Appraisal (PRA) was developed to increase local people’s involvement in the development process, leading to a sound “ownership.” It built up rural people’s own capacities for analyzing their circumstances of living, their potentials, and their problems for the decision on changes, while PRA trainers accepted more and more the role of learners. This interactive mutual learning of both local people and PRA trainers becomes the means for more sustainable development. One of the most important principles in PRA is the sharing analysis results, decisions, and planning efforts among the community members by open and public fora. PRA strongly supports and facilitates the introduction of more demand-responsive ways of managing development interaction, and process-oriented thinking.

Rural people have developed ability and skill to survive in coping with the changes of the environment and the available natural resources. Natural resources such as soil, water, forests, livestock, wildlife, river systems, etc., are closely linked to rural livelihoods. Methods in PRA help both researchers/trainers and local people incorporate “participation” to achieve the development goal. These methods are used not just to enable the voice of local people – especially those who are marginalized – to be heard, but also to encourage all stakeholders to make their own analysis of their conditions.

It is important to stress that development strategies do not depend only on monetary assistance, credit, materials, and technology; development depends on the thinking and perception of the members of the community. Development that pushes people to accept what they do not choose for themselves leads to problems. The active participation of local people starts with identifying the real needs and searching for a suitable strategy to meet those needs.

Participatory methods and techniques tend not to follow a blueprint or standardized procedure. They are used creatively and generatively, often in combination with other tools. The methods used are often considered less important than the attitudes and beliefs of those carrying out the investigation.

The prosperity of a nation depends not so much on its monetary policy as on the expectations of its people.

Prof. Robert Lucas, Nobel prize in Economics
Data Collection

There is a need to understand and appreciate traditional management systems, livelihood systems, indigenous technologies, and the ways and reasons why people feel, see, think, and act in rural areas. Researchers need to take into account certain key features:

Key features of data collection in PRA