

PARTICIPATORY CAPACITY AND VULNERABILITY ANALYSIS



A PRACTITIONER'S GUIDE

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An Oxfam Disaster Risk Reduction
and Climate Change Adaptation Resource



OXFAM

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Cover photo: Working on a map of the camp which lays out the hygiene points in a settlement in Eastern Chad (Carmen Rodrigues/Intermon Oxfam)

Abbreviations

CBO	Community-Based Organisation
CCA	Climate Change Adaptation
DRR	Disaster Risk Reduction
IPCC	Intergovernmental Panel on Climate Change
NAPA	National Adaptation Programme of Action
NGO	Non-Governmental Organisation
PCVA	Participatory Capacity and Vulnerability Analysis
PLA	Participatory Learning and Action
PRA	Participatory Rural Appraisal
RRA	Rapid Rural Appraisal
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNISDR	United Nations International Strategy for Disaster Reduction
UNOCHA	United Nations Office for the Coordination of Humanitarian Affairs

Definitions

Capacity: The combination of all the strengths, attributes, and resources available within a community, society, or organisation that can be used to achieve agreed goals. **Adaptive capacity** relates to the potential of the above to minimise negative impacts and maximise any benefits from changes in the climate.

Coping strategy: Actions taken to mitigate the negative impacts of adverse situations such as natural disasters. This could include, for example, the unplanned sale of assets such as livestock to raise money for purchasing food when crops fail. It may also include temporary migration to urban centres for paid work.

Climate change: A change in climate that persists for decades or longer, arising from human activity (e.g. greenhouse gas emissions) that alters the composition of the atmosphere.

Climate change adaptation: Actions that people and institutions take in anticipation of, or in response to, a changing climate. This includes changing what they do, and/or how they do it.

Disaster risk reduction: The concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events.

Exposure: People, property, systems, or other elements present in hazard zones that are thereby subject to potential losses.

Extensive risk: The risk of low-severity, high-frequency disasters, mainly but not exclusively associated with highly localized hazards.

Intensive risk: The risk of high-severity, low-frequency disasters, mainly associated with major hazards.

Natural hazard: A natural phenomenon or process that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

Resilience: Where adaptive capacity relates to the ability to influence and respond directly to processes of change (to shape, create, or respond to change), resilience is the ability to absorb shocks or ride out changes.

Vulnerability: The characteristics and circumstances of a community, system, or asset that makes it susceptible to the damaging effects of a hazard or the impacts of climate change.

Sources: UNISDR Terminology of Disaster Risk Reduction, 2009; Oxfam: Introduction to Disaster Risk Reduction: A Learning Companion, 2009; Introduction to Climate Change Adaptation: A Learning Companion, 2009; UN Global Assessment Report, 2011.

PART 1: Introducing the theory

What is participatory capacity and vulnerability analysis?

Oxfam's participatory capacity and vulnerability analysis (PCVA) tool outlines a multi-stakeholder risk analysis and planning process designed to help staff and partner organisations engage with communities in contexts where natural disasters are significant drivers of poverty and suffering.¹

As its name suggests, PCVA has its roots in two proven social development methodologies. First, it stems from capacity and vulnerability analysis (CVA)² methodology. This has long enabled development and humanitarian aid workers to design programmes based on a community's capacities as well as its vulnerabilities. It recognises that vulnerable people have capacities to cope with adversity and can take steps to improve their lives, however difficult their situation may be.

Second, it is rooted in the belief that enabling communities to genuinely participate in programme design, planning, and management leads to increased ownership, accountability and impact, and is the best way to bring about change. PCVA draws on a wide range of participatory learning and action (PLA)³ techniques and tools that are designed to channel participants' ideas and efforts into a structured process of analysis, learning, and action planning, with the overall aim of reducing a community's disaster risk.

The participatory nature of the process supports men and women to act as agents of their own development who, with the right resources and support, can solve their own problems. It promotes the participation of women in particular as risk analysts and decision-makers when it comes to prioritising what a community can do to reduce its disaster risk.

Carrying out a PCVA should be regarded as an investment with communities that needs to be repeated regularly to help assess progress and enable them to make any changes needed to strengthen the impact different stakeholders actions, including those of Oxfam. It is important for us to be clear to ourselves and the stakeholders we engage in PCVA that Oxfam's role as a broker of the process is distinct from any direct support it might provide in response to the findings the PCVA produces (such as in Livelihoods, WASH etc).

How can PCVA improve your programme?

PCVA contributes to the process of empowering poor men and women to make informed choices that reduce the risk of disasters and their negative impact on people's livelihoods and well-being. It is an expression of Oxfam's rights-based approach to development and humanitarian action.

You might want to carry out a participatory capacity and vulnerability analysis for a number of reasons:

- to integrate disaster risk reduction (DRR) into an existing programme;
- to inform the design of a new programme using a DRR approach;
- to monitor and evaluate the impact of actions taken to reduce risk, and to plan new activities;
- to guide advocacy strategies for DRR.

¹ Oxfam's PCVA tool is based on a tool that was designed and used successfully in the Philippines for over a decade by Oxfam staff and partner organisations, before being used more widely in East Asia and other regions. Given Oxfam's commitment to DRR and the increasing importance of climate change as a key factor in development, in 2008 we began to update the model to make it even more relevant to communities to help them understand the challenges of climate change as they relate to disasters.

² M. Anderson and P. Woodrow (1989) *Rising from the Ashes: Development Strategies in Times of Disasters*, Boulder, CO: Westview Press

³ Previously known as participatory rural appraisal (PRA) techniques

About this guide

This step-by-step guide has been designed to take you through the PCVA process. It is aimed at development practitioners working with communities that are vulnerable to natural hazards. In Part 1, the theory and concepts behind PCVA are outlined, as well as a brief description of how it has evolved. We also explain Oxfam's approach to DRR and why climate change must be a significant factor in any risk reduction programming. Part 2 provides the step-by-step guide to the seven stages of the PCVA process. It covers the preparatory work you need to undertake, facilitation (working directly with the community on participatory learning and action (PLA) exercises to answer key questions), and action planning.

The guide is structured in a way that gives programme staff, facilitators, and communities the flexibility to carry out the different stages over a number of consecutive days or at different moments in time, depending on local needs, priorities, and availability.

The PCVA guide has been updated based on feedback following a pilot phase from 2009 to improve its approach to gender analysis and gender equity, and to make it more relevant to communities in both rural and urban environments. The PCVA tool is also now consistent with Oxfam's *Project Cycle Management Guide*,⁴ to better enable staff and partner organisations to incorporate DRR strategies in projects and programmes in all relevant contexts. A companion PCVA *Training Pack* will be made available later in 2012.

It was not possible to include a comprehensive guide for incorporating climate change adaptation here, but some basic information and guidance has been inserted to highlight the importance of analysing climate change risk in communities.

⁴ Oxfam (2009) *Project Cycle Management Guide*, Oxford: Oxfam GB

Understanding disaster risk reduction and climate change

What is disaster risk reduction?

Disasters are not natural. They result from the combination of exposure to hazards, people's vulnerability, and limited capacity to reduce the potential negative consequences of risk.

People living in poverty in the countries where Oxfam and its partners work often suffer crippling losses when hazards and hit. This is partly because their livelihoods are so precarious, but also because they often have no choice but to live or work in areas that are environmentally fragile and thus more likely to be exposed to natural hazards.

For this reason, Oxfam prioritises working with others at all levels to reduce the risk of disasters in these contexts. We do this by incorporating an analysis of disaster risk into our programmes and implementing measures to reduce it. Only by addressing the factors that make people vulnerable can we strengthen the capacity of families, communities, and institutions to take actions that can either avert or reduce the impact of disasters.

Disaster risk reduction (DRR) can be defined as: *'the concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events'* (UNISDR, 2009, *Terminology of Disaster Risk Reduction*).

Climate change

The impact of climate change is fast exhausting the capacity of communities to respond – particularly the poorest and most disadvantaged people in developing countries. Across the world, erratic rainfall patterns and changing seasons are regularly threatening harvests of food and other crops, leaving many people struggling to feed their families. Rising sea levels are also wiping out crops in some areas, and contaminating water supplies with salt water.

Global climate change can be defined as: *a change in climate that persists for decades or longer, arising from human activity that alters the composition of the atmosphere (i.e. greenhouse gas emissions).*

A long-term process is required to understand how long-term changes to average climatic conditions affect people's livelihoods, and to help people adapt to the emerging conditions. But climate change is also changing the nature of the hazards communities face (the hazard profile), either bringing more frequent and/or intense extreme weather events, or by bringing new hazards. This trend is already noticeable: since the 1980s, the number of people reported as affected by weather-related disasters has doubled from 121 million to 243 million a year.⁵

Climate change adaptation

Climate change adaptation (CCA) must be an integral part of Oxfam's broader development work. This is because, like any other driver of poverty and suffering, climate change does not act in isolation, but instead increases vulnerability and inequality.

Through DRR activities, Oxfam is committed to supporting poor and vulnerable communities to develop in ways that enable them to withstand and recover from shocks. Through CCA activities, we are also working with these communities to help them adapt to emerging trends, changing climatic conditions, and the increased uncertainty brought about by global climate change. We are committed to

Climate change adaptation (CCA) is defined as: *'Actions that people and institutions make in anticipation of, or in response to, a changing climate. This includes changes to the things they do, and/or the way they do them'* (Oxfam GB, 2009, *Introduction to Climate Change Adaptation: A Learning Companion*).

⁵ C. Pettengell (2010) *Climate Change Adaptation: Enabling People in Poverty to Adapt*. Oxford: Oxfam GB.

undertaking systematic analysis of the potential consequences of climate change for our programmes.

Taking a CCA approach involves working at different scales. It combines local and indigenous knowledge with climate science; it is flexible enough to cope with uncertainty; and it requires planning for the longer term while helping communities address immediate needs. We are doing this through our programming, by fostering resilience (relating to shocks), and increasing adaptive capacities (relating to broader trends) among vulnerable communities.

Synergies between disaster risk reduction and climate change adaptation

DRR and CCA have similar aims and mutual benefits, and are therefore closely linked. They both focus on reducing people's vulnerability to hazards by improving their ability to take action to prepare, respond, and recover from their impact. And because climate change alters the type, frequency, and magnitude of climate-related hazards, using a DRR approach is a vital element in supporting communities to adapt to climate change.

Not all disaster hazards are climate-related, however. Climate-related (or hydro-meteorological) hazards include floods, droughts, and storms, but DRR can also apply to geological hazards (earthquakes, tsunamis, and volcanic eruptions), technological hazards (industrial or chemical spills), and even conflict. And equally, climate change impacts are not all discrete events or sudden shocks. They also include long-term changes to average climatic conditions, such as rising temperatures, changing seasonal patterns, unpredictable rainfall patterns, and rising sea levels – all of which have an impact on food security, health, and poverty.

The challenges of incorporating climate change into PCVA

For many years, Oxfam has invested in DRR work to better understand how different hazards put vulnerable communities at risk, and how these risks can be reduced or managed to make communities less vulnerable and more resilient. More recently, we have also begun to invest in work to improve our understanding of how climate change is affecting the kinds of hazards that people face from modern weather-related disasters.

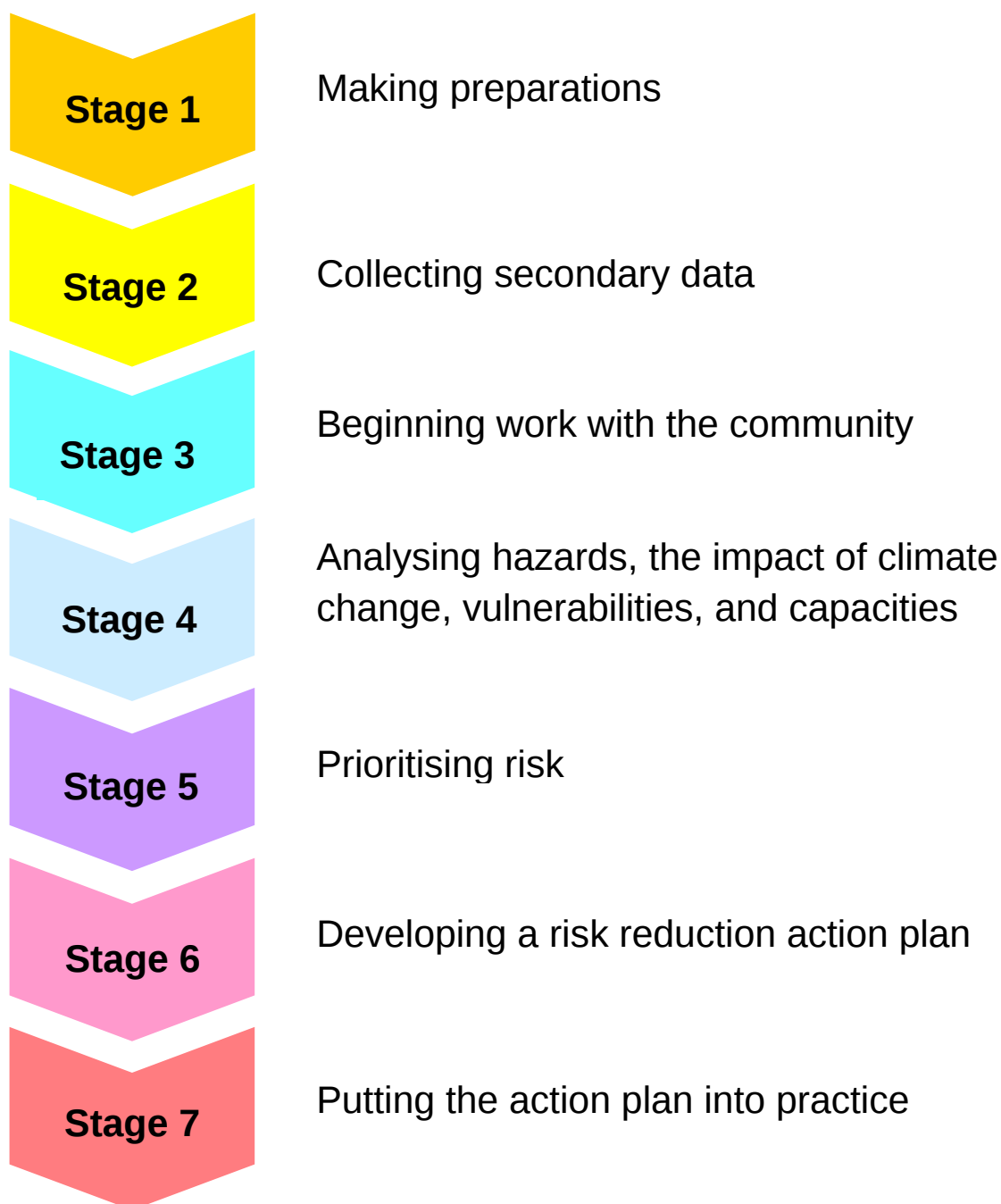
However, while climate change is becoming increasingly well understood at the global level, predictions of how average climatic conditions will affect people at the local level are less robust, especially in resource-poor settings. This means that addressing changing hazard profiles at the local level is not as simple as taking a 'predict and adapt' approach. Instead, it requires a combination of three approaches:

- 'No regrets' options (for example, soil management strategies that support greater moisture retention and better drainage are beneficial, whether conditions become drier or wetter);
- The 'precautionary' principle (for example, if the extent of an area likely to be affected by a flood is uncertain, but the impact would be catastrophic, action should be taken as a precaution);
- Raising awareness, and encouraging investment to monitor changes in conditions to inform future planning.

Communities themselves are able to use their first-hand experience of climate change over recent decades to help develop more sustainable responses to reduce disaster risk in the short term. While this local knowledge is extremely valuable, it is not enough on its own to consider the impacts of climate change in the medium and longer term. Communities need access to outside sources of information – and they need to know how to use it – to give them a fuller picture of how climate change is likely to affect them, as well as ongoing monitoring to increase their understanding of how the climate is changing over time. Used correctly, PCVA should empower communities to analyse their *changing* risk profile and monitor it over time to ensure that they are constantly adapting their plans and responses.

Another challenge in incorporating climate change into PCVA is the diversity of impacts climate change brings, and the integrated approach required for CCA (to adapt to change, manage uncertainty, and build adaptive capacity at a number of levels). The framework for PCVA focuses on hazards, and because hazards may change as a result of climate change, it considers the impacts of climate change on disasters. It aims to empower communities to identify, analyse, and assess their vulnerabilities and capacities in relation to these hazards. Therefore, it only identifies CCA actions and processes that are specifically linked to natural disasters.

PART 2: Step-by-step guide to the PCVA process



Stage 1: Making preparations

To get the best results from the PCVA process, you need to be well prepared. To begin with, you need to:

1. Draw up the **terms of reference** for the process. Identify why it is necessary, its aims and objectives, the communities you propose to work with, and the key stakeholders.
2. Select and train the **facilitation team**.
3. Allocate the necessary **resources** and set up the logistics.

The following sections show you how to carry out each of these tasks.

Drawing up the terms of reference

Is a PCVA needed?

You should check if any similar processes have been carried out by Oxfam or other organisations in the communities or areas you are planning to target. If a similar analysis has been carried out less than 18 months ago, think about whether you really need to undertake another one. Look carefully at the methodology, stakeholders, and results of the previous process, and decide if they meet your needs.

What are the aims and objectives?

If you decide to go ahead with your own PCVA process, you need to define the aims and objectives. In most cases, a PCVA is carried out to:

- integrate DRR into an existing programme or advocacy strategy; or
- inform the design of a new programme or advocacy strategy.

For such purposes, the objectives of the Oxfam PCVA model are:

- to assess the potential impacts of hazards in a given community; and
- to agree actions to reduce disaster risk in that community.

If the purpose of your PCVA is to monitor the progress of ongoing risk reduction initiatives and adapt action plans accordingly, the objectives are:

- to update the assessment of potential impacts of hazards in a given community; and/or
- to update the action plan to reduce disaster risk in that community.

Aligning your PCVA with other processes

You may want to carry out the PCVA as a separate process or combine it with another assessment. It may be that you need to carry out a post-disaster assessment (to identify recovery priorities), a household economy survey (to assess food security), a local development needs assessment, or a WASH (water, sanitation and hygiene) assessment.

If you decide to align the PCVA with another process, the sequence and content of Stages 1 to 5 remain the same. After each stage, the information and analysis you have gathered should be triangulated (cross-checked) with the results from the other process. For Stage 6, your risk reduction action plan will need to be aligned and co-ordinated with the plans or recommendations from the other process. Together, your plans should be discussed with a representative group of the community concerned to answer these questions:

- How will the proposed actions affect our vulnerability to hazards? Do we need to change them? If so, how?

- How will the proposed actions affect our resources for risk reduction? Do we need to change them? If so, how?
- What is the implementation plan for the proposed actions, and how can it be co-ordinated with the PCVA action plan?

When you have received satisfactory answers to these questions, and any necessary changes have been made, you are ready to draw up a joint risk reduction action plan.

If Oxfam's planned activities (or those of a partner organisation) are limited to one sector, you will have to carefully manage people's expectations during the PCVA process. You may also need to identify other organisations or bodies that can take forward the remaining areas of the action plan.

Deciding which communities to work with

If you are carrying out a PCVA to inform the design of a new programme or advocacy strategy that will focus on DRR, you should consider the following criteria when deciding which community (or communities) to work with:

- anticipated or known exposure and vulnerability to hazards;
- anticipated or known exposure and vulnerability to climate variability;
- willingness and interest on the part of the community/ies;
- accessibility of the community/ies;
- funding opportunities and restrictions.

(If the purpose of your PCVA is to integrate DRR into an existing programme, then the scope will already be defined, if the community and its leaders are in agreement.)

Involving stakeholders

The main stakeholders in this process are the community members themselves. But remember that communities are not homogeneous; there are significant differences based on gender, age, socio-economic status, religious or political affiliations, as well as individual and collective interests. Securing buy-in from a wide range of stakeholders is the key not only to a successful PCVA process, but an effective action plan to reduce disaster risk. As well as members of the community, other stakeholders in the local area are likely to include:

- international non-government organisations (NGOs), United Nations (UN) bodies and the International Red Cross;
- local NGOs or community-based organisations (CBOs);
- religious groups or institutions;
- government institutions;
- private companies.

Be aware: The presence of certain representatives or external interests might affect the community's willingness to share information – something that is critical for the success of the PCVA process. Be aware of these dynamics and check with community leaders or other members of the community before you decide who to involve.

What do we mean by 'community'?

By definition, a community is 'a socially cohesive group of people living in a common location'. But in reality, communities are very different, in terms of their size, composition, and internal cohesion.

In a community of more than 200 households, you may need to repeat the stages of the PCVA with several groups to make sure you get a good level of participation. In this case, you would need either a larger facilitation team or more time.

Alternatively, you could divide the community into different groups, if there are clear divisions of interests, environment, and resources (e.g. differences based on gender, power, wealth, and productive resources like land ownership). Consult with the community and its leaders before you do this though, as it could have negative repercussions.

The best way to identify stakeholders is to visit the community, meet with its leaders, identify the other actors involved, and begin a working relationship with them. This will also help you to familiarise yourself

with the community, in terms of what happens on a day-to-day basis, so that you can take people's work and family commitments into account when planning activities and logistical arrangements.

During your initial visit and discussions, you should emphasise that any risk reduction action plan resulting from the PCVA process needs to be owned and led by the community. It is likely to have the support of Oxfam, but will require other forms of support from, and co-ordination with, the stakeholders involved.

Promoting participation

Once you have identified your main stakeholders, the next step is to decide how they might best participate in the process.

If the other international NGOs or agencies working with local communities have similar values and approaches to Oxfam, you might consider working with them as partners and joint facilitators in the process and resulting action plan.

If national or local governmental bodies are interested in participating, or are required by law to undertake a similar process, it would also be a good idea to include their representatives on the facilitation team, so that they can fully engage with the action plan.

Before you begin the PCVA, you should set up briefing sessions with all the stakeholders to inform them about each stage of the process. Feedback should be requested after each stage of the process, and at the end, when all stages are complete. This is an important part of the process, as it ensures that facilitators understand what has worked, and encourages the team to adjust learning and communication styles throughout the process, if required.

Whether you carry out the PCVA separately or in partnership with another organisation, make sure you factor the time and resource implications of these meetings into the planning process.

Selecting the facilitation team

The PCVA team works together to catalyse a process for change. Think about the following issues before you choose the size and composition of your team:

- Using participatory learning and action (PLA) techniques requires skilled facilitators who can directly lead and accompany a range of community-based exercises. The team members' skills and experience will determine the quality of the PCVA and the extent to which the process is genuinely owned and led by the community. All team members should therefore have **excellent PLA facilitation skills and communications skills**. At least one of them should have previous experience of conducting a PCVA.
- An adequately staffed facilitation team will be able to keep the momentum going and deliver good quality results. While there is no ideal team size, you should try to **have four to six members, including the team leader**.
- As the PCVA aims to initiate a longer-term change process, the team should comprise representatives of the main stakeholders involved. In most cases, **the team should include a community leader, representatives of any CBOs and NGOs working with the community, and a local government representative**. It is important for the team to reiterate that Oxfam is playing a facilitating role in a process that is owned and led by the community.
- As DRR is a multidisciplinary approach, the team should include **expertise in livelihoods, natural resources management, governance, DRR, CCA, gender, and WASH**. If the secondary data you collect (see Stage 2) highlight particular vulnerabilities or complexities in any of these areas, at least one team member should have relevant technical expertise.
- At least one team member should have **skills in advocacy and project cycle management**, to guide the development of the action plan.
- **The team should include men and women**. Their roles should be defined by their skills and expertise, not by their sex.

- If particular **language skills and cultural sensitivities** are needed to communicate and build trust with the community, an appropriate number of team members should have these. If language is a barrier, the team will need to include an interpreter, and this should be budgeted for.
- Obviously, **the team members must be able to commit to the duration of the PCVA process** and should be able to give it their undivided attention.

Training

At least four members out of a six-member team (or an equivalent proportion) are required to have attended Oxfam's PCVA training course.

Roles and responsibilities

You need to allocate specific responsibilities to each member of the team as follows:

- team coordinator;
- focal point for communications with the community;
- focal points for communications with other stakeholders;
- gender lead;
- lead on logistics and resources.

All members will be responsible for recording results and taking notes during the PLA exercises (Stages 3–6).

Management, logistics, and timing

The PCVA process should be regarded as a small project, because it needs a budget, a management plan, and ongoing monitoring. The facilitation team should evaluate the process at the end, together with members of the community and other stakeholders, so that learning can be captured for future experiences and exercises.

Management

The management plan should specify how long each activity should take, what it will cost, and who is responsible for leading it.

The budget should include: transport, accommodation, and food for the facilitation team; refreshments for participants; stationery or other materials for the exercises; and interpreters if relevant. You may also find that governmental officials are better able to attend meetings if they receive expenses.

Logistics

One team member with experience of logistics should take responsibility for ensuring that transport, accommodation, food, refreshments, and materials are available for each exercise.

Timing

The facilitation team should spend up to two days familiarising themselves with this guide and developing a facilitation plan, and another two days collecting and analysing secondary data (Stage 2).

Carrying out the PCVA with the community (Stages 3–7) is estimated to take between five and ten days, depending on the number of facilitators and the size of the community group (or groups). The stages may be conducted in quick succession or at intervals over a longer period.

Once you have made your preparations for the PCVA process, you are ready to carry out the data collection and analysis stage.

Be aware: Remember that community members participating in the PCVA are giving up time which they might otherwise have spent working or looking after children and other dependents. You can minimise the opportunity cost for participants by conducting the PCVA sessions at times of the day, week or month that are least disruptive to people's work and family life. Consider providing additional support (through social networks, for example) for participants who would otherwise be unable to afford to give time to the process.

Stage 2: Collecting secondary data

The first stage of collecting and analysing data involves secondary sources – that is, getting information from written sources and individuals or organisations external to the community, but that know a lot about it. This stage is integral to the PCVA process. It will enable you, as a facilitator, to get the best out of the process in terms of enhancing participation, analysis, and action planning during each subsequent stage (see box, 'Using the secondary data'). Collecting and analysing secondary data has a number of benefits:

- It provides you with **knowledge that will help you explore the contributions made by participants** during the PLA exercises in greater depth. As a result of intelligent probing, participants will be better able to analyse their own situations.
- It enables you to identify **particular groups of interest or concern** before you begin the direct work with the community, so that you can ensure that all members are actively taking part and making their voices heard.
- It provides you with information about relevant **institutions, organisations, policies, and sources of support** that will enable you to encourage participants to identify potential partners, allies, and targets for their risk reduction action plan.
- It obliges you to make **contact with all stakeholders** before the facilitation work begins, thereby building solid foundations for further engagement, whether in the form of direct action or through advocacy.

What you really need to know

The information you need to obtain is directly related to the key questions that form Stages 3 to 6 of the PCVA process. The table below will help you to identify potential sources of information and focus your analysis on the most relevant parts of their content.

Table 1: Where to get the information you need

Information required	Source of information
LOCAL LEVEL	
What is the community's • physical location; • demographic composition; • social structure • economic profile; • recent history; • political structure; • development plan.	National census office Local or district government offices and staff Local development plan Church, mosque or other religious institution NGOs and CBOs working in the community
What natural resources exist in and around the community?	Maps showing topography, agro-ecological regions, infrastructure, etc. (including GIS-generated maps)
What groups and organisations exist within the community or interact with the community?	Meteorological services
What governmental institutions exist within the community or interact with the community?	
What disasters have affected the community in the past 20 years, and how have people coped with them? What was the response of government and other actors?	
What changes to weather patterns and resource availability are being observed or predicted, and how are people coping with them?	
How does the local development plan affect the community? Does it address disaster risk and climate variability and change, and if so, how?	

REGIONAL/DISTRICT/PROVINCIAL LEVEL	
What is the disaster profile of the region?	Seasonal forecasts and meteorological data on current climate trends, from the national meteorology service
What impacts of climate variability and change have been observed or are predicted for the region?	NGOs working in the region
How does the regional development plan affect the community? Does it address disaster risk and climate variability and change, and if so, how?	Regional government offices and staff
Which regional organisations and institutions are working on or have responsibility for DRR and/or climate change adaptation?	Regional development plan
	Climate Change Coordination Unit (or similar national body)
NATIONAL LEVEL	
How does the national development policy affect the community? Does it address disaster risk and climate variability and change, and if so, how?	Poverty Reduction Strategy Paper or National Development Plan
What other national programmes or policies affect the community? Do they address disaster risk and climate variability and change, and if so, how?	National Platform for DRR
Which organisations and institutions are working on or have responsibility for DRR and/or climate change adaptation?	Hyogo Framework for Action (HFA) Monitoring Report
What are the observed climate variability and changes, and available climate projections?	Climate Change Coordination Unit (or similar national body)
	National Communications to the United Nations Framework Convention on Climate Change (UNFCCC)
	Intergovernmental Panel on Climate Change (IPCC) Reports
	National Adaptation Programme of Action (NAPA)
	UNDP, UNOCHA or other UN country office
	Country-level climate analysis at: http://country-profiles.geog.ox.ac.uk/

During the data collection stage, remember two points:

- Do not look for more information than you actually need. You should be able to answer each of the questions in the table in just a few sentences. If you collect too much data at this stage, it may divert your time and energy from the next stages.
- The documents and verbal inputs you obtain may be extremely useful, or they may be inaccurate or lacking resources for implementation. Treat them as potentially helpful **signposts** to guide you to the starting point for the rest of the process, but be prepared to find new or even contradictory issues and perspectives when you begin working with the community.

Once you have collected and analysed secondary data, you are ready to move on to Stages 3–7, working directly in and with the community.

Using the secondary data

You will need to refer back to the secondary data you collected and analysed at subsequent stages of the PCVA process:

- After **Stages 3 and 4**, to enable the facilitation team to triangulate (cross-check) the findings from the PLA sessions with the community (the primary data). If there is a significant discrepancy between the primary and secondary data and no reasonable explanation for this, the team may decide to repeat a particular exercise with different participants. They may choose a different method to explore the issue, or discuss the results with community leaders, in order to understand the discrepancy.
- Before and during **Stage 6, to inform the action plan**, particularly on the subject of institutional capacities and external opportunities.
- During **Stage 7**, to be included in the PCVA report.

Stage 3: Beginning work with the community

This is the first stage of the PCVA process that takes place *in* the community. Its main purpose is to generate a shared understanding of the community's demographic composition, social and political structures, livelihoods, and resources. This common understanding is critical to the following stages, as it will help to promote ownership of the process and underpin the subsequent risk analysis.

During this stage, which is all about facilitation, the team asks key questions (KQs) of those taking part in each exercise using PLA techniques. For each of the seven KQs in this stage, we describe a tool to help you explore the answers.

Expected output(s): These exercises will give you a good understanding of the community and its wider context, including its demographic composition, social and political structures, as well as the livelihoods and resources available to the community. This not only promotes ownership of the process, but provides a solid foundation for the subsequent stages of the PCVA process.

Introducing the team

It is recommended that you begin the PCVA process by requesting that the community leaders call a meeting so that you can introduce yourselves. At this point, you should explain:

- who the facilitation team members are, and which organisation(s) they represent;
- the reason why you are visiting the community;
- what you will be doing, how and when;
- what you intend to produce (a risk reduction action plan);
- what is expected of the community members who take part (see box); and
- when you will feed back the results of the process to all community members.

Participation

The number of people who participate in the process, and their characteristics, will depend on the size of the community and its socio-demographic composition. But you should try to ensure that:

- as many community members as possible attend the introductory meeting and the meeting to present the results and action plan;
- you get a fair representation of the total adult population (men and women) directly taking part in one or more PLA sessions;
- men and women from all socio-economic, generational and ethnic groups are invited to take part (note that some exercises may require separate groups of men and women);
- a core group, which includes the elected and informal community leaders, actively participates throughout the process; and
- the number of participants for each exercise is appropriate to the particular tool being used, which means that some exercises may need to be repeated with several groups.

After you have worked with the participants for Key Question 1, you will have a fuller picture of the socio-demographic composition of the community, and will be able to seek the participation of diverse groups of men and women if they are not already represented by the core group and initial volunteers.

The **KQs and exploratory tools** for Stage 3 areas follows:



KQ1. What is the demographic composition of the community?

Use the **Plate diagram** tool to explore the answer to this key question:

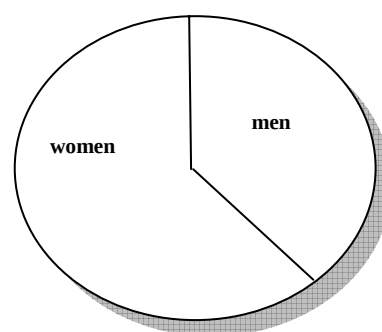
- Form four groups, each with 6–8 people (2 groups of men, 2 of women).
- Explain that each group will draw their own plates and then compare and discuss them with the other groups at the end of the exercise.
- Invite participants to imagine that the community is a big plate of food, and that the different groups of people in it are the ingredients on the plate. Ask them to draw a plate to represent their community, and to show how many community members are men or women. They can label the 'ingredients' or sub-groups with words or images, and with exact numbers if they know how many people are in each sub-group.
- Do the same for all the basic population groups in a community. Make sure you have at least covered the following: adults/children; older adults/younger adults (give age ranges to guide people); number of children per household (using relative sizes, such as more than four children/three children or less); people with disabilities/people without disabilities; people who are able to work/people who are unable to work; boys of school age attending or not attending school; girls of school age attending or not attending school; people from a minority ethnic group/people from the majority ethnic group.
- Encourage participants to recommend more population groups and draw plates for each, until they are satisfied that all groups have been represented.
- In plenary, ask for volunteers to display their 'plates' on a wall or table and explain them to the whole group. Encourage discussion and try to reach agreement on a set of plates that represents the community.

What is a plate diagram?

A plate diagram shows the composition of population groups. Sub-groups are represented as portions of food or ingredients on a plate. If the number of units in each group or sub-group is known, this is also marked on the diagram, but relative proportions are more important than exact quantities.

For example:

The community



Facilitation tip

Depending on the typical foods in the region or country where you are conducting the PCVA, you may prefer to talk about 'slices of a cake/pie/bread/chapatti', etc.



KQ2. What are the gender/generational roles in the community?

Use the **Daily time chart** tool to explore the answer to this key question:

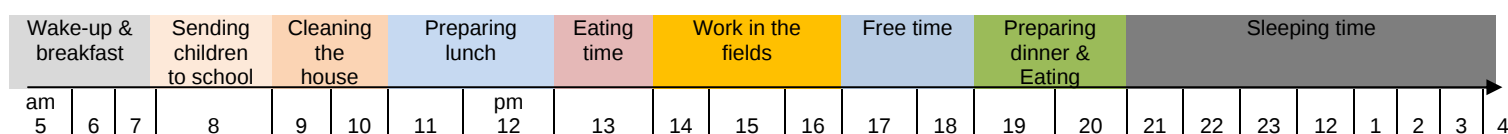
- Form four groups of 5–8 people. Group 1 is of adult women (typically mothers); group 2 is of older adult women (typically grandmothers); group 3 is of adult men (typically fathers); and group 4 is older adult men (typically grandfathers). Grouping by gender is particularly important, as the daily activities carried out by women will probably differ greatly from those carried out by men.

What is a daily time chart?

Daily time charts show how people spend their time over the course of a day. Blocks of time dedicated to certain activities are usually shown as fractions of a horizontal line, in which the width of the block represents the duration of the activity.

- Explain that each person will make their own daily time chart, although participants will discuss them together and help each other.
- Ask participants to discuss in their group what they generally do at this time of year from the moment they get up to the moment they go to bed. Make sure each person has had a chance to speak.
- Pre-prepare sheets of paper for each participant with a horizontal line and 24 points on it of equal distance, to represent the 24 hours in the day. The first point on it indicates the time they get up and start their daily routine. Participants may want to mark each point with a specific time, such as '6 o'clock'.
- Then ask them to mark each activity, in the order in which they do it, and how long it takes them. Participants should label the blocks with words or symbols to represent the activities.
- If there is time, ask them to produce a new chart to represent a typical day in a different season, such as harvest time, or planting.
- Encourage participants to discuss their charts, either as they are doing them or once they have finished. Ask for volunteers to present and explain their charts to the whole group.

Example of a daily time chart



Facilitation tip

Depending on how familiar participants are with using a standard, 12-hour analogue clock face to tell the time, you may prefer to use clock faces to represent daytime and night-time, with each fraction representing a different activity. Whichever method you decide to use, make sure that the whole group uses the same one; otherwise it will be difficult to compare the results.



KQ3. Which groups and organisations exist within the community?

Use the **Circle diagram** tool (option A) to explore the answer to this key question:

- Form four groups of 4–6 people, (2 male groups, 2 female).
- Ask participants to brainstorm the different groups and organisations (social, religious or other groups) in their community. They may wish to note these or have a facilitator assist with this.
- Ask them to draw the first circle (covering almost all the paper/area) to represent the community.
- Explain that in the picture they are about to create, a large circle represents an important actor, and a smaller circle shows a less important actor.
- Explain that a circle placed near another shows a close relationship or significant influence, whereas one that is further away shows a less close relationship or minor influence.

What is a circle diagram?

A circle diagram is a type of diagram in which participants draw a number of circles to represent different actors in their community, or with whom their community interacts. The size of each circle indicates its relative importance or influence. The position of each circle indicates its relationship to the other circles.

Option A: If the circle diagram is being used to show the relationship between **different actors within a community**, each actor is usually shown as a smaller circle within the largest circle, which represents the whole community.

Option B: If the circle diagram is being used to show the relationship between **external actors and the community**, a medium-sized circle is usually drawn in the middle to represent the community, and a number of circles or relative proportions are drawn at appropriate distances around it to represent the external actors.

- Explain that the circles may overlap if they represent actors with members/elements in common.
- Now ask participants to draw circles of different sizes to represent the main actors in, or involved with, their community, positioned according to their importance or influence.
- When participants have finished their diagrams, bring them together and ask for volunteers to present and explain their charts to the whole group. Ask probing questions about each circle, its size and relationship to the other circles. If the diagrams are similar, produce a combined one. If the diagrams are very different and there is no agreement on a common one, keep all of them.

Facilitation tip

As all participants in each group need to agree the relative size and position of each circle, it is better to use materials that allow them to rub things out as they are drawing (so use chalk or wipe-clean marker pens).



KQ4. Which government and private sector institutions exist within the community, and which external institutions does the community interact with?

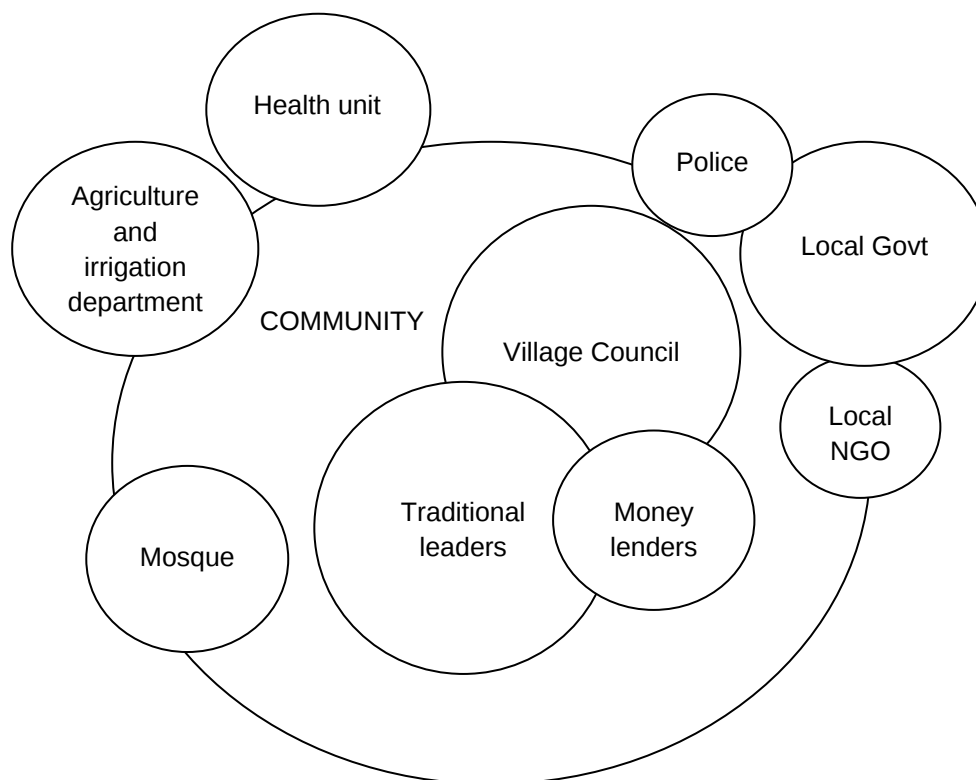
Use the **Circle diagram** tool (option B) to explore the answer to this key question:

- Form four groups of 4–6 people, (2 male groups, 2 female).
- Ask participants to brainstorm which government and private sector institutions they have contact with or whose services or facilities they use. These could be district health bodies, schools, agricultural extension services, banks or money-lenders, for example. They may wish to note these or have a facilitator assist with this.
- Ask them to draw the first circle (medium-sized, in the middle of the paper/area) to represent the community.
- Explain that in the picture they are about to create, a large circle represents an important actor, and a smaller circle shows a less important actor.
- Explain that a circle placed near another shows a close relationship or significant influence, whereas one that is further away shows a less close relationship or minor influence.
- Now ask participants to draw circles of different sizes to represent the institutions they identified in the brainstorm, and position them according to their importance or influence.
- When participants have finished their diagrams, bring them together and ask for volunteers to present and explain their charts to the whole group. Ask probing questions about each circle, its size and relationship to the other circles. If the diagrams are similar, produce a combined one. If the diagrams are very different and there is no agreement on a common one, keep all of them.

Facilitation tip

As all participants in each group need to agree the relative size and position of each circle, it is better to use materials that allow them to rub things out as they are drawing (so use chalk or wipe-clean marker pens).

Example of a circle diagram



KQ5. What are the main livelihood strategies in the community?

Use **semi-structured interviews** to explore the answer to this key question:

- Select the number of households to be interviewed, based on a sample size (for instance, x per cent of the total number of households in the community).
- Discuss with community leaders the need to identify the widest possible range of strategies used by community members, and ask for their help in selecting the households to be interviewed.
- Arrange a convenient time (or times) to visit each household so that you can speak to each of the adults and children who work in some way to contribute to the household's food supply and/or income.
- Using the following sequence of questions, find out what each adult or child does to contribute food or money to the household:

- ❖ What did you do/what are you going to do today that helps to provide food and income for the household?
- ❖ What do you do on other days?
- ❖ What do you do in other seasons?

What is a semi-structured interview?

A semi-structured interview is a form of guided interview in which only a few general questions on the topic of interest are decided upon before the interview. Most of the questions will be formulated during the interview, prompted by the respondent's reactions and answers.

Record the activities on a chart such as the one below, with a column for each household member and a row for each activity:

Example of a chart that records the answers to questions about livelihoods

Household #1	Father	Mother	Eldest daughter	Eldest son
Fishing	X			X
Growing corn	X	X	X	X
Raising chickens		X	X	
Selling eggs		X		

Before you leave, invite the selected households to participate in the next exercise, which involves creating an annual calendar for livelihoods activities.



KQ6. What cycles do the main livelihood strategies follow?

Use the **annual livelihoods calendar** tool to explore the answer to this key question:

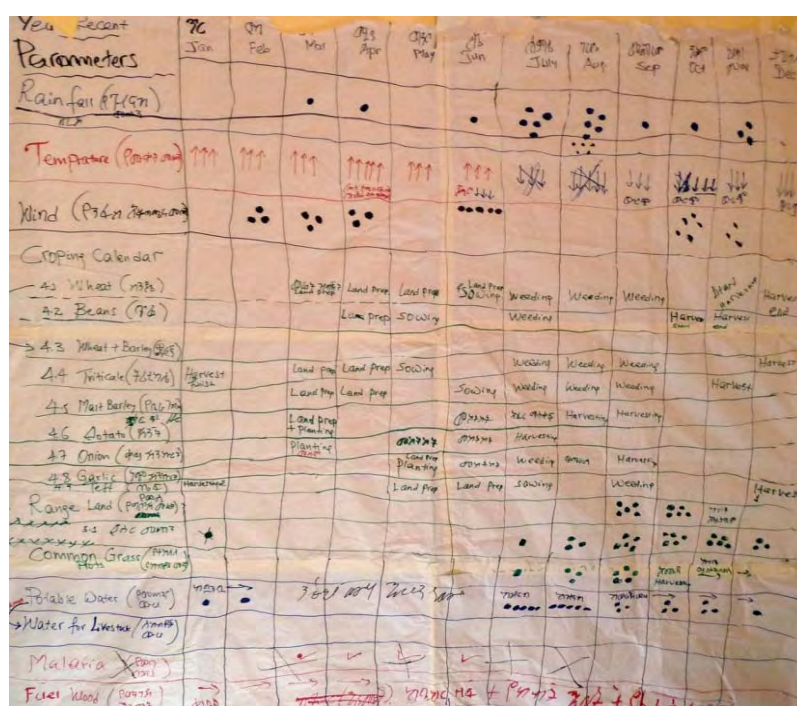
- In a meeting including as many of the participants in the KQ4 exercise as possible, divide the wider group into smaller groups of up to 10 men or women. Ensure that there is at least one group of men and one group of women.
- Prepare charts with 13 columns (one for the list of activities and one for each month of the year). Then ask participants to label the columns accordingly, starting with the month that they consider to be the beginning of the year or productive cycle.
- Ask the group to list, in the first column, the livelihoods activities they each identified in the previous exercise. Then ask them to shade/mark the relevant month(s) for each activity.
- In plenary, ask for a volunteer from each group to share their results. Then encourage them to interpret them, making linkages between the charts if possible.
- Using the chart that best represents the range of livelihoods activities, add the information from other groups to produce a summary. You will need to use this at subsequent stages of the PCVA process.

What is an annual livelihoods calendar?

An annual livelihoods calendar is a diagram that shows the key livelihood activities for individuals or communities during an annual cycle.

The diagram is usually drawn in the form of a chart with a column for each month of the year and a row for each event, process or activity.

An example of an annual livelihoods calendar from Ethiopia (content explained on next page)



Example of a seasonal calendar

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Rainfall			V low			V low	V high		V low		Medium	
Temperature	High			V high	High				Frost		Frost	
Wind		Medium				V high				V high	Medium	
Wheat			Land prep				Sow	Weeding			Harvest	
Beans				Prep	Sowing		Weed			Harvest		
Wheat + Barley												Harvest
Triticale	Harvest		Land prep		Sowing		Weeding				Harvest	
Malt Barley			Land prep			Sowing	Weeding					
Potato			Prep	Sow		Land prep		Harvest				
Onion			Sow			Prep	Harvest					
Garlic					Prep	Sow	Prep	Weeding		Harvest		
Teff	Harvest				Land prep		Sowing		Weeding			Harvest
Range land									High	High	No cattle	
Grass amount							Low	Medium	High	High	High	Medium
Common grass							Low	Medium	High	Harvest	Cattle	Cattle
Potable water	Low (tap)						V high (rain)		Medium (running water)			Low (running)
Fuel wood	Low				From eucalyptus tree+ cattle and horse dung							

Facilitation tips

While it is very important that the team understands the full range of households' sources of income or food, as hazards may affect some more than others, some people may not be willing to disclose their livelihood strategies. This may be because they are ashamed of them (as in the case of prostitution, for example), because they are illegal, or because they do not want other family members to know. Facilitators need to be prepared for this so they can decide whether or not to probe further. It is likely that such strategies will be mentioned again in the PCVA process as coping strategies in times of disaster or difficulty, and at that stage they can be mapped without attribution to individuals or households.

Although not its primary purpose, the semi-structured interview also serves to validate the information generated for KQ2 about gender and generational roles.

In some contexts, people may prefer to list activities according to the seasons rather than months of the year. In this case, ask participants to name the seasons and agree on their relative duration.



KQ7. Which natural and physical resources are important to livelihoods, life, and well-being in the community?

Use a **resource map** to explore the answer to this key question:

- Form two groups of 6–8 participants (one group of men, one of women) who have a combined knowledge of the range of livelihood activities explored in the previous exercise.
- Ask participants to walk through the different physical locations/areas within the community in pairs, noting the resources that are important to *livelihoods, life, and well-being* in the community.
- On their return, ask them to transfer their observations and notes on to a large map of the community, marking all the natural and physical resources they can recall.
- When they have finished, ask for a volunteer from each group to share their map, explaining any symbols they may have chosen to use, and why the resources are important.
- By agreement, select the best map of the community and add the resources identified by the other groups, to give one comprehensive resource map of the community.

Facilitation tips

It is very important that participants consider the resources needed for *all three areas*: life, livelihoods, and well-being.

This exercise can take a long time, depending on the physical boundaries of the community or village. Facilitators need to give clear instructions regarding how long participants should spend walking around before returning to feed back their observations.

Example of a base map



Triangulating your results

What is a resource map?

A resource map is a way of visually recording information about the natural and physical resources to which the community has access, and are important to people's livelihoods and well-being.

Participants usually draw a map of the community following a series of transect walks. On it, they circle or mark resources using appropriate symbols.



After you have recorded the results of the exercises for the seven KQs in this stage, you should triangulate (cross-check) them with any relevant secondary data you collected in Stage 2, and discuss them with the community leaders. If there are significant gaps or discrepancies, you may wish to repeat particular exercises with another group of participants to obtain additional datasets for comparison.

Congratulations! You have successfully completed Stage 3 of the PCVA process. You are now ready to move on to Stage 4, where you will work with the community to analyse hazards, the impact of climate change, and their vulnerabilities and capacities.

Stage 4: Analysing hazards, the impact of climate change, vulnerabilities, and capacities

This stage of the PCVA process is designed to enable the community members themselves to analyse their vulnerabilities and capacities when it comes to natural hazards, weather and the impact of climate change.

Expected output: *These exercises will produce a hazard, capacity and vulnerability matrix – a visual representation of the community's views about what makes them vulnerable, and how they analyse disaster risk. This is essential so that the community can prioritise risks and develop an appropriate risk reduction action plan, in the two subsequent stages of the PCVA process.*



KQ8. What are the hazards affecting this community?

Use the **hazard map** tool to explore the answer to this key question:

- Form 2 groups of 6–8 men and women, and possibly children, who are familiar with the area.
- Use the definition of 'natural hazard' (given on page 4) to create a common understanding of what constitutes a hazard. Give examples from another location (ideally, one that is known to community members) to clarify what the word means in practice.
- Use the definition of 'exposure' (given on page 4) to create a common understanding of what is exposed to the hazard. Give examples from another location (ideally, one that is known to community members) to clarify what the word means in practice.
- Ask participants to walk through the different sectors of the community in pairs, making notes of the hazards they notice and any assets that are exposed to them.
- On their return, ask them to transfer their observations and written notes onto a large map of the community, marking all hazards and, if possible, their likely extent of impact on exposed assets, including both the geographical extent of the impact, and the extent to which an exposed asset might be damaged.
- When they have finished, ask for a volunteer from each group to share their map, explaining any symbols they have chosen to use.
- By agreement within the group, select the best map of the community, then add the hazards and exposed assets identified by the other groups, to produce one comprehensive hazard map.

What is a hazard map?

A hazard map is a way of visually recording information about the hazards that affect (or could affect) the community.

The map depicts the type of hazard, its location, route/influence, its potential extent, and resources that are exposed to it (such as houses, fields, livestock, roads and bridges, grain stores, or market places).

Hazards may be marked using a cross or another well-known symbol. The extent of their impact is usually shown by shading or directional arrows. The exposed elements are marked with appropriate symbols.



KQ9. How have the different hazards affected the community at different times?

Use the **historical timeline** tool to explore the answer to this key question:

- Form groups of 4–6 participants, at least one of which is comprised solely of women. You should try to include older men and women in this activity.
- Ask each group to draw a timeline going back as far as they can remember (including information they have been told by their parents and grandparents if appropriate). On it, they should mark major events and the impacts of hazards and changes (good and bad), how frequently they occurred, and how severe or intense they were. These should include:
 - ❖ Major disasters such as a drought, flood, typhoon, earthquake, crop disease outbreak, water shortage, or period of hunger. Participants should mark the intensity (based on crop losses, lives lost, or other indicators they choose), and frequency of the event.
 - ❖ Major events for the community – political or social events, festivals/celebrations, bumper harvests (these are good markers for people to check their recollections against, but should not be the main focus of the discussion/exercise).
 - ❖ Unusual events such as: early rains; bumper harvests; and changes in temperature, availability of water, or seasons (can they say when such changes occurred, what triggered them, and how long the changed situation lasted?).
- In plenary, ask the groups to present their timelines and discuss similarities and differences. Encourage participants to identify any patterns or trends emerging from the timelines, and possible reasons for any differences in the frequency and intensity of similar events. For example, if flooding is occurring every five years, but the intensity is decreasing, is this a result of something they or others are doing? If the flooding is becoming worse every year, is it because of activities that are increasing the flood risk, or heavier and longer rains, etc?
- Using both sets of information, ask participants (in plenary) to develop a full timeline of changes and trends.
- Using the secondary data you collected relating to local disasters and weather patterns, ask probing questions about any events or trends you were expecting to be mentioned but that have not been brought up.

Take care not to ‘introduce’ events yourself – only information that comes from the community should be recorded in these exercises. But if you were expecting to hear about typhoons starting to affect the area recently, and this is not mentioned, just keep checking with the group that they are satisfied that they have included everything significant relating to weather, hazards, and changes/challenges they face. Give them more time to reflect on what has been recorded if necessary.

Facilitation tips

Create a very visual timeline such as in the example on page 29. This really helps people to visualise trends by showing the frequency of events (the number of occurrences from left to right) and their intensity (height of marking). However, as this limits the amount of detailed information that can be collected, it is also useful to record more detailed information alongside the chart in a table (as in the example).

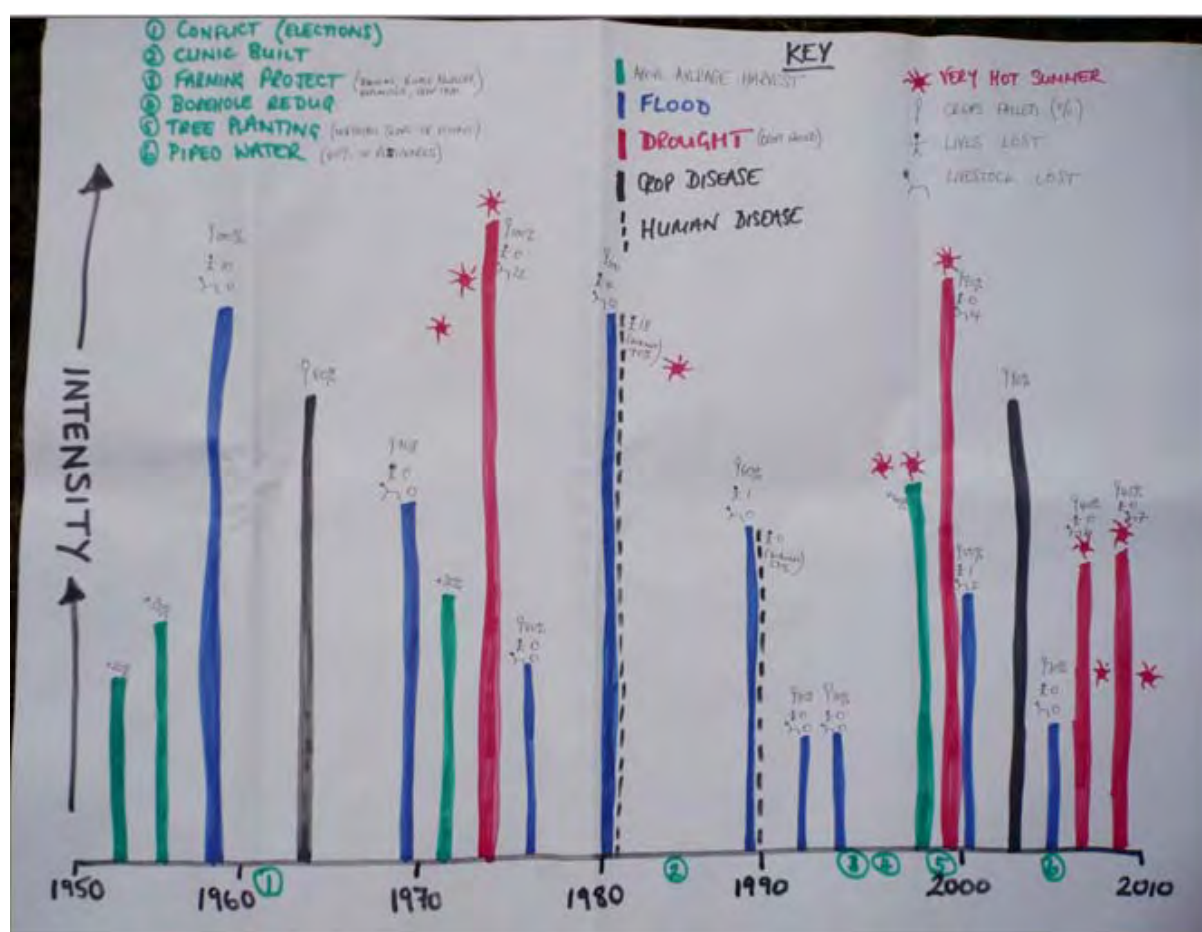
Remember that there may be a bias in the timeline, as events in recent history are more likely to be noted than events that happened 20 or 30 years ago, and sometimes people perceive things as being ‘better’ a generation ago. Check this bias by challenging participants in plenary, asking questions like ‘was it like this before?’, ‘how was this different to the flood 30 years ago?’, etc.

What is an historical timeline?

An historical timeline is a diagram that shows noted events in a community’s history.

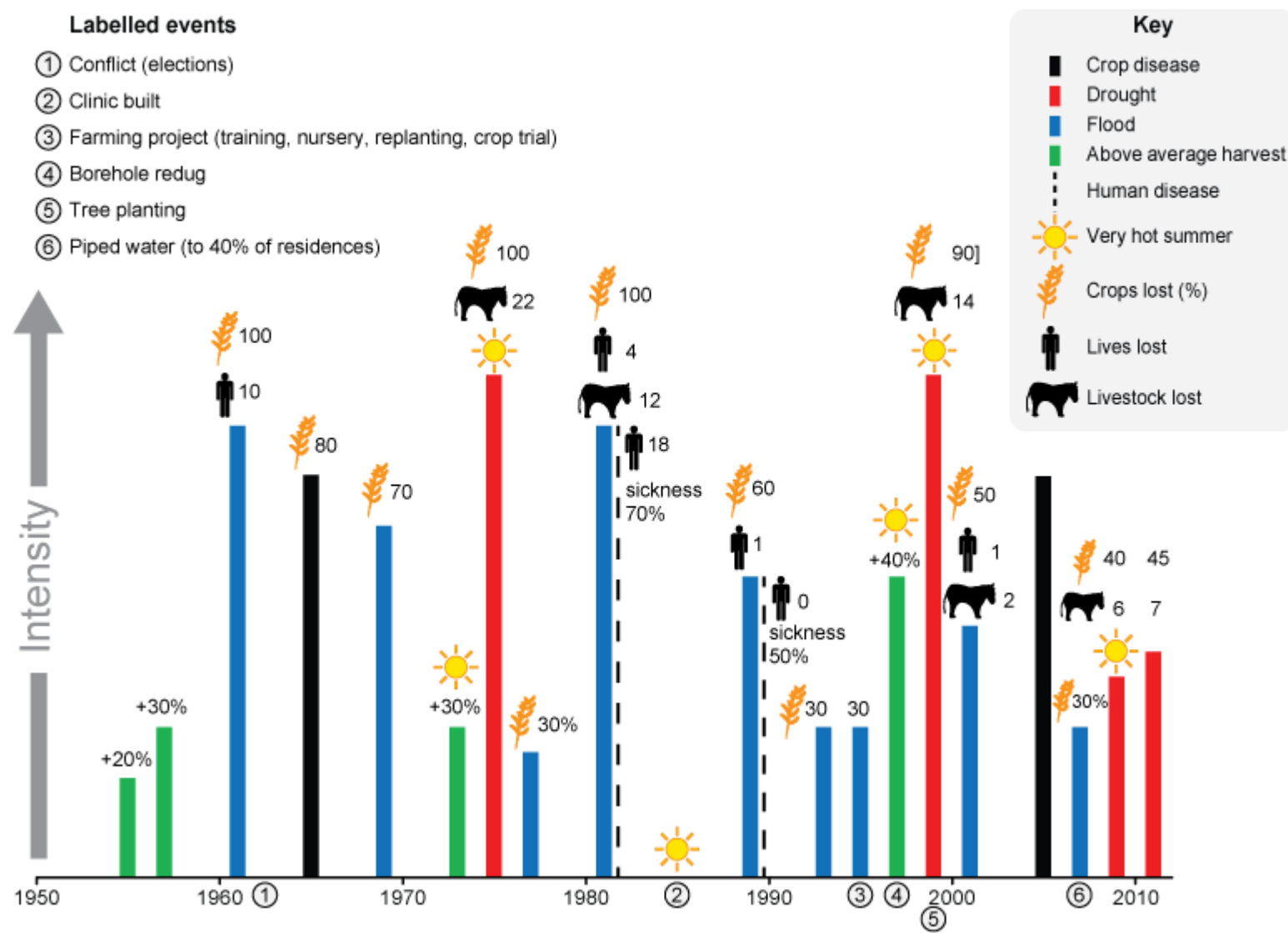
It helps communities gain a better insight into past events, trends and changes.

Example of a timeline (recreated version on next page)



Date	Event	Observed trends
2010	Persistent drought (since 2008) with hot summer, and failed crops	- Seasons changing, with longer drought periods and more unpredictable wet season (heavier downpours over a shorter period of time) - More frequent non-severe flash flooding in the past 5 years - Elders can't remember such bad cyclones
2000-2005	Severe drought with major destruction of crops, accompanied by hot summer Crops suffered diseases Severe floods caused major destruction	
1999	Bumper crop, accompanied by a very hot summer	
1996	Floods – damage to crops <i>A farming project was started by the government</i>	
1990	Floods, with 60% of crops lost Diseases, with 50% of the population affected	
1980	Floods, with 100% of crops destroyed Human diseases, with 70% of the population affected <i>A clinic was built in 1982</i>	
1975	Drought, with 100% loss of crops	
1972	Good harvest season	
1970	Floods, with 70% crops destroyed	
1965	Crop disease, destroyed 80% of the standing crops	
1960	Major flooding, with 100% crops destroyed and loss of lives <i>Election times with intense riots</i>	

Example of timeline





KQ10. How have hazards changed (or how might they change) as a result of climate change?

Using the **hazard map** and the **historical timeline** produced by the groups during KQ8 and KQ9 respectively, discuss how climate change has already changed the hazard profile facing the community, or how it may change the hazard profile in future:

- Re-form the same groups as for KQ8.
- In plenary, discuss the differences between the terms 'weather', 'climate variability', and 'climate change'. Establish a common understanding of the term 'climate change' (use the simple definitions given in the box opposite). Ask the groups to describe what they understand by each term, giving examples to clarify what they think the word means in practice.
- Share some of the information you collected during Stage 2 from secondary sources about how the climate is changing in the region, and scientists' predictions for future climate change. Ask participants to think about whether these changes reflect their own understanding of how climate change is affecting them. This will enable you to develop a fuller picture of what is happening.
- Also explain that while the climate is changing globally, the impact will be felt at the local level and that, because the impacts of global climate change cannot be undone, communities need to adapt and prepare for the changes.
- Using their **hazard map** and **historical timeline**, ask each group to answer the following questions:
 - ❖ What are the biggest weather-related hazards that your community faces?
 - ❖ Have any of these weather-related hazards changed in the past, and if so, how?
 - ❖ How might they change over time as a result of climate change? (In 5, 10, or 50 years?)
- Ask each group to record their answers on a flipchart. Encourage the groups to think about how the hazards facing the community have already changed as a result of climate change or climate variability. Using their observations (along with the information you shared earlier from secondary sources), ask participants to think about how these changes will affect them in future.
- Bring the groups together in plenary and encourage a volunteer from each group to share their results. Ask the groups to summarise the changes most commonly noted on a flipchart.

What is climate change?

A change in the climate that persists for decades or longer, arising from human activity that alters the composition of the atmosphere (i.e. greenhouse gas emissions).

What is climate variability?

Natural variations in the climate that are not caused by greenhouse gas emissions (e.g. it rains more in some years and less in others).

What is climate?

The average weather conditions prevailing in an area over a long period of time.

Example: Recording changes in hazard mapping over time as a result of climate change

Weather/climate-related hazard	Changes to hazard profile in the past 10–20 years	Possible changes for the future: in 5 years' time	In 10 years' time	In 50 years' time
Flash floods	Flooding has become more frequent in the past 5 years	Likely to be equally frequent and intense	Flooding may become <i>more</i> frequent and intense due to glacier melt and deforestation.	Flooding may become <i>less</i> frequent as precipitation declines and glaciers melt
Late rains	This has happened a few times	The information provided suggests this may continue to happen from time to time	Possibility of a permanent shift to a shorter, later rainy season, starting in May instead of April	There may be a permanent shift to a shorter, more intense, and more unpredictable rainy season, possibly starting in May or June instead of April



KQ11. How do the identified hazards affect families and the resources on which they rely for their livelihoods?

Use the **impact visualisation** tool to explore the answer to this key question:

- Create four groups of 5–8 men and women, preferably those who took part in previous exercises and demonstrated confidence in group work, and possessed good analytical skills.
- Provide each group with a ready-made chart of 5 columns, in which you have placed a list (or pictures) of the hazards identified by the groups in previous exercises in the far left column, and labelled the other columns 'who/what/which', 'when', 'where' and 'how' (see example below). NB: Leave space on the right-hand side to add another column, for KQ12.
- Ask each group to explore one of the following subjects:
 - ❖ Families' daily lives
 - ❖ Community groups, organisations and institutions
 - ❖ People's livelihood strategies
 - ❖ People's productive resources
- Ask each group to discuss each of the hazards in turn, noting their responses in the relevant column.

Example of using the impact visualisation tool (in a group discussing the impact of hazards on families' daily lives)

Hazards	Who or what is affected	When	Where	How families are affected
Landslides	Up to 20 households living on steep slopes	After heavy rains	Hills on eastern side of community	Lose their houses Lose possessions People injured or killed
Flooding	20-40 households close to river banks	After heavy rains for several days	Southern part of community	Get sick Move out of houses Possessions damaged
Late rains	Corn farmers	February	Plots far from river with no irrigation	Small corn plants wither so they have less food to eat



KQ12. How does the community seek to reduce the impact of hazards?

- Ask each group to add another column to the right-hand side of their chart, and label it 'Risk reduction strategies'. Ask them to discuss what the community does to reduce the impact of each of the hazards on people's homes and livelihoods, community institutions, and organisations (as appropriate).
- Bring the four groups together in plenary to present their charts. Allow enough time for discussion.

Facilitation tips

At least one of the participants in each group will need to possess good literacy skills to record the discussion in the chart.



KQ13. Why are community members negatively affected by hazards?

Use the **problem tree** tool to explore the answer to this key question.

- Form four groups of 5–8 men or women, preferably those who took part in previous exercises and demonstrated confidence in group work and good analytical skills.
- Summarise each of the impacts ('problems') described in the previous exercise (in the 'How?' column) on a piece of card. Taking one card at a time, ask the participants 'Why does that happen?' Write their answer on another piece of card and repeat the question, 'Why does that happen?' Continue to ask the same question and put the answer on a card until they have reached the root causes of their vulnerability and poverty (you now have a 'cause–problem sequence' for each). Repeat the above process until you have discussed the reasons behind each of the impacts.
- Display all the cards in order where all participants can see them.
- Draw a large tree (on a flipchart, or using a stick on the ground) and ask participants to help you arrange the cards with the problems at the top, and the causes below them, until you reach the 'roots'. Link problems that have the same causes together.
- Explain to the groups that they have produced an important analysis of the causes of their vulnerability. They can use their analysis in the next exercise, KQ14.

What is a problem tree?

Drawing a problem tree involves participants identifying, writing and placing causes of problems on the 'trunk', 'roots' and 'branches' of a tree to represent the causes and effects of a problem. These are likely to include unsafe conditions, lack of institutions, global trends in urbanisation and migration, belief systems, structural inequities, climate variability, and climate change. An example can be found on page 34.



KQ14. How can the community reduce its vulnerability to hazards?

Use the **solutions tree** tool to explore the answer to this key question:

- Using one of the cause–problem sequences the group has just put together, explain how we can find solutions to hazards by turning each problem on its head and making it into a positive statement. Invite participants to do the same for each cause–problem sequence, until they have transformed all the problems and their causes into potential solutions.
- Explain that what they can now see is a '*solutions tree*', which tells us what needs to change in order to reduce the community's vulnerability to hazards. Invite participants to be involved in the next stage of the process to ensure that their solutions are taken into account when drawing up the community's risk reduction action plan.

What is a solutions tree?

A problem tree can be transformed into a solutions tree by formulating an opposite statement for each of the problems and causes. This provides a visual representation of what can be done to address the causes of the problem. An example can be found on page 35.

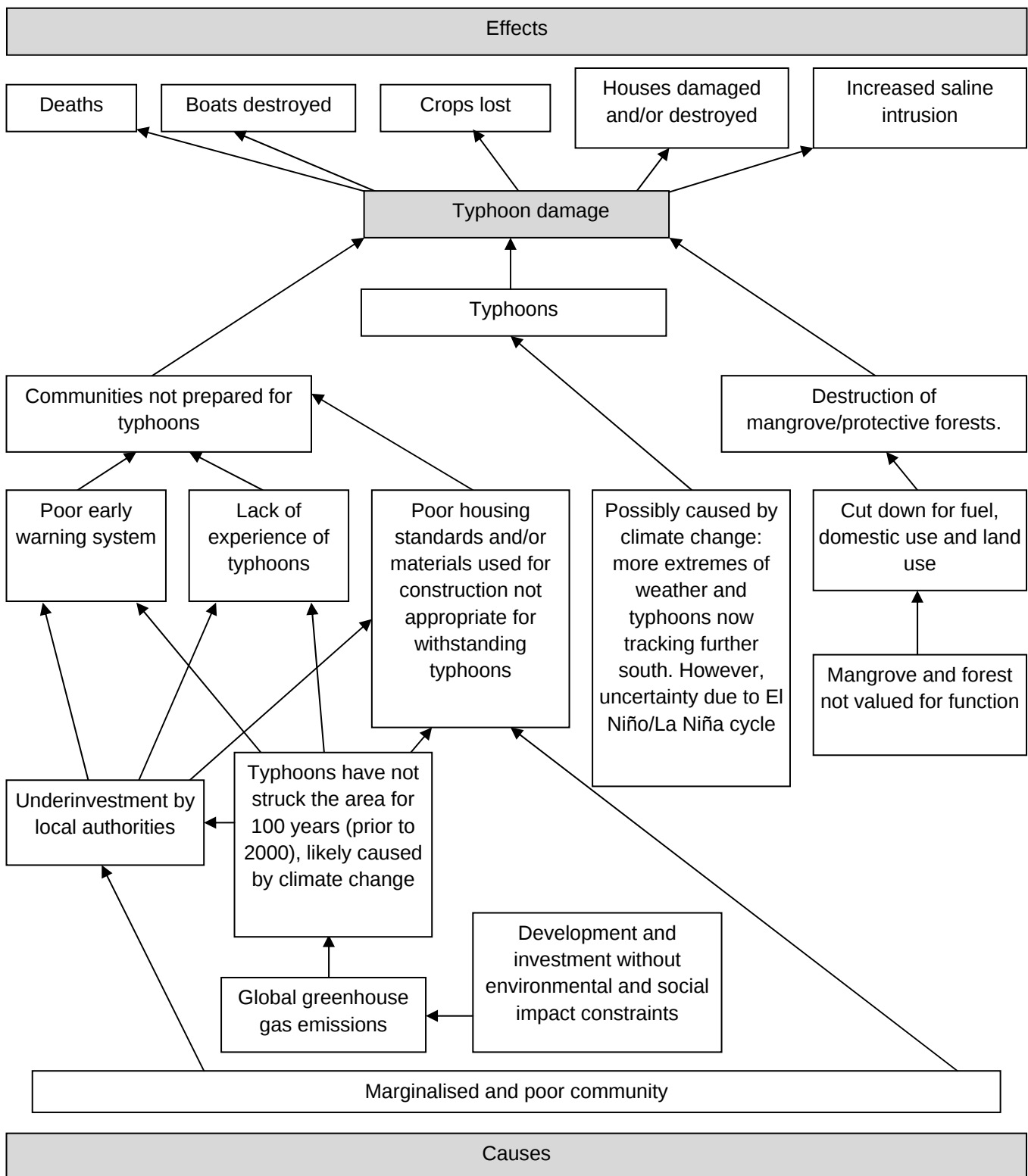


Triangulating your results

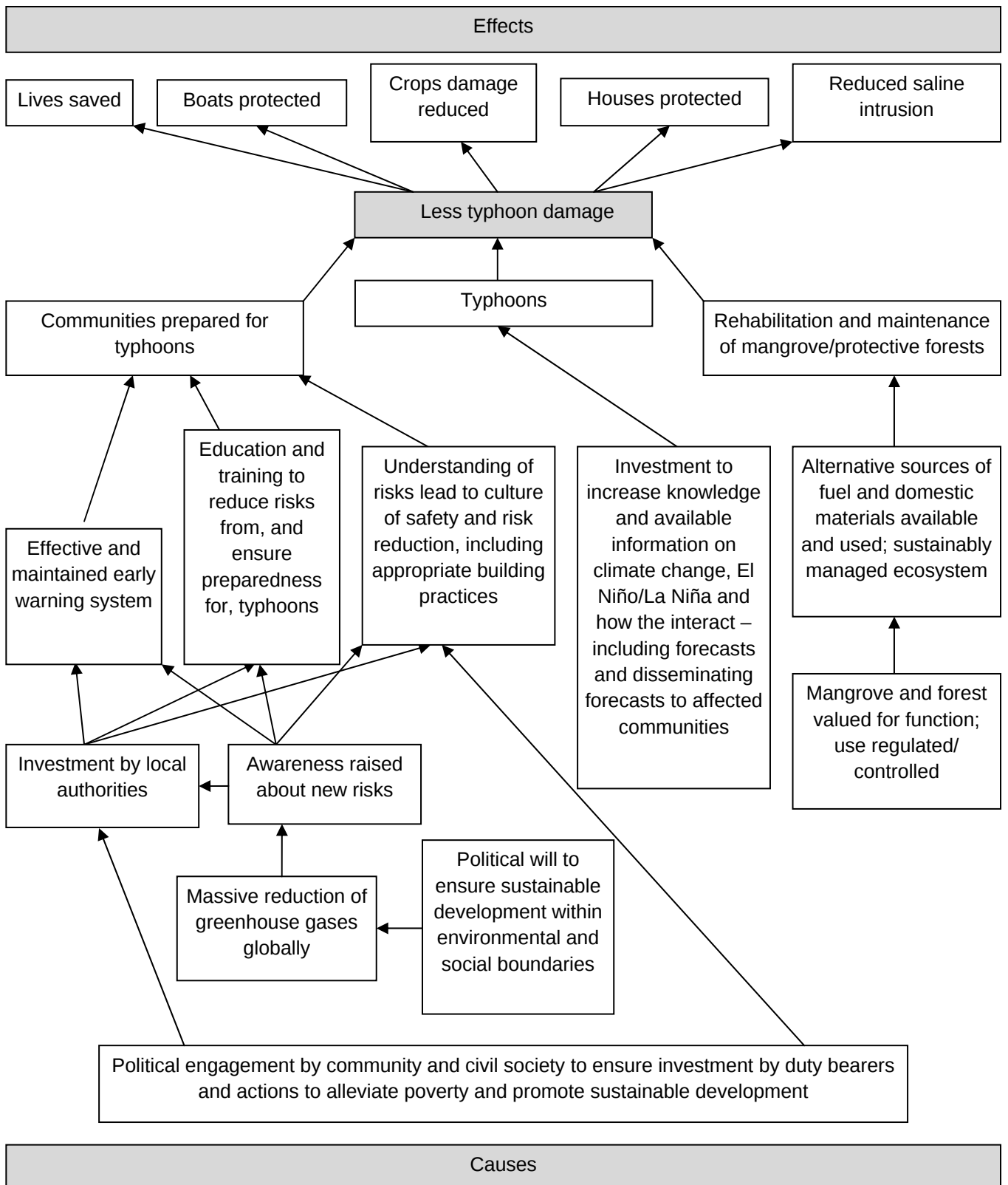
After you have recorded the results of the seven KQs in this stage, compare them with any relevant secondary data you collected in Stage 2 and discuss them with the community leaders. If there are significant gaps or discrepancies, you may wish to repeat particular exercises with another group of participants to obtain additional datasets for comparison.

Congratulations! You have successfully completed Stage 4 of the PCVA process. You are now ready to move on to Stage 5, which focuses on prioritising the risks faced by the community.

Example of a problem tree from Vietnam



Example of a solutions tree from Vietnam



Stage 5: Prioritising risk

This part of the PCVA process is designed to enhance the community's understanding of the components of risk, and to enable participants to compare different sources of risk.

Given that the key questions in this stage and the next stage are somewhat more complex than previous ones, you should identify a core group of participants who are able to be involved in both stages. However, you should still try to ensure a balance between women and men.

The PLA tools used here are also more demanding of the facilitation team's skills. The team should prepare for this by ensuring that the outputs of previous stages are available during group discussions (for reference), and by reviewing any relevant secondary data.

Expected output(s): *The community has ranked (prioritised) the different types of risks they face and the assets that are most at risk.*



KQ15. Which hazards present the highest risk to the community?

Use the **risk quadrant** tool to explore the answer to this key question:

- Form a group of 4–6 women of different ages.
- Explain the terms 'probability' and 'impact' using the definitions in the box opposite. Provide examples from another location to clarify what the words mean in practice.
- Ask the group to draw a box and divide it into four quadrants, labelled as shown in the example below.
- Using the outputs from the previous stage, discuss how likely it is that each hazard may occur, and the likely level of impact (bearing in mind that these are not static and may change over time). Once there is a reasonable consensus among participants, write their responses in the relevant box, explaining how the method works.
- After the group has discussed each of the hazards, explain that you have ranked the level of risks, with those in the top-right being of highest risk, followed by the top-left, and the bottom-right. Make any changes the group thinks necessary at this stage.
- Repeat the process with a group of 4–6 men. Then bring the two groups together, if possible, to discuss their rankings. Although they may differ, both outputs are equally valid and should be kept for later use.

What is a risk quadrant?

A risk quadrant is used to develop a common understanding of risk and to compare different sources of risk.

What do we mean by 'probability'?

The number of times a certain hazard usually occurs within a given timeframe (one year, one decade, etc), bearing in mind any changes (sudden or gradual) to what is considered 'normal' as a result of climate change.

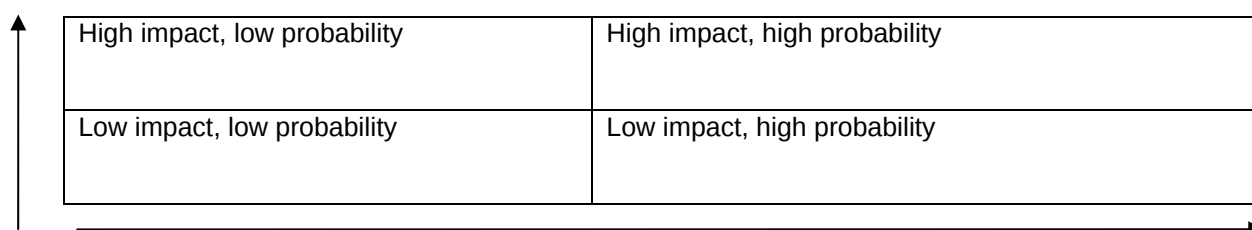
What do we mean by 'impact'?

The usual or anticipated consequences of such events/changes. These include losses of or damage to property, productive assets and services; social and economic disruption and environmental degradation; and the number of people killed, injured, or otherwise affected.

Facilitation tip

If, during the discussion about trends, there is a discrepancy between the community's observations of climate change and what climate predictions tell us, plot the hazard at a midpoint between them.

Example of a risk quadrant



High impact, low probability	High impact, high probability
Low impact, low probability	Low impact, high probability

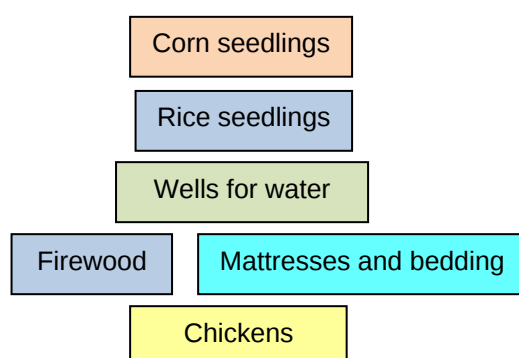


KQ16. Which assets are at greatest risk?

Use the **ranking tool** (ideally with the same group of 4–6 women who took part in the KQ15 exercise).

- Explain to participants that they will be putting assets in a particular order, according to their importance.
- Look back at the charts produced during previous exercises showing the impact of the risks and hazards identified (especially KQs11 and 15). Ask the group to write the name of each asset that is at risk from a hazard on a coloured card. Assets might include buildings such as houses or schools, productive assets such as domestic animals, natural resources, or personal assets like people's health, etc.
- Ask the group to discuss which assets are most at risk, and to place the coloured cards in order of importance from top to bottom.
- When participants have finished ranking the assets, ask them to explain why they have placed each card in that position.
- Repeat the process with a group of 4–6 men. Then bring the two groups together, if possible, to discuss their rankings. Although they may differ, both outputs are equally valid and should be kept for later use.

Example of using ranking to prioritise risk (in a flood-prone context)



Triangulating your results

After recording the results to the key questions in this stage, compare them with any relevant secondary data you collected in Stage 2 and discuss them with the community leaders. If there are significant gaps or discrepancies, you may wish to repeat particular exercises with another group of participants to obtain additional datasets for comparison.

Congratulations! You have successfully completed Stage 5 of the PCVA process. You are now ready to move on to Stage 6, where you will work with the community to develop their risk reduction action plan.

Stage 6: Developing a risk reduction action plan

This is the final part of the PCVA process that involves the team working directly in and with the community.

It is vital that the community owns the analysis that has been carried out, and the subsequent action plan. For this reason, you should begin by organising a community meeting to share the analysis produced during the PLA exercises in Stages 3–5. Make sure you include time for members of the wider community to raise any questions, so that the results are properly validated.

For the key questions in this stage, you will need to ensure that participants have access to all of the outputs produced in stages 3–5.

Expected output(s): *The community will produce their own risk reduction action plan, which sets out what they can do to reduce risk.*



KQ17. How does the community want to address the most significant risks?

Use the **validity quadrant** tool to explore the answer to this key question:

- Invite up to 12 men and 12 women (from those attending the community meeting) to take part, forming two separate groups. Ideally, each group will include at least six participants who took part in Stage 5.
- Explain the terms 'effectiveness' and 'sustainability' using the definitions in the box opposite. Give examples from another location to clarify what these words mean in practice.
- Ask each group to draw a box divided into four, labelled as in the example below.
- Ask each group to discuss the **effectiveness** and **sustainability** of the risk reduction strategies identified during Stage 4 (KQ11). They should consider what has been learned about climate variability and climate change for each of the assets prioritised as being 'at risk' in Stage 5. Remind the group about the importance of the frequency of hazards and the impacts of climate change on resources that may have been used or sold as part of a coping strategy during a disaster (e.g. the unplanned sale of livestock). Once there is a reasonable consensus among the group, plot each coping strategy in the relevant quadrants.
- At the end of the process, summarise what participants have done, explaining that they have ranked the most **effective and sustainable** risk reduction strategies in the top-right quadrant, followed by the top-left and bottom-right quadrants. Discuss the results again, and make any changes on which the group agrees.
- Now ask each group to suggest new coping strategies (capacities) that may reduce the remaining risks. Using a different coloured pen, discuss each (as above) and plot them in the relevant quadrants.
- Bring the two groups together, if possible, to discuss their rankings. Where there are differences of opinion, plot the coping strategy in the higher of the quadrants in question.
- Explain to participants that the strategies they have placed in the top-right quadrant should form the basis of the community's risk reduction strategy, as they have been identified as the most effective and most sustainable elements of the action plan. Allow further time for discussion and ask participants to cross-check their results against previously identified hazards, most vulnerable groups, and the assets most at risk.

What is a validity quadrant?

The validity quadrant is used to develop a common understanding of the effectiveness and sustainability of different strategies, and to compare them.

What do we mean by 'effectiveness'?

The ability to produce the desired effect or result to reduce risks and/or vulnerability to hazards.

What do we mean by 'sustainability'?

Actions that do not deplete vital assets or cause future harm, and are able to be maintained in the longer term by the community using resources available to them.

Example of a validity quadrant

High effectiveness + Low sustainability	High effectiveness + High sustainability
Low effectiveness + Low sustainability	Low effectiveness + High sustainability



KQ18. How can the community address the causes of vulnerability?

Use the **tree pruning** tool to explore the answer to this key question:

- Invite up to 10 men and women (ideally including participants from the problem tree and solutions tree exercises, KQ13 and KQ14, respectively) to take part in this activity.
- Explain that the purpose of this exercise is to identify significant political and structural changes that need to take place in order to reduce the community's underlying vulnerability to disaster risks and the impact of climate change. Explain that the results will complement the coping strategies identified in the previous exercise.
- Choose the areas of the tree on which you will focus, by removing the cause–problem sequences for risks that have not been prioritised by the community in previous exercises. Taking each of the proposed solution sequences in turn, check which parts have already been included in the action plan. When you are sure that they have been included, 'prune' the tree by removing those 'branches'.
- Explain that the remaining solutions are likely to be the most difficult to achieve and may take several years, but they will bring about transformational change when implemented appropriately.
- Invite participants to attend the action planning session. Remind them that they will need to be prepared to explain their views on why such solutions should be included in the action plan.

What is 'tree pruning'?

This is used to select solutions on a solutions tree. In this case, it is used to prevent duplication of effort, as many measures to reduce vulnerability will already have been dealt with by other exercises.

The participants compare the solution chains with those prioritised by the validity quadrant. The actions that have already been included in the table produced in KQ14 are removed (or 'pruned'), as are those related to risks that have been judged to be less of a priority.

The remaining solutions are likely to be the structural and political changes that need to be tackled during the implementation phase of the action plan.



KQ19. How will the community implement its risk reduction action plan?

Use the **wall plan** tool to explore the answer to this question:

- Continue to work with the group of men and women who produced the validity quadrant (KQ17). Explain that participants will now be defining the core of the community's risk reduction action plan, and deciding how it will be implemented.
- Create a large chart (ideally with one 'poster-sized' sheet of paper for each column), labelled as in the example below. Stick it up on the largest available wall.
- Take each action in the top left quadrant of the validity quadrant, and list it in the first column on the wall plan. Ask participants to answer the following questions:
 - ❖ Can the community implement the action directly, or does it need to influence others, such as government, to do so?
 - ❖ When does the action need to be implemented?
 - ❖ Who will pay for the action to be implemented?
 - ❖ Who does the community need to work with to implement the action?
 - ❖ Who is responsible, within the community, for taking the action forward?
- Now ask participants to answer the same questions for the other solutions on the 'pruned' solutions tree. It is likely that at least some of the actions will need to be implemented by other actors, and will therefore require some advocacy work.
- Explain to participants that they have just produced a basic action plan that addresses the priority needs for risk reduction in their community.
- Invite leaders to call a community meeting to present the action plan. During the meeting, allow ample time for discussion. To answer questions, refer back to the different exercises undertaken during the PCVA process that brought participants to each new stage in their analysis. Leave visual representations of the outputs from the PCVA process in the village for people to refer to (e.g. photos or posters of the hazard maps, historical timelines, etc).
- Invite the community leaders to begin a process to amend the plan, if necessary, and then adopt it.
- Once the plan is adopted, encourage the community to appoint a risk reduction committee (including both men and women) to take the process forward. Agree how the committee will operate, how it will measure progress, and how it will be accountable to the community as a whole.
- Arrange a series of briefings with the stakeholders identified at the start of the process (and any identified subsequently) to take forward any actions that require the support of others.

Example of a risk reduction action plan

Action to be initiated or scaled up	Direct action by community? By whom?	Indirect action (advocacy)? Aimed at whom?	When?	Own resources available?	Additional resources required? Quantity?	With whom? Partners?	Who is responsible for taking forward?	Cost?
1.								
2.								
3.								

Congratulations! You have successfully facilitated the production of the community's risk reduction action plan, based on their own understanding of current and future risks, and their own strategies to address them. With this, you have also completed the last stage of the community-level PCVA process.

Stage 7: Putting the action plan into practice

When the community has finalised and adopted its risk reduction action plan, the facilitation stage of the PCVA process is complete. But the process of change in the lives of community members is just beginning. While this guide is not intended to accompany the implementation of the plan, it includes a description of the tasks that need to be completed to ensure that the community receives adequate support when they are putting the plan into practice – the implementation stage.

Before the facilitation team leaves the community, it should:

- establish a liaison group and a basic system for communicating with them to report on progress and arrange future visits;
- agree on how to compile a report on the PCVA process, including recording the outputs produced;
- establish an 'accompaniment team' to support the community in taking its plans forward, the membership of which should be discussed with the community;
- arrange the next meeting between the accompaniment team and the community.

Within two weeks of completing the PCVA process, the facilitation team should:

- produce a full report on the PCVA process and its outputs, and give it to the community;
- provide appropriate feedback to their organisation or institution and seek commitment to take forward some areas of the risk reduction action plan.

Within one month of completing the PCVA process, the facilitation team should:

- facilitate meetings between the community and other stakeholders (identified in Stage 1) to provide feedback and gain support for the action plan;
- arrange a return visit to the community to assist them with monitoring progress, and planning.

Annex: Summary of the seven stages of the PCVA process, and the key questions

STAGE 1: MAKING PREPARATIONS

Drawing up the terms of reference

Deciding which communities to work with

Selecting the facilitation team

Management, logistics, and timing

STAGE 2: COLLECTING SECONDARY DATA

What you really need to know

Using the secondary data

STAGE 3: BEGINNING WORK WITH THE COMMUNITY

KQ1. What is the demographic composition of the community?

KQ2. What are the gender/generational roles in the community?

KQ3. Which groups and organisations exist within the community?

KQ4. Which government and private sector institutions exist within the community, and which external institutions does the community interact with?

KQ5. What are the main livelihood strategies in the community?

KQ6. What cycles do the main livelihood strategies follow?

KQ7. Which natural and physical resources are important to livelihoods, life, and well-being in the community?

STAGE 4: ANALYSING HAZARDS, THE IMPACT OF CLIMATE CHANGE, VULNERABILITY, AND CAPACITY

KQ8. What are the hazards affecting this community?

KQ9. How have the different hazards affected the community at different times?

KQ10. How have hazards changed (or how might they change) as a result of climate change?

KQ11. How do the weather-related hazards identified affect families and the resources on which they rely for their livelihoods?

KQ12. How does the community seek to reduce the impact of weather-related hazards?

KQ13. Why are community members negatively affected by hazards?

KQ14. How can the community reduce its vulnerability to hazards?

STAGE 5: PRIORITISING RISK

KQ15. Which hazards present the highest risk to the community?

KQ16. Which assets are at greatest risk?

STAGE 6: DEVELOPING A RISK REDUCTION ACTION PLAN

KQ17. How does the community want to address the most significant risks?

KQ18. How can the community address the causes of vulnerability?

KQ19. How will the community implement its risk reduction action plan?

STAGE 7: PUTTING THE ACTION PLAN INTO PRACTICE

Immediate and short-term actions required to transition from the planning to implementation stages.

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