RESILIENCE AND ADAPTATION PLANNING FOR COMMUNITIES IN PROTECTED AREAS

STEP-BY-STEP GUIDE

UNEP

The United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC) is the specialist biodiversity assessment centre of the United Nations Environment Programme (UNEP), the world's foremost intergovernmental environmental organisation. The Centre has been in operation for over 30 years, combining scientific research with practical policy advice.

Citation

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...k g labour saving (coos, rice milling machine...
...d opportunities for girls education due to

...day care centre for children.
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Executive Summary

One of the most serious threats to our environment, economy and social well-being is climate change. The negative impacts of climate change are already being felt around the globe, and countless communities, particularly in developing countries, are becoming increasingly vulnerable. In response to climatic risks, communities need to understand and build appropriate strategies that not only provide some resilience to environmental change, but also offer an opportunity to adapt to it in a positive way. Protected areas (PAs) are important tools for conserving biodiversity and ecosystems, which provide numerous services that support the livelihoods of many people. Furthermore, their importance in climate change mitigation and adaptation is increasingly acknowledged. With this in mind, the United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC) has developed a step-by-step manual for engaging with communities living in PAs regarding climate change and empowering local people to plan for such change.

Resilience and Adaptation Planning for Communities in Protected Areas provides the practical tools needed to effectively engage with communities living in, and around, PAs regarding appropriate strategies to deal with the negative impacts of climate change. This manual outlines a practical and pragmatic community-based resilience and adaptation planning process, offering step-by-step guidance on initiating the planning process, engaging the community in it and refining and implementing action plans.

This manual is aimed at practitioners from non-governmental organisations (NGOs), government departments, PA management and research institutions with some experience in participatory work and a good understanding of climate change. The process described can be used to work with communities living in, and around, PAs of any management or governance type (for instance, co-management, state-run or community-governed) and can be tailored to different contexts. In addition, the detailed instructions on undertaking the community-based workshop component of the process, along with several practical annexes, are ideal for training workshop facilitators.

The resilience and adaptation planning process outlined in this manual is broken down into three main sections: 'Preparation', 'Workshop' and 'Refining and Implementing'. 'Preparation' provides guidance on the important elements to consider when initiating the process, as well as specific logistical preparations for the community-based workshop component of the process.

'Workshop' covers the community-based workshop component of the resilience and adaptation planning process. It starts with the Community Planning Workshop which assesses the vulnerability of the community to climate change, maps resources and capacities, gathers information on local values and future aspirations, and develops Community Action Plans. These action plans aim to build resilience to climate change through various measures, including adaptation options. Following this, a series of one-on-one Follow-up Interviews complement information gathered in the workshop, and a Scenario Development Exercise tests how robust the Community Action Plans are, offering improvements where necessary. Overall, the community-based workshop component has been designed to empower communities and is an important entry point for engagement.

'Refining and Implementing' provides post-workshop guidelines which are designed to ensure that the Community Action Plans will be resilient under current and projected climate change, can be sustainably implemented in the PA, and will be appropriate in the local social, economic and political context. It is important to refine these action plans through an iterative process of consultations with local communities, PA managers, technical experts and other key stakeholders.

This manual was developed in the context of the Climate-Resilient Communities and Protected Areas project, funded by the MAVA Foundation and executed by UNEP-WCMC. As part of the project, the planning process – now refined and outlined in this manual – was implemented at three pilot sites in the Gambia and Senegal. Working with communities living in coastal PAs in the pilot sites, the project undertook Community Planning Workshops, which resulted in Community Action Plans. The project supported the communities involved in implementing several of these action plans, which included multiple community-based and ecosystem-based adaptation options. Lessons learned from implementing the planning process at the project's three pilot sites have been incorporated into this manual to add to its robustness and relevance. Furthermore, this manual is informed by a wealth of existing knowledge of community adaptation planning frameworks, a number of participatory tools and methodologies tried and tested around the world, and extensive knowledge of PA management processes. This document should, therefore, provide useful guidance to a wide audience wishing to work with communities to holistically strengthen their resilience to climate change and implement actions that will ultimately help them to adapt to it.

01

Introduction

1.1 | Overview of the resilience and adaptation planning process described by this manual

Step-by-step, this manual outlines a community-based resilience and adaptation planning process. It equips those working with communities living in, and around, protected areas (PA) with practical tools to effectively engage with those communities regarding the negative impacts of climate change in order to identify locally appropriate resilience and adaptation strategies. Working with communities living in PAs who are vulnerable to climate change impacts is important as PAs conserve biodiversity and ecosystems, which provide numerous services that support the livelihoods of countless people. Furthermore, their critical role in climate change mitigation and adaptation is increasingly acknowledged (Dudley et al., 2010; Gross et al., 2014). This manual is

aimed at practitioners from non-governmental organisations (NGOs), government departments, PA management and research institutions who want to engage in such work and have some experience with participatory methods and a good understanding of climate change.

Preparation

The resilience and adaptation planning process outlined in this manual starts with a number of preparatory steps, which are described in Section 2. These steps cover the important elements to consider when initiating the process, such as assembling a project team, contacting relevant stakeholders, training workshop facilitators and conducting background research. They also cover specific logistical preparations for the community-based workshop component of the process, such as selecting and inviting workshop participants, adjusting the time frame and activities to the local context, and organising venue logistics. Following this guidance will ensure that project teams and workshop facilitators enter the community-based workshop component well-prepared.

Workshop

The community-based workshop component of this manual is described in detail in Section 3. It consists of a three-day Community Planning Workshop (Section 3.1), two days of one-on-one Follow-up Interviews (Section 3.2) and a one-day Scenario Development Exercise (Section 3.3). Together, these activities provide a detailed picture of the complex web of social, economic, environmental, political and institutional factors that form the community. The Workshop activities are:

Community Planning Workshop

Any initiative that helps communities adapt to climate change must consider all aspects of the complex social, environmental, political and economic system in which it is operating. Therefore, the Community Planning Workshop takes a holistic approach, addressing both developmental and environmental concerns in a changing climate. It is structured as follows:

- On the first day, the workshop focuses on scoping the focal system (i.e. the linked system of people and nature and their interactions in the area of study); diagnosing and prioritising vulnerabilities and adaptation challenges; identifying existing response strategies and tools; noting opportunities and barriers to adaptation; and highlighting how PA management can strengthen adaptive capacity.

- The second day of the workshop begins by developing shared visions of the future, followed by detailed mapping of all of the assets, resources and capacities that can be used to achieve these goals.

- On the third day, goals for planning and action are prioritised, leading to the backcasting of step-by-step Community Action Plans. These action plans aim to build the community's resilience to climate change through various measures, including adaptation options. Linkages are also made with appropriate support groups, such as PA staff and other technical experts, and responsibilities are assigned for tasks to take the plans forward.

Follow-up Interviews

After the Community Planning Workshop has been completed, a series of one-on-one interviews is undertaken. These interviews provide an opportunity to cross-check results from the Community Planning Workshop, ensuring that certain perspectives have not been marginalised by the group process. They also offer a chance to discuss sensitive topics and to gather more information on community-PA relations. The interviews can be adjusted to the needs and time frame of the project team.

Scenario Development Exercise

The final component of the community-based workshop component is a Scenario Development Exercise. This tests and improves the Community Action Plans that have been developed in the Community Planning Workshop by challenging them with multiple climate change scenarios. It also builds capacity within the community for decision-making and planning under uncertainty and change. It presents the community with a number of ways in which their action plans can be continually improved, making them more resilient, robust, flexible, achievable and complete in the face of uncertainty; thus, increasing the awareness of participants to potential pitfalls.

Overall, the community-based workshop component of this manual is an important entry point to engaging with communities living in, and around, PAs on their terms. It has been designed to empower communities, giving them the opportunity to express and explore their point of view, while allowing project teams and facilitators to understand local norms, visions and aspirations. This understanding helps project teams to appropriately engage with communities in their local context when planning and implementing Community Action Plans in a PA.

In addition, conducting local consultations in the manner described here gives project teams and PA management the opportunity to gain buy-in from the community affected, helping them to negotiate potential trade-offs between the human development goals of the community and PA management objectives. For instance, it is entirely feasible that an agreed Community Action Plan might not be workable within the PA in question, or that further exploration of scientific data following a workshop reveals that the action plan would not do well under current or projected climate change. Furthermore, the project team might not be able to support certain action plans or specific objectives thereof due to the context of their work, budget, time frame or institutional mandate. In such cases as these, any negotiations or alterations of the action plans can be discussed with communities on an even playing field as they have been given a chance to freely express their views, feel valued and take ownership of actions in the first place. Therefore, this community-based workshop component marks a crucial first step in a continued process of dialogue and engagement between the communities affected and the PA. Such free communication ensures that the most appropriate and effective resilience-building and adaptation plans are implemented.

Refining and Implementing

Once the community-based workshop component has been completed, a number of important post-workshop steps must follow (Section 4). Notably, evidence from additional sources needs to be collected to complement the local knowledge and information already provided in order to refine the Community Action Plans. This includes gathering information on: current and projected climate change; the sustainability of the proposed activities and their compatibility with PA management; and the local social, environmental, economic and political context. Once the Community Action Plans have been refined through dialogue with all relevant stakeholders and technical experts, the project team, community and PA managers can proceed to implementing the action plans, or components thereof. If funding to support the action plans has not been secured by this stage, it should be the next priority.

1.2 | Development of this manual

This manual was developed in the context of the three-year project (2012-2015) Climate-Resilient Communities and Protected Areas (officially entitled Development of a Sustainable Livelihood Action Plan for West African Coastal Protected Areas in the Context of Climate Change). The project was funded by the MAVA Foundation and executed by the United Nations Environment

Programme World Conservation Monitoring Centre (UNEP-WCMC) in cooperation with ENDA – Energie Environnement Développement, the Regional Network of West African Marine Protected Areas (RAMPAO) and the West African Regional Marine and Coastal Conservation Programme (PRCM). The project aimed to enhance livelihoods and increase social-ecological resilience in West African coastal PAs to the negative effects of climate change. It was implemented at three pilot sites across two marine protected areas (MPA) in the Gambia (Niumi National Park) and Senegal (Sangomar MPA). At these pilot sites, several of the Community Action Plans resulting from the Community Planning Workshops were implemented, including multiple community-based and ecosystem-based adaptation options.

This manual is informed by the wealth of existing guidance materials on community adaptation planning frameworks and participatory community-based tools, as well as extensive knowledge of PA management processes. In particular, it draws directly upon the theoretical and methodological frameworks developed by the CGIAR Climate Change, Agriculture and Food Security (CCAFS) Systemic Integrated Adaptation (SIA) programme, the adaptation toolkit jointly designed by ENDA and the Stockholm Environment Institute (SEI) (Ampomah, G. and Devisscher, T., 2013), UNEP-WCMC's work with PA management, and guidance from Munroe et al. (2015) on integrating ecosystem considerations into climate change vulnerability assessments.

Most importantly, however, the manual reflects the steps followed in the resilience and adaptation planning process undertaken at the pilot sites. Moreover, the lessons learnt from implementing the process have ensured that it has been amended and refined as required, making this manual more effective, robust and user-friendly.

This manual is unique because it is tailored to the context of communities living in, or around, PAs and dealing with the effects of climate change. Thus it focuses on the need to balance community and environmental adaptation and development goals with the objectives of managing the PA. Furthermore, the planning process outlined is suitable for implementation across all types of PA management and governance systems, ranging from state-run PAs to private- and co-managed areas or community reserves (Figure 1 shows the International Union for Conservation of Nature (IUCN) classification system for PAs comprising both management category and governance type).

Governance types / Management Category	A. Governance by government			B. Shared governance			C. Private governance			D. Governance by indigenous peoples and local communities	
	Federal or national ministry or agency in charge	Sub-national ministry or agency in charge	Government-delegated management (e.g. to an NGO)	Transboundary management	Collaborative management (various forms of pluralist influence)	Joint management (pluralist management board)	Declared and run by individual land-owner	…by non-profit organisations (e.g. NGOs, universities, co-operatives)	…by for-profit organisations (e.g. individual or corporate landowners)	Indigenous peoples' conserved areas and territories – established and run by indigenous peoples	Community-conserved areas – declared and run by local communities
I a. Strict Nature Reserve											
I b. Wilderness Area											
II. National Park											
III. Natural Monument											
IV. Habitat/ Species Management											
V. Protected Landscape/ Seascape											
VI. Managed Resource Protected Area											

Figure 1: IUCN Protected Area Matrix (Borrini-Feyerabend et al., 2013)

1.3 | Planning concepts used by this manual

The process described in this manual builds upon previous resilience and adaptation planning. It aims to support communities in developing plans that will holistically strengthen their resilience to climate change and increase their ability to cope with disturbances, as well as to implement actions that will help them adapt to a changing climate (IPCC, 2014).

For such planning to be meaningfully implemented, scope, time frame, disturbances, stressors and measures of improvement from local perspectives must be clearly specified. In short, we need to answer the questions: Resilience or adaptation of what? Over what time frame? To what? From whose perspective? This is shown in the Adaptation Planning Framework (Helfgott, 2011) presented in Figure 2.
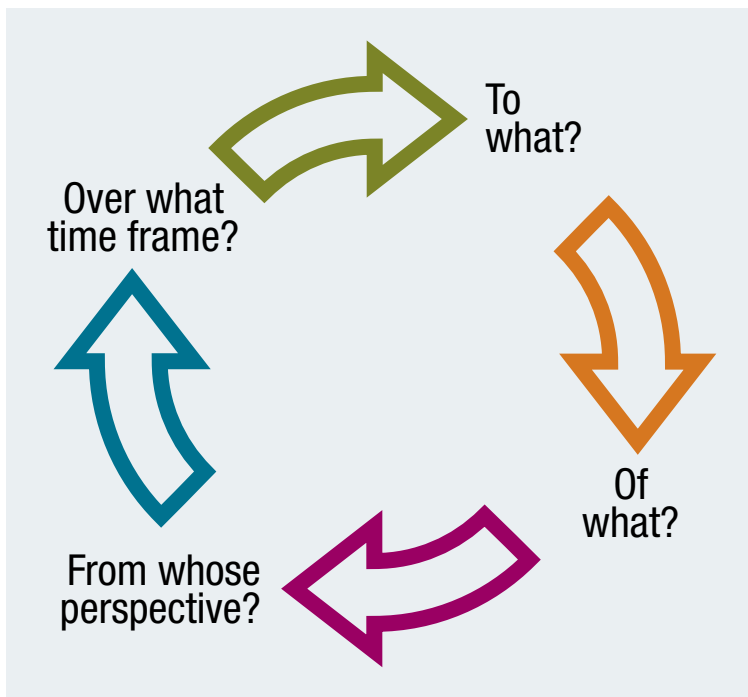
Figure 2
Adaptation Planning
Framework (Helfgott,
2011)

Any type of planning requires knowing where you want to go, where you are now, the context you will have to act within, and the options and tools available to get there (Figure 3). In the case of communities living in, and around, PAs, planning will revolve around integrating community visions and aspirations for development and adaptation with the goals of managing the PA.
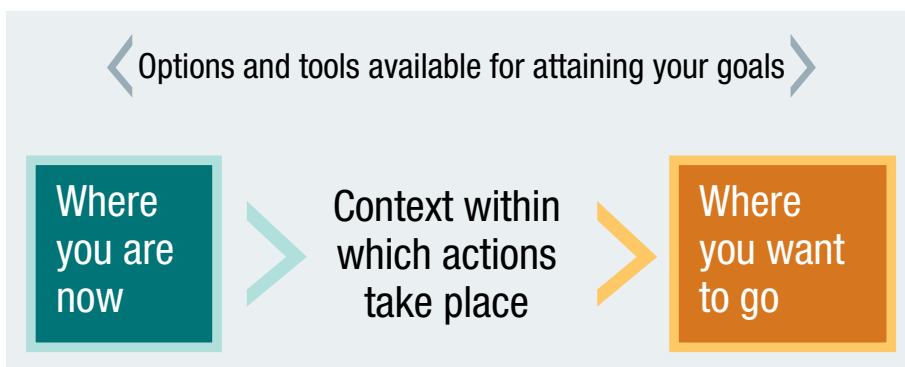
Figure 3
Strategic Planning
Framework
(Helfgott, 2011)

This manual pays particular attention to the ordering of activities, taking into account any preconceived ideas or biases that participants may have at the start of the Community Planning Workshop in order to minimise the researcher/development 'worker effect' and to maximise community empowerment (Mikkelsen, 2005). The ordering of activities is based on a number of strength-based community capacity development approaches. In particular, it draws on Appreciative Inquiry (AI) (Cooperrider and Whitney, 2005), which proposes that positive change comes from appreciating what exists and focusing on the successes of the past, rather than on failures and challenges.

In addition, this manual uses the 5D Cycle: Define, Discover, Dream, Design, and Deliver (Cooperrider and Whitney, 2005) capacity development model to underpin the design of the community-based workshop component. This is interpreted by the manual as follows:

1-Define

Participants determine the focal system (i.e. the linked system of people and nature and their interactions in the area of study), the time frame, relevant adaptation challenges and relationships with the PA.

2-Discover

Participants gather stories and evidence about capacities, achievements, assets, unexplored potentials, innovations, strengths, opportunities, traditions, and competencies, and team them with wisdom and insight into what has made their community successful in the past.

3-Dream

The group explores how past experiences can apply to the community's future. Participants imagine 'what could be' for the community and their natural environment. This is achieved through three distinct visioning exercises that capture the physical, environmental, social, psychological, economic and political aspects of desired futures. The community then prioritises aspects of these desired futures for detailed planning.

4-Design

The community designs a Community Action Plan of how to achieve their desired future goals by drawing on both past successes and present capabilities. Future goals are linked to present assets, resources and capacities, providing a step-by-step action plan that can be followed from the present moment. Supporting organisations and external advisers, such as PA managers and staff, should be present for this stage. They assist the community in following through with their plans, and provide information and technical advice during the planning phase. As a result, more detailed plans can be created and dialogue between the key stakeholders can be initiated, optimising the implementation of the plans. Once this has been completed, scenarios for alternative plausible futures are developed, building capacity for decision-making under uncertainty and change. This adds robustness and climate-proofing to the action plans and allows for further engagement and collaboration between the key stakeholders.

5-Deliver

The final stage of the model delivers the Community Action Plan. It takes the planning and scenario development work and puts it into practice, with appropriate support and constant monitoring and evaluation of the actions. Note that adaptation, like any change process, takes time. The community is likely to require ongoing support and follow-up activities from local institutions and authorities beyond the scope of the initial intervention.

Building on the 5D Cycle, this manual includes activities that generate a shared understanding of the interdependence of community well-being and PA management. These activities not only help to make the community aware of issues surrounding PA management, but also provide a sense of ownership and responsibility for the PA, which can have significant positive outcomes for conservation. Box 1 details which activities are designed to achieve each of the 5Ds, taking note of those which shed light on community-PA interrelationships and on climate change.

BOX 1   WORKSHOP ACTIVITIES CATEGORISED BY EACH D OF THE 5D CYCLE

In the Community Planning Workshop presented in this manual, the following activities are designed to achieve each of the 5Ds:

Define
- What's Important?
- Historical Disturbance Profile[ab]
- Perceptions of Environmental Change and Impacts[ab] (includes changes in landscape, species presence and distribution)
- Vulnerability Mapping[b]
- Daily Calendar by Season[ab] (describes times of abundance, scarcity and average)
- Challenges Clustering and Ranking[ab] (shows interrelationships between vulnerabilities, adaptation challenges and the PA)

Discover
- Responses Clustering and Response Stories[b]

Dream
- Collages
- Future Village Map
- Visualisation

Design
- Resource Mapping[a] (highlights the natural resources relating to the PA)
- Mapping Formal and Informal Organisations and Institutions[a] (captures the relationships between institutions involved in PA management)
- Individual Strength Mapping: Community Valentines
- Linking with Support Organisations
- Backcasting
- Scenario Development and Testing[b]

Deliver
- Refining, designing and implementing Community Action Plans

[a]Activities drawing particular attention to community-PA interrelationships
[b]Activities drawing particular attention to climate change

In conclusion, the resilience and adaptation planning process outlined in this manual equips communities living in, and around, PAs with:

- shared visions and aspirations for the future;
- improved and expanded relationship networks;
- resources for sustainable, climate-resilient community development;
- a plan for achieving the desired vision using the resources available;
- greater capacity to cope with uncertainty;
- critical thinking skills;
- and increased strategic capacity.

Bringing together local communities and other relevant stakeholders involved in the PA during the Community Planning Workshop and Scenario Development Exercise links the visions and activities of the communities with PA management and monitoring processes; in turn, helping to create more sustainable, well-adapted and equitable plans for the future.

02
Preparation

2.1 | Assembling a team

Project team

To effectively implement the resilience and adaptation planning process outlined in this manual, it is important to assemble a project team with the necessary skills to lead and execute such a project. Practitioners from NGOs, government departments, PA management or research institutions with some experience in participatory work and a good understanding of climate change will be well positioned to lead the process. In order to be able to undertake a holistic approach, the project team should be multidisciplinary and include both men and women. Good research, scientific, analytical and writing skills are beneficial to make sure that the local and traditional information and knowledge gathered is complemented with other evidence and sources of data.

It is important that the project team includes, or has access to, someone with extensive knowledge of community engagement, who understands the intricacies of participatory work, and who feels comfortable training a team of workshop facilitators in the activities described in this manual. Furthermore, the team should include, or have access to, an expert on climate change and adaptation to ensure that any action plans resulting from the Community Planning Workshop are 'climate-proofed' (by including activities that can withstand the impacts of climate change and avoid maladaptation) and consider climate change projections for the region.

Last but not least, the project team should also have a good understanding of the PA and its management and monitoring processes to ensure that actions will not harm the environment and are aligned with PA management objectives. It is important for the project team to have a thorough understanding of the local context and customs of the community with which they are working so as to appropriately engage with them, and so they can adjust the community-based workshop component to the local context. If the project team is not based in-country, it should work with a local partner who has such knowledge and can easily access and relate to the community involved.

Workshop facilitators

In order to implement the community-based workshop component of this manual, the project team needs to assemble a team of local facilitators. A minimum of three facilitators is required to carry out activities in three simultaneous workshop break-out groups and four facilitators are needed for the break-out groups of the Scenario Development Exercise. Ideally, however, there should be two facilitators for each break-out group, totalling six to eight. If possible, this facilitation team should consist of men and women who have experience in participatory community-based work. They should be able to facilitate discussions, encourage dialogue, know how and when to ask appropriate follow-up questions on pertinent issues, and be able to engage and mobilise communities. Furthermore, facilitators must be able to communicate fluently in the local language of the community, as well as being able to take written notes in the principle language of the project team. Ideally, facilitators should have good computer skills so that the information produced during the workshop can be easily shared with members of the project team. Facilitators can originate from any organisation or institution, including from the project team if its members have the necessary skills. It would be helpful, however, if they have some understanding of the local social, economic, institutional, ecological and cultural context of the communities and PAs they are working in, as well as knowledge of relevant issues, especially in relation to climate change or PA management.

Training the facilitators is an important component of Preparation. All facilitators need to be familiar with the Workshop activities, their objectives and the sequence in which they should occur. By the end of training, facilitators should feel confident in their skills to manage group discussions, handle conflicts, validate participant input and synthesise results in a meaningful way (Annex II). In order to achieve this, the project team should provide hands-on training for the facilitators prior to the community-based workshop component being undertaken. Ideally, this training should be held over five days in order to give the facilitators time to thoroughly go through each activity within the Community Planning Workshop, as well as the Scenario Development Exercise. The facilitators should take turns to practice both leading activities, as well as acting as participants. This ensures that the facilitators are 'learning by doing'. They should also discuss and agree on how to translate more complex terms and concepts into the community's local language.

Training sessions such as these provide a good opportunity for the project team to discuss with the facilitators whether any of the activities need to be modified to better fit the local context and customs and how break-out groups should be structured (i.e. taking into account social

Figure 4
Facilitators
practicing activities
during a training
session

differentiation). It is advisable to train more facilitators than are needed (for example, ten instead of six) in order to be able to select the most competent and skilled facilitators, and to protect against unforeseen absence.

2.2 | Contacting PA managers, relevant authorities and community leaders

To make the planning process effective, collaboration with PA managers and staff is imperative from the start. Before making any logistical arrangements for the community-based workshop component, it is important for the project team to contact the PA managers, relevant government authorities (e.g. department of national parks, environment agency, forestry division) and the appropriate community leaders in order to discuss the selection of the target community, as well as the overall planning process and its subsequent implementation.

This manual recommends that the planning process is implemented in one village at a time (or in two closely bordering villages that share an ecosystem and similar livelihood activities) so as to gain context-specific knowledge of one focal system and to generate action plans that truly

represent the priorities of the community in question. Vulnerabilities, challenges and community priorities can vary from one village to another, even within a small geographic area; therefore, it is important to capture such differences. Results from Community Planning Workshops undertaken in several villages within one PA can always be compared so that joint plans, based on shared community priorities, can be developed across the PA, or at an appropriate scale, if required (Munroe et al., 2015).

Prior to the community-based workshop component, the PA managers can provide valuable assistance in organising certain logistics and identifying appropriate contacts in the community in question. PA staff are also invited to the last day of the Community Planning Workshop and to the Scenario Development Exercise to provide input into the Community Action Plans, including ensuring that they align with, and take advantage of, existing processes. Following the workshop, PA managers and staff will be crucial in providing support in all planning, implementation, monitoring and evaluation of adaptation activities, alongside the community members. Their involvement will ensure that activities are feasible and sustainable within the PA. Furthermore, by assisting the community with the implementation of their plans, PA managers and staff are able to work with local people to achieve mutual goals; in turn, strengthening their relationship.

2.3 | Background research

Early engagement with local and national stakeholders, and initial scoping exercises, will provide valuable background information on the target community. In addition, it is important for the project team to conduct background research on the wider context within which the community is embedded. This includes gathering information on relevant institutions, policies and socio-economic trends, as well as looking at existing climate data and adaptation strategies. Scientific information on climate change is available at the country level and can help to identify which climate-related shocks and stresses are likely to affect the community. Useful sources of information (usually available online) include:

- Intergovernmental Panel on Climate Change (IPCC) reports.

- National communications to the United Nations Framework Convention on Climate Change (UNFCCC).

- National Adaptation Programme of Action (NAPA) documents.

- National Action Programme to Combat Drought and Desertification (NAP) documents.

- Meteorological data on current climate trends and seasonal forecasts.

It is advisable to investigate whether any other organisations or institutions have implemented similar projects nationally or locally. If so, then there may be scope to build upon existing efforts, past research, and lessons learnt from other projects.

2.4 | Community Planning Workshop participant selection and invitation

When organising the participant selection and invitation process, care should be taken to identify all existing forms of social differentiation within the community so that the Community Planning

Workshop is as representative as possible; for example, consider gender, caste, ethnicity, disability, age, sector, wealth, marital status, religion, literacy, etc. This scoping can be done via consultation with village leaders and with local partners who have an ongoing relationship with, and knowledge of, the community. A small number of interviews with general members of the community may also be useful. Alternatively, it can be achieved more formally by using tools such as the *Women's Empowerment in Agriculture Index* (IFPRI, 2012) alongside the Systemic Integrated Adaptation (SIA) module on social differentiation (Annex I). Participants should be sampled in representative proportions from all groups.

Several techniques for representative participant sampling and selection exist; the most appropriate method should be chosen after obtaining a better understanding of the village dynamics through the initial community scoping. It is important to choose a specific selection method, rather than making an open invitation to all village residents, to prevent issues such as participants only coming from a certain subset of the population, or having too many people attending the workshop. Furthermore, as elite capture is always a risk of any community-based approach (i.e. only the most influential and relatively well-off people engage), it is unwise to simply rely on village leaders to nominate all workshop participants. In contrast, taking a list of all village residents and selecting participants entirely randomly carries the risk of missing out community members who are leaders, have an active role in the community or have knowledge about what projects have worked well in the past.

Therefore, in order to find a balance between representing the population and engaging active community members, this manual recommends combining random selection with participant nomination.

To randomly select half of the participants, the project team needs to:

- Obtain a list of all inhabitants[1] within a specified age range (e.g. 18 years and older to ensure meaningful participation and avoid conflict with school attendance).

- Assign each individual on the list a number.

- Generate random numbers (in Excel using the 'RANDBETWEEN' formula or online at www. random.org) to select the desired number of participants. Since this selection process is random, list it generates should include an appropriate mix of gender and age.

To select the other half of the participants through nomination, the project team needs to:

- Ask village leaders to nominate an equal number of women and men from those remaining after random selection. These nominations should include people from different age groups (e.g. young adults [18-35], middle-aged adults [35-55], elders [55+]) who are active in the community.

Once the participants have been selected, the project team needs to prepare an invitation letter for each participant, which they will be asked to present at the workshop when signing in (Annex I).

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1   If a list of households is available, rather than a list of individuals, an approach using 'clusters' is recommended. Each household is considered as a 'cluster' and given a number; one man from each odd-numbered household and one woman from each even-numbered household is asked to attend the workshop as a household representative. If the number of households is less than the number desired for the workshop, the local authority (e.g. the village development committee) can be asked to nominate additional participants.

These letters should be hand-delivered to each invitee, who should be briefed orally (especially if illiterate) that they have been invited to a Community Planning Workshop. If the invitee is unable or unwilling to attend, they should be asked to nominate another household member – of the same gender, if possible – to attend in their place. If invitees feel it would be difficult to attend, for example, due to age or disability, they should be reassured that all necessary arrangements can be made to accommodate them.

Participants should be given a minimum of three days' notice to attend the workshop; however, the more notice given, the easier it will be for participants to make any necessary arrangements in their schedules (bearing in mind that too much notice might cause participants to forget to attend).

2.5 | Undertaking the Community Planning Workshop

Redesigning the time frame and activities in context

The Community Planning Workshop can to be undertaken over three days, each day lasting around seven hours (e.g. 10:00-17:00 with a one-hour lunch break and two 30-minute comfort breaks; Box 2). While it is important to maintain the order of the activities, the programme can easily be spread over any number of consecutive days (e.g. four days, 4-5 hours in length), depending on the availability of participants. Furthermore, the project team may wish to allocate more time to certain activities; in which case, the workshop can be spread over a longer duration. In addition, to ensure that there is enough time for the relevant technical experts to make arrangements to attend the last day of the workshop, a day's break can be taken between day two and three of the workshop. Therefore, although the activities have been divided into three days in this manual, they can be adjusted to any number of days as long as the order of activities is maintained.

Deciding when to hold the workshop should be based on the availability of participants in order to maximise attendance and consistency. For example, main planting and harvesting seasons, or periods of religious significance ideally should be avoided. To further maximise attendance, but depending on the context, small daily subsistence allowances can be offered to participants to offset any losses through attendance, and food can be provided at the workshop (participants should be informed of this).

The order of the activities in the Community Planning Workshop is very important and should be maintained. However, to accommodate local conditions, specific activities can be substituted and/ or tailored in consultation with local facilitators and experts. For instance, activities may be tailored to consider the literacy, numeracy and ability of different social groups to express themselves openly in front of one another.

BOX 2 EXAMPLE OF A THREE-DAY COMMUNITY PLANNING WORKSHOP SCHEDULE

Day 1: Framing adaptation: of what, to what, on whose terms?

09:30 – 10:30	Opening ceremony and introductions
10:30 – 11:00	What's important? (Whole group exercise)
11:00 – 11:30	Break
11:30 – 13:00	Adaptation to what? Three mixed break-out groups:

- Historical Disturbance Profile
- Perceptions of Environmental Change and Impacts
- Vulnerability Mapping

13:00 – 13:30	Report back from break-out groups
13:30 – 14:30	Lunch
14:30 – 17:00	Adaptation to what? New mixed break-out groups:

- Challenges Clustering and Ranking
- Responses Clustering
- Response Stories

Day 2: Where do we want to go? Where are we now?

09:30 – 10:00	Welcome back and introduction to the day; briefing on visioning activities
10:00 – 11:00	Visioning activities; three mixed break-out groups:

- Collages
- Future Village Map
- Visualisation

11:00 – 11:30	Report back from break-out groups
11:30 – 12:30	Lunch
12:30 – 13:30	Where are we now? Three mixed break-out groups:

- Resource Mapping
- Mapping Formal and Informal Organisations and Institutions
- Individual Strength Mapping: Community Valentines

13:30 – 14:00	Report back from break-out groups
14:00 – 14:30	Break
14:30 – 16:00	Daily Calendar by Season (one break-out group per season)

At the end of Day 2, the facilitators and project team compile a list of the Community Priority Issues that have emerged from the workshop activities, define these into Community Goals and Alternative Livelihood Activities, and present them back to the community on Day 3. This time is also used to invite relevant external technical experts to attend Day 3 (these can also be contacted prior to the workshop by anticipating community needs. Alternatively, if the community is remote, a break can be built into the workshop between Day 2 and Day 3 to allow enough time for experts to attend).

Day 3: Building a step-by-step plan

09:00 – 10:00	Welcome back and introduction to backcasting (practice round)
10:00 – 11:00	Discussion of Community Priority Issues and community vote
11:00 – 11:30	Break
11:30 – 13:00	Backcasting first priority issue (three mixed break-out groups)
13:00 – 14:00	Lunch
14:00 – 15:30	Backcasting second priority issue (three mixed break-out groups)
15:30 – 16:00	Break
16:00 – 17:00	Report back from break-out groups and consideration of further steps
17:00 – 17:30	Close

Logistics

Venue

When implementing the Community Planning Workshop, it is preferable to hold it within the village itself, rather than choosing an external venue. Participants are significantly more at ease on their own territory, so are more likely to fully engage with the process and, ultimately, provide higher quality data.

In hot climates, it is preferable to hold the workshop outside, unless it is raining. For comfort, the project team should look for large, shaded areas with a good breeze. It may be necessary to hire tents to provide shade. If the workshop is held indoors, it should ideally be in a building with several rooms in order to accommodate both the whole group, and retreat for the three break-out groups. In instances where participants are coming from two closely bordering villages for a joint workshop, it is advised to find a suitable venue that lies between the two villages, so as to avoid some participants travelling further than others and perceiving this as unfair.

Group size, structure and facilitation

The workshop can easily accommodate 50-60 participants, although it can be implemented with fewer people. However, it is important to note that the fewer people participate, the more careful the project team must be about the group being a representative sample of the community.

To enable productive discussion and participation, the optimum size for the break-out groups is around 15 people; the minimum size is 3-4. Note that these numbers might vary depending on context, village size, modes of representation and number of facilitators available. The minimum number of facilitators required is one per break-out group, but it is highly recommended that there are two facilitators per group, especially if group size is large (15-20 people). With two facilitators, one can observe and take notes, while the other is actively leading the activity; they can then alternate, giving each other a rest from active engagement. It is also advised that additional project team members are available to move between the groups, keep an eye on time, look after voice recorders and take good quality photographs. A shopping list for the recommended materials needed for the workshop can be found in Annex I.

Care should be taken in the composition of groups to ensure that participants will be able to express themselves freely. Each community has different norms of representation and decision-making, so group structure needs to be determined on a case-by-case basis in consultation with local partners and key informants in the community. Examples of groups in which sensitivity may exist include women, young people, minority ethnic groups and people with disability and disease (e.g. HIV).

03
Workshop

The community-based workshop component of this manual is described in detail in this section. It consists of a three-day Community Planning Workshop (Section 3.1), two days of one-on-one Follow-up Interviews (Section 3.2) and a one-day Scenario Development Exercise (Section 3.3). Together, these activities provide a full picture of the complex web of social, economic, environmental, political and institutional factors that form the community.

3.1 | Community Planning Workshop

The Community Planning Workshop can fit into a three-day programme. The first day scopes the focal system; diagnoses and prioritises vulnerabilities and adaptation challenges; identifies existing response strategies and tools; notes opportunities and barriers to adaptation; and highlights how PA management can strengthen adaptive capacity.

The second day begins by developing shared visions of the future. This is followed by detailed mapping of all of the assets, resources and capacities that can be used to achieve these goals.

The third day prioritises goals for planning and action, leading to the backcasting of step-by-step Community Action Plans. These action plans aim to build the community's resilience to climate change through various measures, including adaptation options. Finally, linkages are made with appropriate support groups, such as PA staff and other technical experts, and responsibilities are assigned for tasks to take the plans forward.

As noted in Section 2.5, as long as the order of the activities is maintained, the workshop can easily be spread across any number of days, depending on the availability of participants and time needed for external technical experts to attend the last day.

Please note that, in addition to individual equipment lists for each exercise, all activities will require a camera and someone assigned to take photos. This ensures that everything has been captured, especially if the workshop is pressed for time and papers/materials need to be revisited later. In addition, it is recommended that discussions are recorded for later synthesis; this can be done using separate recording device.

Day 1

Framing adaptation: of what, to what, on whose terms?

Before opening the Community Planning Workshop, ask participants to present their invitation letter when registering to check that all invitees (or their nominees) have arrived. Provide participants with a name badge when they sign in – this will make it easier for people to address one another in their discussion groups and will speed up the process of checking for people's attendance on the following days of the workshop. Use different coloured stickers on the badges to easily identify which break-out group participants belong to, avoiding confusion later on. Ask participants to return their badge at the end of each day.

Opening ceremony and introductions
Once all participants have registered, open the workshop and welcome participants, setting the tone for this strength-based, community-focused activity. The workshop should be opened according to local custom, usually involving speeches from local authorities and partner organisations. Hold the entire workshop in the local language to ensure that everyone can participate. If possible, discuss the concept of 'pre-framing' with those speaking at the opening ceremony and encourage them to use neutral language, so as not to bias any discussions on climate change, disasters, etc. Furthermore, when working within the specific context of a project, do not speak of the project or make any mention of available funds. Framing the workshop to any particular issues, project context or funds can dramatically limit the nature of community participation, their ideas and engagement in the process, and the extent of their involvement in

Workshop

the future. This should be made clear to those opening the workshop. Also, avoid wearing clothing and logos from specific organisations, so as to remain 'neutral' in appearance.

Following the official speeches, explain to the participants the purpose and process of the workshop including the following points:

- The purpose of this workshop is to identify your [the community's] goals and create a plan to achieve those goals.

- These plans are based on all the assets, skills and resources that you already have. As needed, support from outside can be added to the plan, but this is not the focus of the workshop. Outside support comes and goes, and, ultimately, you are the only ones who can see these goals through to fruition.

- On the final day of the workshop, we [the workshop organisers] will invite expert guests to provide advice, while you make step-by-step plans to achieve your goals.

- At the end of the workshop, you will have created a step-by-step Community Action Plan. This will be typed up by us and given to you to keep. You can use this plan to write to government agencies or NGOs to ask for their technical support. And, when government agencies or NGOs visit you in the future, you will be able to show them your action plan, which outlines how you want to develop and your plans for doing so.

- We will also have copies of this action plan, which we can share with others who may be able to give you support to achieve these goals. We will use our networks to the best of our abilities to share your plan with as many organisations as possible.

What's important? (Whole group exercise)

Brief description

This exercise is inclusive, validating all input from participants. It sets the tone of the workshop as being completely driven by community priorities, and also functions as an icebreaker. It is conducted with all the participants together in one large group. The purpose is to construct a broad picture of what is important and relevant to the community as a whole, scoping the focal system for later analysis. This exercise captures tangible aspects of community life, such as water availability, crop productivity and education, as well as less tangible aspects like community cohesion, safety and spiritual identity – all of which may prove relevant for resilience and adaptation planning, but many of which are unlikely to be voiced directly in activities focused purely on adaptation planning.

If only limited time and resources are available for the workshop, or if you already have an existing knowledge of the community, this activity can be omitted to allow more time for the following Challenges and Responses exercises.

Specific objectives

- To create a shared understanding of what is important and relevant to the community as a whole.
- To rapidly provide researchers and practitioners who do not have a long-term relationship with, and knowledge of, the community with a broad understanding

of local values and priorities that go beyond adaptation alone. These values and priorities have a practical impact on the prioritisation of resources for adaptation initiatives, and can have an impact on the effective and sustainable implementation of such initiatives.

▪ To provide information on what else is going on in the community that could directly compete for priority with any action plans produced in the workshop.

Activities and time frame

Step 1
Ask all participants to reflect on what is important to them for 5 minutes. Instruct them to think very openly and personally about this – nothing is too small or insignificant. Be sure to emphasise to participants that they should think of what is *important* to them, rather than which *problems* they face.

Give each participant a small stack of post-it notes and ask them to write down one item per post-it note so that similar answers can be easily grouped ('clustering') later on. If participants are illiterate, you have a number of options to help them to express their views:
1) You can ask them to draw visual representations of what is important.
2) You can provide a scribe (facilitator/translator) to write for them (Figure 5).
3) You can ask a literate community member to help them.

Figure 5
Scribe taking notes for illiterate participants

Step 2
Cover a wall or a wooden board with large sheets of brown paper in a very accessible and visible space. Ask the participants to place their post-it notes one-by-one onto this space. Help them to group comments that are closely related to other items already on the board, and separate views that are different. The result is a successful clustering of post-it notes into 'themes' that represent what is important to the community as a whole. When working with illiterate participants, you can label the themes with visual representations and help people to choose the relevant cluster for their post-it note through discussion.

This exercise creates a visual representation of local values and aspirations. It also helps to scope the focal system under consideration (Figure 6).

Step 3

At the end of the process, take 10 minutes to read aloud all the post-it notes to the group, explain the clustering and discuss the resulting themes.

TOTAL TIME: 1 HOUR

Facilitation and equipment requirements

Facilitation

Depending on the size of the group, it is useful to have a number of facilitators to assist the participants in identifying and recording what is important to them. In the case of illiterate populations, a number of scribes will be necessary to help with writing.

Equipment

- Enough brown paper to cover a wall or wooden board
- One pen per participant
- Approximately 5 post-it notes for each participant
- Different coloured post-it notes for labelling the cluster themes
- Marker pens
- Camera
- Recording device to document the discussions

Expected outputs

The final output of this exercise is a visual representation of what is important to the community as a whole, with weighting of different issues in terms of cluster sizes. It provides a synthesis of the participants' discussions on values and issues.

Adaptation to what? (Mixed break-out groups)

This stage of the workshop is conducted in three phases – mixed break-out groups, a feedback session and further break-out groups. During the first phase, three break-out groups conduct different activities simultaneously, exploring dimensions of vulnerability and exposure, which characterise the 'to what'. Each activity (Historical Disturbance Profile, Perceptions of Environmental Change and Impacts, and Vulnerability Mapping) has a slightly different focus, collectively leading to a comprehensive assessment.

The second phase of this stage of the workshop is a feedback session. You may choose between a plenary format involving all the participants in one large group, or organising the participants to move between break-out group locations and discuss the findings in smaller groups. For the former, bring everyone back to together in one space and request the nominated representatives of each group to feed back on their findings. For the latter, keep the outputs of each break-out group on the flip charts at the location of the group discussions. Organise participants to move around to each of these boards in turn and discuss the outputs with a representative of the group or a nominated facilitator.

The third phase (Challenges Clustering and Ranking, and Responses Clustering and Stories) brings together the challenges and disturbances identified in the first three break-out groups and maps out their interrelationships, as well as how they are mediated by various factors, such as ecosystem services provided by the PA. The two exercises that make up this stage are undertaken by three new mixed break-out groups in order to further facilitate knowledge sharing within the community.

To complete this section of the workshop, divide the participants into three break-out groups of up to 20 people each. If possible and appropriate, these groups should be made up of equal numbers of both men and women. To speed up the process of forming groups, name badges can be assigned a colour sticker (or symbol) to represent a break-out group. Ask each break-out group to nominate a representative who will be in charge of reporting back on the group's findings.

Historical Disturbance Profile

Brief description

This exercise is conducted by one of the three mixed break-out groups, simultaneously with the Perceptions of Environmental Change and Impacts, and Vulnerability Mapping exercises. It explores the community's history of exposure to disturbances – their nature, relative severity and impacts – and their current vulnerability to such events. Participants are helped to recall past disturbances and challenges, and to arrange these events along a timeline, while simultaneously recording their severity and impacts. The timeline provides a visual representation of past events and shows any trends in their frequency and severity.

This activity provides the basis for exploring response strategies (past, present and potential) during subsequent activities, as well as looking at how these response strategies are enabled by ecosystem services provided by PAs.

Specific objectives
- To develop a timeline of historical disturbances and stressors (going back at least three or four decades).
- To develop an understanding of dynamics and trends in frequency and severity of different types of disturbance and stress.

- To provide the basis for the subsequent exploration of response strategies (in terms of what worked/what did not work in the past).

Activities and time frame

Step 1

Ask the participants of the break-out group to come together in a circle and individually report on how long they have lived in the community. This gives you an idea of the length of collective memory of the group. Discuss the events and disturbances that have affected the site over the past decades. These events can be social, political, economic, ecological, technological, climate change-focused, etc. You can also ask participants about disturbances or negative changes in land use, land tenure, food security and nutrition, administration and organisation, key infrastructure and services, and the PA since it was established. Throughout these discussions, record what has been said, particularly in relation to the reasons for these changes.

Represent the participants' answers in a Historical Disturbance Profile with two axes: 1) a horizontal axis to use as the timeline; and 2) a vertical axis with marks '1', '2' and '3' to record the severity of an event. Along the timeline, add the year for each important event, if possible. If an event lasts for a period of time, add a line to mark this period. Indicate where there are links between events using arrows. For each event, ask participants how severe the impact was, ranging from low ('1') to medium ('2'), or high ('3'). Based on their answer, draw a line representing the severity of the impact to the height of the number on the vertical axis. An example of a Historical Disturbance Profile is shown in Figure 7.
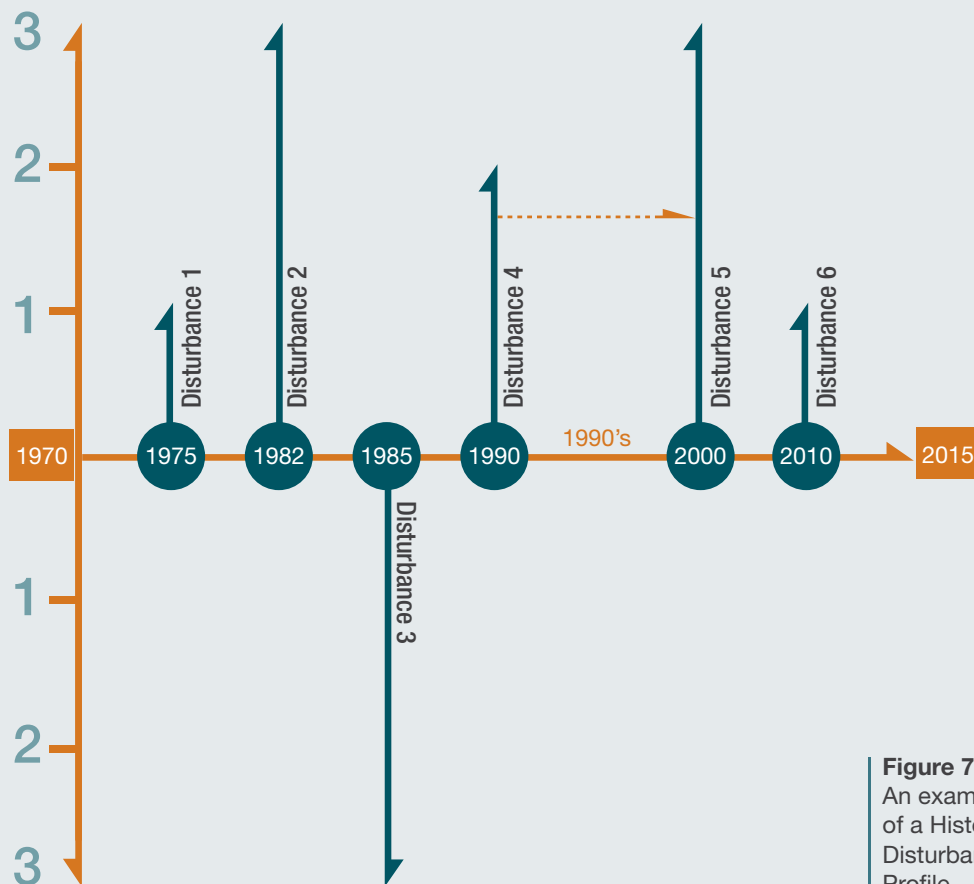
Figure 7
An example of a Historical Disturbance Profile

Step 2

After recording the answers on the profile, guide a brief discussion on what participants did to cope with these disturbances, while also taking note of what the community-led and PA-led actions were. The following questions should be addressed:

- Were the coping strategies used successful?
- How did different people cope in different ways?
- Did any of these coping strategies impact the ability of the community to cope the next time such an event occurred?

Draw a table with the three columns (Figure 8) to record the main points of this discussion: 1) Coping strategy; 2) Did the coping strategy work in the past? (Yes/No); 3) Could the coping strategy be used again in the future? (Yes/No).

TOTAL TIME: 1.5 HOURS

Figure 8
An example of a Historical Disturbance Profile table

Facilitation and equipment requirements

Facilitation

A minimum of one facilitator per group is required to assist in this exercise. Ideally, if the group is large, two facilitators should be available: one to lead the group discussions and one to take notes.

Equipment

- Flip chart sheets
- Marker pens of different colours
- Notebook to document the discussions
- Camera
- Recording device to document the discussions

Expected outputs
The final outputs of this exercise are visual representations (diagrams and tables drawn on flip charts) of the disturbances and issues previously faced by the community and the coping strategies they used to deal with them.

Perceptions of Environmental Change and Impacts

Brief description
This exercise is conducted by one of the three mixed break-out groups, simultaneously with the Historical Disturbance Profile and Vulnerability Mapping exercises. It is designed to capture the community's perceptions and experiences of environmental change, and their relationship with the existence and condition of PAs. This includes changes in species presence, distribution and abundance; changes in natural and built landscapes, both marine and terrestrial; and changes in climate. The time frame for analysis is the collective social memory of the community.

Specific objectives
- To describe local perceptions of environmental change in multiple dimensions: changes in species presence, distribution and abundance; changes in natural and built landscapes, both marine and terrestrial; changes in benefits derived from nature; and changes in climate.
- To discuss the relationship between these changes, as well as any resulting changes in livelihoods and coping capacities.
- To develop an understanding of the multiple causes of environmental change, local contributing factors and the consequences of such changes.

Activities and time frame

Step 1
Arrange the participants of the break-out group in a circle. In the centre of the circle, place four flip chart sheets labelled 'Animals', 'Climate', 'Natural Landscapes' and 'Buildings and Infrastructure', or equivalent terms for such environmental changes.

Step 2
Ask participants to quietly reflect on changes that have happened within their surroundings with respect to each of the four headings on the flip chart sheets. The following questions may help you to guide their reflections:
- Animals
  - Are there any animals that you used to see, or know used to be here, which are no longer here, or you rarely see (both on land and in the water)?
  - In what ways do you benefit from the animals in your area? [You may also ask about more specific details relevant to the PA, such as changes in fish or shellfish catches in a Marine Protected Area]
  - Have these benefits changed?

- **Natural Landscape**
  - Has the natural landscape changed during your lifetime (both on land and in the water)?
  - Can you describe how this has happened?
  - In what way do you benefit from your natural landscape?
  - Have these benefits changed over time? Please describe these changes.
  - Why do you think they have changed?

- **Buildings and Infrastructure**
  - What changes have occurred in the built environment here that you can remember (including roads, schools, houses and other buildings on land; plus sea walls, dykes, harbours, etc., in the marine environment)?

- **Climate**
  - Have you noticed any changes in the usual/expected features and patterns of the seasons here? Please describe these changes.
  - Have you noticed any changes in rainfall/temperature patterns?
  - Have you noticed any changes in water levels in the sea and any freshwater sources?
  - Have there been more floods/droughts/typhoons/etc. than usual?

- **Other**
  - Are there any other noticeable changes in the features of your natural or built environment you would like to mention?

- **Emotive question to aid in memory recollection**
  - Are there particular changes you feel very upset or very happy about?

This reflective process takes 5-10 minutes.

Step 3
Choose one of the four types of environmental change to start with and, one-by-one, ask participants to share their recollections of the change in question. Note the key points on each type of change, causes, impacts and coping strategies on the flip chart (Figure 9). Spend up to 20 minutes discussing each category of change. Record the discussion for later synthesis.

TOTAL TIME: 1.5 HOURS

Figure 9
An example of a Perceptions of Environmental Change and Impacts table

Facilitation and equipment requirements

Facilitation

A minimum of one facilitator per group is required to assist in this exercise. Ideally, if the group is large, two facilitators should be available: one to lead the group discussions and one to take notes.

Equipment
- Flip chart sheets
- Marker pens of different colours
- Notebook to document the discussions
- Camera
- Recording device to document the discussions

Expected outputs

The expected outputs of this exercise include visual representations and recorded narratives of the multiple dimensions of environmental change in the target area, including changes in species, natural and built landscapes, and climate. A synthesis of discussions regarding the relationship between these environmental changes and changes in livelihoods and people's coping strategies is also provided. This information can then be compared and combined with available scientific data.

Vulnerability Mapping

Brief description

This exercise is conducted by one of the three mixed break-out groups, simultaneously with the Historical Disturbance Profile and Perceptions of Environmental Change and Impacts exercises. In order to assess the key factors, including climate change, that impact certain livelihoods, resources and social groups, it is necessary to establish the level of exposure of these groups to the relevant disturbances that impact the area. This exercise explores current vulnerabilities by discussing how different disturbances affect resources and social groups differently in the target area. The activity is left deliberately open to allow a comparison between the relative impact of historic and current climate change and other factors to emerge. Vulnerability Mapping also reveals competing priorities in terms of addressing disturbances, which will have repercussions for the amount of time, energy and resources that can be dedicated to different adaptation strategies.

Specific objectives
- To gain insight into the current vulnerabilities of the target community and area.
- To gain a broad overview of which livelihoods/resources/social groups are most vulnerable to different types of disturbances through the use of a Vulnerability Matrix.
- To improve understanding of the relative importance of climate change-related issues compared to other types of disturbance.
- To create a better understanding of the main climatic hazards affecting the site.

Activities and time frame

Step 1

Draw a table in which you can list the main livelihood activities of men and women in the local context and any disturbances affecting these livelihoods (Table 1).

Livelihoods	Disturbances			
	Disturbance 1	Disturbance 2	Disturbance 3	Disturbance 4
Women's livelihood 1				
Women's livelihood 2				
Women's livelihood 3				
Men's livelihood 1				
Men's livelihood 2				
Men's livelihood 3				

Table 1: An example of a Vulnerability Matrix incorporating social differentiation

Figure 10
List of principle
livelihood activities
and disturbances

Step 2

First, ask the women to list their top livelihood activities and note them on a separate flip chart. It is advisable that women go first as, in particular communities, they might be uncomfortable speaking in front of men and therefore might take more time to express their ideas, which could entice men to interrupt and speak in their stead. Secondly, ask the men for their top livelihood activities; note all answers on the flip chart. Thirdly, ask the women to vote by a show of hands on their top three activities, and do the same with the men (Figure 10). Write down the results of the votes in column 1 of the Vulnerability Matrix: Livelihoods.

Step 3

Ask the whole group to name any disturbances that affect their livelihood activities (these can be environmental, social, economic, climatic, etc.). Write these disturbances down on the flip chart. Ask each participant to vote on their top four disturbances with coloured stickers. The four disturbances that gain the most votes form the horizontal axis of the Vulnerability Matrix (Disturbance 1-4) for both gender groups.

Note that if the climate is not mentioned at all at this stage, it is a very telling result in itself. However, as the overall aim is to gain an understanding of the relative vulnerability of different social groups to climate change, ask the participants to vote on one climatic disturbance, which will be added to the top three non-climatic disturbances. These top four disturbances can then be listed in the matrix.

Step 4

Using the matrix, ask participants to rank their level of vulnerability to each disturbance (vulnerability is interpreted as the product of exposure and sensitivity).[2]

Ask the women, and then the men, to rank the impact of each disturbance on their livelihood activity by using plus signs ('+') to represent positive impacts and negative signs ('-') to represent negative impacts (Figure 11). The more positive an impact, the more plus signs should be allocated, up to a maximum of three. The more negative an impact, the more

Figure 11
An example of
a completed
Vulnerability Matrix

2   The IPCC (2014) defines exposure as: 'The presence of people, livelihoods, species or ecosystems, environmental functions, services, and resources, infrastructure, or economic, social, or cultural assets in places and settings that could be adversely affected'; and sensitivity as: 'The degree to which a system or species is affected, either adversely or beneficially, by climate variability or change. The effect may be direct (e.g. a change in crop yield in response to a change in the mean, range, or variability of temperature) or indirect (e.g. damages caused by an increase in the frequency of coastal flooding due to sea level rise)'.

negative signs should be allocated, also up to a maximum of three. A neutral disturbance that has no impact on a particular livelihood activity is given a '0' (this scale has been specifically designed to cope with the high levels of innumeracy in rural West Africa, thus '0' in this case is just a circular symbol representing 'neutral').

To aid the speed of the activity, use an 'X' to represent 'I don't know' in the case of any disagreement that cannot be resolved quickly; take an average and record the level of disagreement. Give preference to the opinion of the social group being considered.

These symbols convert to numerical data in post-processing activities as follows:

+++ = 3	- = -1	0 = 0
++ = 2	- - = -2	X = unknown, seek further data
+ = 1	- - - = -3	

In order to determine the ranking, discuss the nature of the impacts and their severity (number of people/area/etc. affected, in what ways and to what extent, and with which secondary consequences; for example, loss of livelihoods for women may mean children do not go to school, which is a secondary impact on youth). The ranking will be at the discretion of the group based on their perceptions of how severely different livelihood activities are affected relative to each other. Record this discussion for later synthesis, and take note of any key interrelationships that present themselves during discussions.

Step 5
Facilitate discussion on who is most vulnerable to current and future climate change, where there are gaps in knowledge, and where there might be unanticipated negative effects on groups not directly impacted. Continue to map out interrelationships during this further discussion.

TOTAL TIME: 1.5 HOURS

Facilitation and equipment requirements

Facilitation
A minimum of one facilitator per group is required to assist in this exercise. Ideally, if the group is large, two facilitators should be available: one to lead the group discussions and one to take notes.

Equipment
- Flip chart sheets
- Marker pens of different colours
- Notebook to document the discussions
- Camera
- Recording device to document discussions

Expected outputs
The final outputs of this exercise are visual representations (Vulnerability Matrices) and recorded narratives of the vulnerability of the whole community and various groups within the community (e.g. women and men) to disturbances in livelihoods due to environmental factors, including climate change. A synthesis of discussions regarding the relationship between these disturbances and livelihoods is also provided.

Figure 12: A participant reporting back to the large group on the historical disturbance profile

Challenges Clustering and Ranking (new mixed break-out groups)

Brief description
As opposed to the previous three exercises, each break-out group does the same activity. This exercise is also conducted in break-out groups of 20 people or less. If possible, new groups should be composed of a mixture of participants from each of the three previous activities so as to facilitate knowledge-sharing across groups. Structuring break-out groups according to different forms of social differentiation, such as gender (for example, one group composed entirely of women, one group composed entirely of men and one mixed group), is useful in order to record the relative priority of different issues to different social groups.

The purpose of this exercise is to understand and rank the key vulnerabilities and adaptation challenges facing the community. Participants brainstorm and cluster challenges into key vulnerability themes before voting on those that affect them the most.

Following this activity, the Responses Clustering and Stories exercise is conducted, during which participants brainstorm and cluster existing and potential responses to these challenges.

Specific objectives
- To frame and contextualise the 'to what' the community is adapting.
- To prioritise vulnerabilities and adaptation challenges in context and according to local experiences and values.
- To provide an understanding of potential barriers to adaptation which must be overcome.
- To gain an insight into the relative priority of various vulnerabilities and adaptation challenges of different social groups, and set priorities for further planning.

Activities and time frame

Step 1
Arrange the participants in a circle facing each other and place a large sheet of paper in the centre. Instruct the participants to reflect on the challenges they face on a daily, weekly, monthly and yearly basis. These challenges can be of any nature (e.g. social, climatic, political, economic, etc.), but you can carefully probe further on certain topics of interest, such as relationships with the PA or changing climate.

This takes approximately 10 minutes.

Step 2
Give the participants post-it notes and ask them to record one challenge per post-it note (to allow clustering of themes in Step 3). Encourage them to prioritise their top five challenges when making this set of notes. If participants are illiterate, you have a number of options to help them to express their views:
1) You can ask them to draw visual representations of what is important.
2) You can provide a scribe (facilitator/translator) to write for them.
3) You can ask a literate community member to help them.

This takes approximately 10 minutes.

Step 3
One-by-one, encourage participants to place each of their post-it notes on the sheet of paper in the centre of the group. As they place each post-it note, ask them to explain what they have recorded to the rest of the group. As successive turns occur, if a new challenge is similar to an existing challenge, ask the participant to cluster it with the previous note; the closer it is related to the previous note, the closer it should be placed, but the more different it is, the further away it should be placed. Help participants in this clustering activity and discuss titles for each of the emerging cluster themes with the participants (Figure 13). Label each theme with a different coloured post-it note. In the case of illiterate populations, graphic representations of each cluster theme can be used.

If you feel it is appropriate, help participants to explore a perceived challenge further in order to get to the fundamental problem (and, later, more appropriate solution). For example, the challenge of not having enough fertiliser is actually an issue with poor soil fertility, for which there are a number of potential solutions, not just increasing the availability of the fertiliser itself.

This takes approximately 25 minutes.

TOTAL TIME FOR CHALLENGES CLUSTERING: 45 MINUTES

Figure 13
An example
of Challenges
Clustering

Step 4

Put your group's 'challenges poster' on the wall. Give the participants five coloured dot stickers each and instruct them in proportional ranking, i.e. participants allocate stickers according to the relative importance of each item (Figure 14). Participants may allocate all of their stickers to one issue if they believe it to be so significant as to outweigh all others; allocate their five stickers evenly across their top five challenges; or give different numbers of stickers to different items according to their relative weighting.

Note that sometimes the voting decisions of participants are influenced by the dots that have been placed by those who have voted previously. This is especially likely when working with illiterate participants dealing with a long list of challenges. This affects the results of the vote and presents the risk that outcomes do not represent the actual situation of the village. To avoid such bias, ask each voter to stand behind the board while you read the list and explain each point, allowing the participant to make a decision without looking at the board. Once the participant has decided on their votes, ask them to hand their dots to you so that you can stick them on according to their preferences.

This takes approximately 30 minutes.

TOTAL TIME FOR CLUSTERING AND RANKING: 1 HOUR 15 MINUTES

Facilitation and equipment requirements

Facilitation

A minimum of one facilitator per group is required to assist in this exercise. Ideally, if the group is large, two facilitators should be available: one to lead the group discussions and
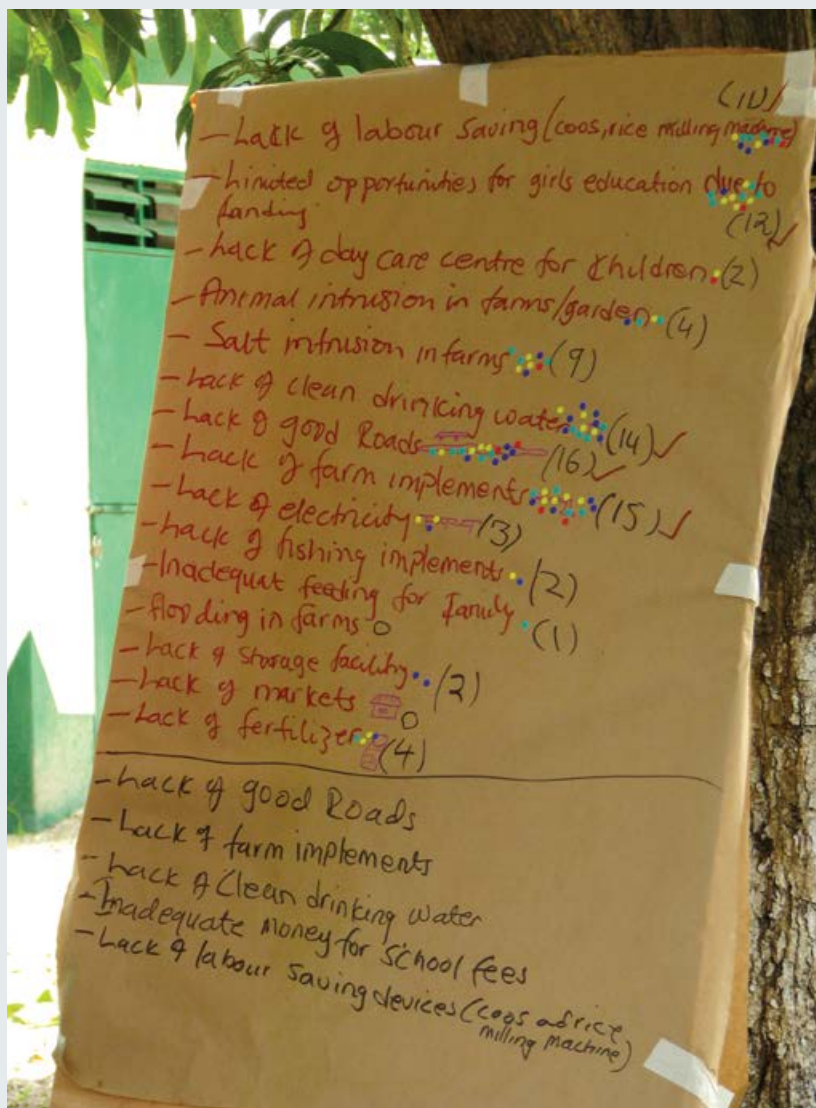
Figure 14
An example
of Challenges
Ranking

one to take notes. If possible, one member of the project team should be present to act as a runner between groups and to coordinate the progress of each group to ensure they all finish the activity at the same time.

Equipment
- Two large sheets of paper for each break-out group conducting the activity
- One pen per participant
- Roughly 5-10 post-it notes per participant
- Different coloured post-it notes for the cluster labels
- Marker pens
- Five dot stickers per participant for ranking
- Camera
- Recording device to document the discussions

Expected outputs
This activity produces a visual representation of the key vulnerabilities and adaptation challenges experienced by the community, weighted by the size of clusters. It also results in a ranked list of adaptation priorities for each social group conducting the analysis, and an aggregated list of priorities for the community as a whole.

Responses Clustering (existing tools and strategies)

Brief description

Having gained an understanding of community vulnerabilities and challenges, the next set of activities gives participants an opportunity to reflect upon ways in which they have responded to challenges in the past, how they are currently dealing with them, and what they might do in the future (building on the information already captured from the previous activities). Through this, it is possible to map existing coping and response strategies and tools. Furthermore, the activities show participants that strategies to deal with challenges they have highlighted actually already exist within the community. This reinforces a positive self-perception of resilience and survival by spotlighting and celebrating positive stories, thus building agency and energy for the following activities.

This activity is conducted in the same break-out groups as the previous Challenges Clustering and Ranking exercise. Using the outputs from the previous activity as 'intermediary objects' (an item used to stimulate discussion and focus thinking), participants brainstorm all past, present and potential future responses to these challenges. This includes both proactive and reactive response options.

Once again, this exercise is very open and participants are encouraged to write down anything they can think of, whether it be something they have done in the past, do regularly, have seen but never tried, have heard of, or simply something they can imagine might be possible. Responses are not clustered according to the challenge that may have evoked them. Instead, they are organised by the type of response involved; for example, infrastructure, institutional support, community organising, etc. This is because individual responses may have consequences that address more than one challenge, so clustering them by challenge can be confusing.

Note that it is only possible for participants to think within their sphere of experience and imagination. Nevertheless, it is very important to map and build on this throughout the workshop. During the backcasting phase of the workshop, when supporting agencies will be present, there is room to develop capacity and think of additional options to those generated by the community as the supporting agencies may suggest alternative approaches and solutions.

Specific objectives

- To elicit all community-endorsed past, present and potential future responses to the vulnerabilities and challenges identified in the previous stages of the workshop.
- To map existing response and coping strategies and tools.
- To share knowledge between participants of different types of responses.

Activities and time frame

Step 1

Arrange the participants in a circle facing each other and place a large sheet of paper in the centre. Place the Challenges Clustering page next to the new piece of paper; this is to be used as an intermediary object to elicit response strategies. Instruct the

participants to reflect on the possible responses to all of the challenges outlined in front of them. These responses can be things they have tried before, things they do on a regular basis, things they have seen but never tried themselves, things they have heard of but never seen, or things they can simply imagine might be possible.

This takes approximately 10 minutes.

Step 2

Give the participants post-it notes and ask them to record one response per post-it note (to allow clustering of themes in Step 3). If participants are illiterate, you have a number of options to help them to express their views:

1) You can ask them to draw visual representations of what is important.
2) You can provide a scribe (facilitator/translator) to write for them.
3) You can ask a literate community member to help them.

This takes approximately 10 minutes.

Step 3

One-by-one, encourage participants to place each of their post-it notes on the sheet of paper in the centre of the group. As they place each post-it note, ask them to explain what they have recorded to the rest of the group. As successive turns occur, if a new response is similar to an existing response, ask the participant to cluster it with the previous note; the closer it is related to the previous note, the closer it should be placed, but the more different it is, the further away it should be placed. Help participants in this clustering activity and discuss titles for each of the emerging cluster themes with the participants (Figure 15). Label each theme with a different coloured post-it note. In the case of illiterate populations, graphic representations of each cluster theme can be used.

This takes approximately 40 minutes.

TOTAL TIME: 1 HOUR

Facilitation and equipment requirements

Facilitation

A minimum of one facilitator per group is required to assist in this exercise. Ideally, if the group is large, two facilitators should be available: one to lead the group discussions and one to take notes. If possible, one member of the project team should be present to act as a runner between groups and to coordinate the progress of each group to ensure they all finish the activity at the same time.

Equipment

- One large sheet of paper for each break-out group conducting the activity
- One pen per participant
- Roughly 5-10 post-it notes per participant
- Different coloured post-it notes for the cluster labels
- Marker pens
- Camera
- Recording device to document the discussions

Expected outputs

This activity produces a visual representation of community-endorsed past, present and potential future adaptation response strategies and tools.

Response Stories (existing tools and strategies)

Brief description

This activity is conducted in the same break-out groups as the previous Responses Clustering exercise. Participants use the Clustering sheet as an intermediary object to prompt stories about times they have tried any of the responses on the sheet, why they did so, and what happened.

Following this, participants discuss if there are any responses listed that they would have liked to have tried, but did not do so at the time required, including why they did not try them and what they did instead. Participants also get to consider any responses they might like to try in the future and the opportunities or barriers that exist to trying such new things.

During the activity, positive responses and coping strategies are spotlighted and celebrated, building the community's belief in being able to cope and adapt to diverse situations. Creating this sense of empowerment is very important for the visioning exercise that takes place on the following day.

This exercise is insightful as people tell stories naturally and tend to remember stories more easily than they remember facts. Furthermore, stories deliver information with an illustrative context and a time frame, which facilitates the interpretation of the response strategies in context. Stories beget more stories and, once a story circle gets going, they can provide the basis for very fruitful discussions.

Specific objectives

- To place response strategies and tools captured during the Responses Clustering exercise in the local context.
- To use medium of story-telling to provide information that has an illustrative context and a time frame.
- To facilitate community capacity development through learning, change and evaluation.
- To obtain a full picture of what is going on in the community and reveal messages about issues that are not directly discussable.
- To elucidate social, cultural, physical, economic, political and environmental opportunities and barriers to adaptation.
- To build positive community self-perception of coping and adapting through spotlighting and celebrating positive stories, building agency and energy for the following activities.

Activities and time frame

Step 1

Arrange participants in a circle facing each other and place the Responses Clustering page in the centre; this is to be used as an intermediary object to elicit stories. Instruct the participants to reflect on the responses outlined in front of them and share stories about when they have tried the different responses and what happened (Box 3). Record the stories.

This takes approximately 20 minutes, but you can take longer if more time is available.

BOX 3   SETTING THE SCENE: GUIDELINES FOR FACILITATING STORY CIRCLES

Without making guidelines explicit, people will maintain their usual conversational habits.

Therefore, repeat the following rules at the start of the exercise:
- "Please allow your colleagues to complete their anecdote without interruption."
- "Rather than disagree with someone's story, simply tell the story the way you remember it."

Warm up the group with introductions, establishing the guidelines and telling your own story as an example. Volunteering an anecdote of your own is the most effective way to get conversations started. This builds trust and enhances understanding of what's relevant.

If a participant attempts to disagree with someone else's story, ask them to tell their own version of the story, to avoid a debate developing. In addition, avoid cross-examination after someone has shared a story.

Step 2

Ask the participants if there are any responses on the sheet that they wanted to try in the past but did not; invite them to tell the story about what happened and why.

This takes approximately 20 minutes, but you can take longer if more time is available.

Step 3

Ask the participants if there are any responses that they would like to try now and prompt them to discuss what opportunities and barriers exist for each of these items.

This takes approximately 20 minutes, but you can take longer if more time is available.

TOTAL TIME: 1 HOUR (if more time is available, participants may enjoy sharing their stories for longer)

BOX 4 CRAFTING THE RIGHT QUESTIONS: GUIDANCE ON HOW TO ELICIT STORIES RATHER THAN OPINIONS

Start with an image-building phrase, such as:
- 'Think about … '
- 'Imagine … '
- 'If … '
- 'Consider … '

For example, 'think about a time when you experienced flooding … '

Add an additional sentence or two to enhance the image:
- 'This might have been in your own home, or on your farm … '

Memories are tied to particular emotions. Use emotive words when constructing questions to elicit stories as it will help participants to recall past events. Avoid leading the participants by using words from both ends of the emotional spectrum; for instance, happy *and* depressed. Some examples of emotive words are:
- Frustrated
- Elated
- Angry
- Exhausted
- Awed
- Timid
- Hopeful

Then add the open-ended question with the emotive words:
- For example, 'when have you been annoyed, ecstatic or just perhaps surprised by the way your local government handled the flooding?'

Facilitation and equipment requirements

Facilitation

A minimum of one facilitator per group is required to assist in this exercise. Ideally, if the group is large, two facilitators should be available: one to lead the group discussions and one to take notes. If possible, one member of the project team should be present to act as a runner between groups and to coordinate the progress of each group to ensure they all finish the activity at the same time.

Day 2

Where do we want to go? Where are we now?

Welcome back and introduction to the day; brief on visioning activities

Before opening the second day of the Community Planning Workshop, ask participants to present their invitation letter when registering to check that all invitees (or their nominees) have returned. Give participants their name badges when they sign in. Use different coloured stickers on the badges to easily identify which break-out group participants belong to, avoiding confusion later on. Ask participants to return their badge at the end of the day.

Once all participants have registered, gather everyone together to reopen the workshop and welcome participants. Start the workshop according to local custom, as required, and hold it in the local language to ensure that everyone can participate. Reintroduce yourselves and reiterate the purpose of the workshop. Brief the group on the itinerary of the day and provide detail on the group activities.

Visioning activities (three mixed break-out groups)

This stage of the workshop is conducted in two phases – mixed break-out groups (for ease, these can be the same three groups used during the first set of the previous day's activities) and a feedback session. During the first phase, three break-out groups conduct different activities simultaneously, exploring individual and community visions for the future. Each activity (Collages, Future Village Map and Visualisation) has a different focus, collectively leading to a comprehensive assessment.

Visioning must not be limited by perceptions of current trends or limitations. The purpose of the visioning exercises is to clarify local visions and aspirations for a desirable future and not to capture their current, potentially negative, expectations of 'all they could hope for', or where they think things are going. This stage is about dreams and not about predictions; simply put, 'if we do not know where we want to go, there is little chance we can get there'.

Indeed, it is essential to have an unrestricted view of what you desire to ensure that subsequent plans do not reflect an undesirable future simply because participants were too frightened to dare to dream about what they really want. Visioning must take people out of their normal sphere of thinking and into the realm of imagination and possibility. An emphasis should be placed on 'dreaming big'.

Day 2

The second phase of this stage of the workshop is a report back session. Bring everyone back to together in one space, or have groups rotate from one station to another, and request the nominated representatives of each group to feed back on their findings.

Collages

Brief description

This exercise is conducted by one of the three mixed break-out groups (up to 20 people), simultaneously with the Future Village Map and Visualisation exercises. To save time, the same mixed break-out groups from the first three activities on Day 1 can be used. If it is feasible in terms of time, this activity may also be done with groups of men and women separately, or other social groupings, in order to see different visions of the future by gender or any other form of social differentiation.

Collages is a very flexible and free-flowing activity that is rich in meaning and highly inclusive. Participants cut out pictures from newspapers and magazines of anything that represents some aspect of their desired future. By sticking these together on a sheet, they create a 'collage of dreams' – an overall visual representation of local visions, aspirations and values for the future. Participants then share their dreams with the whole workshop, reporting back on the story of the collage they have created.

In addition, each mixed group prioritises three or four aspects of their created future to be carried forward for detailed planning activities over the course of the workshop.

Specific objectives
- To create a colourful and inspiring visual representation of a shared vision for a desirable future for the community, incorporating practical physical dimensions, lifestyle characteristics, personal development, etc.
- To prioritise three or four aspects of this desired vision to be carried forward for detailed planning activities throughout the rest of the workshop.

Activities and time frame

Step 1
Arrange the participants in a circle. Place a large sheet of blank paper in the centre, together with stacks of magazines and newspapers, a pair of scissors for each, and enough glue sticks for sharing.

Step 2
Instruct the participants to individually leaf through the newspapers and magazines and cut out any pictures they come across that represent any aspect of their desired future. Care must be taken to constantly remind participants that this is about their *most positive aspirations* and that their choices *must not be limited* by their current situation or their perceptions of trends (that form of analysis is conducted separately).

The magazines and newspapers should be purchased locally, so that the images are relevant. They should also contain a wide variety of topics (everything from politics

to celebrities), so that participants are not restricted in their visions. Ideally, the range of magazines and newspapers should include coloured images and images of the environment. Each participant should have access to at least 10 pages of a mix of magazines and newspapers, to give them a variety of material to choose from.

Step 3
Instruct the participants to stick all of their images on the paper in order to create a Collage (they can organise themselves how best to do this). Write down on post-it notes a summary of what each of the images (or a group of images) represent (Figure 16).

Figure 16
Creating a Collage

Step 4
Encourage participants to share their feelings about their final Collage (Figure 17) and to share what it means to the community as a whole.

Figure 17
Detail from a finished Collage

Step 5
Ask the participants to select three or four aspects of their future vision that they consider to be priorities for detailed planning over the course of the workshop.

TOTAL TIME: 1 HOUR

Facilitation and equipment requirements

Facilitation
A minimum of one facilitator per group is required to assist in this exercise. Ideally, if the group is large, two facilitators should be available: one to lead the group discussions and one to take notes.

Equipment
- A large sheet of paper
- A large stack of local magazines and newspapers with a variety of topics and images
- One pair of scissors per participant
- Approximately six glue sticks
- Different coloured post-it notes for the labels
- Marker pens
- Camera
- Recording device to document the discussions

Expected outputs
This activity produces a 'Collage' – a visual representation of a composite desirable vision of the future for the community.

Future Village Map

Brief description
This exercise is conducted by one of the three mixed break-out groups (up to 20 people), simultaneously with the Collages and Visualisation exercises. To save time, the same mixed break-out groups from the first three activities on Day 1 can be used.

Participants draw a map detailing how they would like their village to look in the future, capturing physical details, such as schools, healthcare facilities, markets, industry, agriculture, housing, electricity, water storage and distribution, sanitation, and PAs. The elements on the map illustrate the goods, services, aesthetic and lifestyle considerations that the community would like to provide through its built landscape. For example, in places where community cohesion is an aspiration, the 'future' often includes a community centre and other places of gathering for various community-based activities.

This exercise in spatial planning allows the community to really see and experience what their village could look like. By having this visual stimulus, community members find it much easier to imagine such changes actually taking place, which is the first crucial step towards making the changes happen. Thus, subsequent plans and actions become much more focused and meaningful to the community.

Specific objectives
- To produce a map of the 'future village', encompassing the community's values and aspirations.
- To increase understanding of the scope of the focal system under consideration.

Activities and time frame

Step 1
Arrange the participants in a circle facing each other and place a large sheet of paper in the centre. In addition, place a flip chart next to the large sheet.

Step 2
Instruct the participants to draw the physical boundaries of the community as set by rivers, roads, or other geographical features. Ensure that the participants do not start drawing in current resources or structures as this will limit their visioning for the future – they should simply draw current physical boundaries as these are unlikely to change in the future.

This takes 5 minutes.

Step 3
Encourage participants to list on a flip chart sheet all of the items that they want to arrange within the boundaries they have drawn on the map. These may include physical and environmental features, such as dykes, forests, fields, mangroves and animals; and infrastructure, such as housing, schools, healthcare facilities, market places, mills, roads, community centres, libraries, etc. Ensure participants list the items that they want to see in the future and are not limited by what is currently present.

The time frame for the vision is far enough into the future so as not to be limited by present conditions, but not so far into the future that it becomes impossible to do any concrete planning – 15 to 20 years often works well.

This takes 5 minutes.

Step 4
Aid participants in arranging these items within the map while discussing the implications of various design features in terms of access, equity, allocation, PA boundaries, physical changes to due climate impacts (for example, coastal erosion) and other relevant qualities. If it helps the decision process regarding what goes where, ask participants to draw the items directly onto the map in coloured pencil first. Once everyone has agreed on a new item, use a coloured marker to make the item more visible (Figure 18).

This takes around 45 minutes.
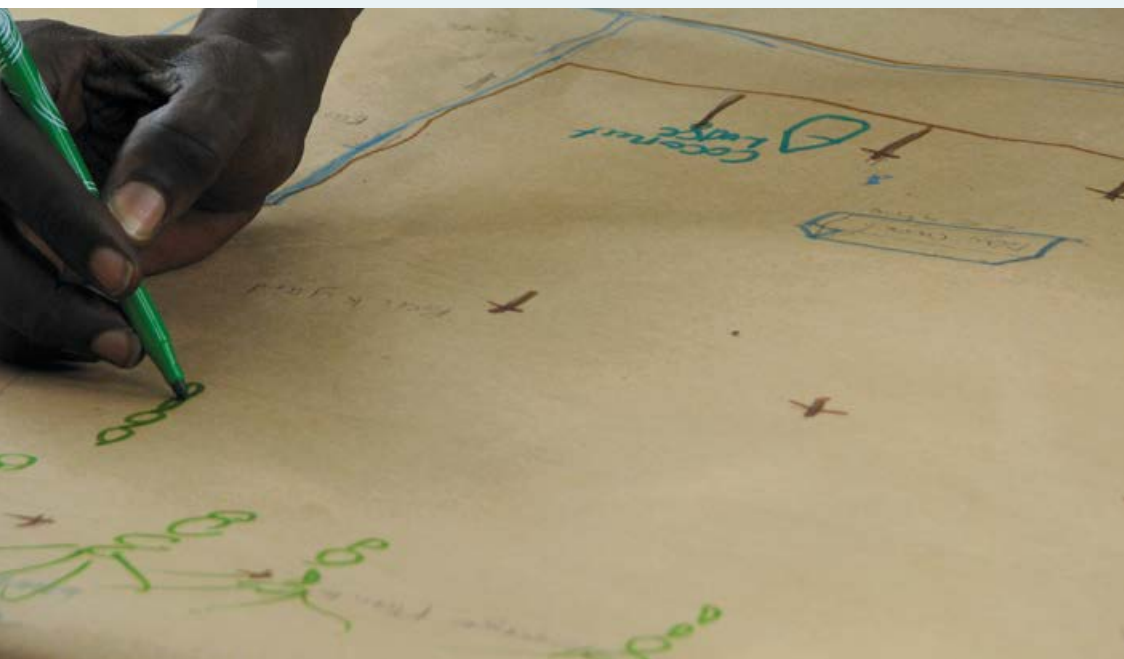
Figure 18
Creating a Future Village Map

Step 5

Ask the participants to prioritise three or four aspects of their future vision for detailed planning on the following day of the workshop.

This takes 5 minutes.

TOTAL TIME: 1 HOUR

Facilitation and equipment requirements

Facilitation

A minimum of one facilitator per group is required to assist in this exercise. Ideally, if the group is large, two facilitators should be available: one to lead the group discussions and one to take notes.

Equipment

- A large sheet of paper
- Flip chart
- Marker pens and coloured pencils
- Rulers and other drawing aids
- Camera
- Recording device to document the discussions

Expected outputs

This activity produces a map of the future village the group wish to see (Figure 19), a list of elements that the future village contains, and a synthesis of the discussions.

Figure 19
A finalised Future Village Map

Brief description

This exercise is conducted by one of the three mixed break-out groups (up to 20 people), simultaneously with the Collages and Future Village Map exercises. To save time, the same mixed break-out groups from the first three activities on Day 1 can be used. If it is feasible in terms of time, this activity may also be done with groups of men and women separately, or other social groupings, in order to see different visions of the future by gender or any other form of social differentiation.

In this exercise, participants close their eyes and are guided through a visualisation of their village, the surrounding landscape, their homestead, their home and their daily activities in the future. Following the visualisation, participants tell the story of what they imagined for themselves, sharing their desired futures. The group then collectively summarises their visions and aspirations for the development of the community. They prioritise three or four aspects of their collective future vision for detailed planning on the following day of the workshop.

This exercise captures intangible aspects of the future that are difficult to represent or articulate, such as gender relationships and other social conventions.

Specific objectives

- To contribute to creating a full picture of the future in terms of local values and aspirations by capturing many aspects of daily life that cannot be represented graphically in a map or collage.

Activities and time frame

Step 1

Arrange the participants in a circle facing each other. Ask them to close their eyes and breathe deeply and slowly, concentrating on their in-breath and out-breath for a couple of minutes.

Step 2

While the participants have their eyes closed, guide them through a visualisation of their home in their future. Slowly, walk them to their own homestead and ask them to imagine the layout of buildings, the content of the rooms of their house, whether there is electricity and water, where the bathroom is located, who lives in the house, and so on, until they eventually get to their bed and lie down, imagining what it is made of before they fall asleep.

Step 3

Ask the participants to keep their eyes closed and guide them through a visualisation of a standard day in their ideal future. They wake up and get out of bed: what time is it? What is the first thing they do upon waking up? Do they read the paper? Clean the homestead and make breakfast? Check their email? Instruct staff? Feed animals? What do they eat for breakfast in their ideal future? … And so on. Help the participants to think through their whole day, including activities before lunch, lunch, activities after lunch, dinner, activities after dinner, and at what time they go to bed.

Step 4

Still with their eyes closed, ask participants to imagine walking through the landscape surrounding their village: is the PA there? What does it looks like? Are there any specific features they hope to see? … And so on.

Steps 1-4 take approximately 30 minutes.

Step 5

Ask the participants to share the stories of what they imagined for their future selves, including any intangible aspects of lifestyle and social organisation. On the flip chart, compile a list summarising the key points from this discussion.

This takes approximately 25 minutes.

Step 6

Instruct the participants to prioritise three or four aspects of their future vision for detailed planning on the following day of the workshop.

This takes 5 minutes.

TOTAL TIME: 1 HOUR

Facilitation and equipment requirements

Figure 20: A participant reporting back on visualisation stories

Facilitation

A minimum of one facilitator per group is required to assist in this exercise. Ideally, if the group is large, two facilitators should be available: one to lead the group discussions and one to take notes.

Equipment

- Flip chart
- Marker pens
- Camera
- Recording device to document the discussions

Expected outputs

This activity produces a set of narrative visions of a desirable future encompassing aspects of lifestyle, decision-making and values that are difficult to capture in physical representations.

> ### *Report back from break-out groups*
> Once all three activities have been completed, participants report back to each other, either in a large group or by rotating from one station to another (see p. 22).

Where we are now? (Three mixed break-out groups)

This stage of the workshop is conducted in three phases – mixed break-out groups (for ease, these can be the same three groups as the first set of the previous day's activities), a feedback session and further break-out groups. During the first phase, three break-out groups conduct different activities simultaneously, exploring all the assets of individuals, local associations and institutions that might be useful for adaptation responses. Each activity (Resource Mapping, Mapping Formal and Informal Organisations and Institutions, and Individual Strength Mapping: Community Valentines) has a different focus, collectively leading to a comprehensive assessment.

It is essential that each person's gifts and assets be recognised, even those who have been marginalised within the community. This releases the power of the individual and the community as a whole, and allows all of those affected to take ownership of the adaptation process.

Identifying formal associations, such as provincial administration, is important, but informal associations, such as family or friend groups, is vital to allow the involvement of all stakeholders, to account for multiple governance structures that exist in heterogeneous communities, and to promote the perception of legitimate processes.

The second phase of this stage of the workshop is a report back session. Bring everyone back to together in one space, or have groups rotate from one station to another, and request the nominated representatives of each group to feed back on their findings.

The third phase of this stage of the workshop (Daily Calendar by Season) clarifies the daily labour and consumption patterns across the seasons, and the corresponding production cycles, in order to inform prioritisation and planning, and to find response options that are appropriate for the local context. Constructing the daily calendar individually for men, women and children during each season is quite time consuming, so divide participants into as many groups as there are seasons, and have each group do the activity for one assigned season.

Resource Mapping

Brief description
This exercise is conducted by one of the three mixed break-out groups (up to 20 people), simultaneously with the Mapping Formal and Informal Organisations and Institutions, and Individual Strength Mapping: Community Valentines exercises. To save time, the same mixed break-out groups from the first three activities on Day 1 can be used.

Resource Mapping collectively constructs an overview or 'map' of the physical resources available in the target area. Participants either draw the resources on a flip chart, or use alternative materials to develop the map. Once the maps are ready, participants are encouraged to discuss and analyse the maps. This opens up dialogue around issues like land tenure, resource allocation and management, how the resources are used and what

benefits they produce, and relationships between the different resources. In turn, this helps to identify how sensitive people are to different climate hazards and stressors, and what resources they have at their disposal for adapting to new ones.

The final Resources Maps are important during the following backcasting activities as detailed plans involve spatial decisions and draw on resources highlighted here.

Specific objectives
- To identify the boundaries of the area to be assessed, the different resources available in that area, and the spatial distribution of such resources.
- To generate group discussions around issues like land tenure, resource allocation and management, how the resources are used and what benefits they produce, and relationships between the different resources.
- To identify how sensitive people are to different climate hazards/stressors and what resources they have at their disposal for adapting to new conditions – their 'adaptive capacity'.

Activities and time frame

Step 1
Arrange participants in a circle facing each other and place a large sheet of paper in the centre.

Step 2
Instruct participants to draw the physical boundaries of the community on the paper; for example, rivers, roads, property boundaries, features of the PA, etc.

This takes 5 minutes.

Step 3
Encourage participants to begin to place key existing features within these boundaries on the map. These may include physical and environmental features, such as dykes, forests, fields, mangroves and animals; and infrastructure, such as housing, schools, healthcare facilities, market places, mills, roads, community centres, libraries, etc. Emphasise that this map represents *current* resources. Ask the participants to continue to add details illustrating the main natural, physical, cultural and other features of the site. To avoid having to create several drafts of the map, ask participants to draw the items onto the map in coloured pencil first. Once everyone has agreed on a new item, use a coloured marker to make the item more visible.

Step 4
Based on the map, ask participants to describe the ways their physical resources shape their lifestyle, livelihood and culture. Bearing in mind potential 'hot topics' and tensions within the community that may need to be explored in private, delve into questions surrounding formal and informal land use and tenure, customary rights, and the consideration of different ethnic, religious and livelihood groups in the discussion.

TOTAL TIME: 1 HOUR

Facilitation and equipment requirements

Facilitation
A minimum of one facilitator per group is required to assist in this exercise. Ideally, if the group is large, two facilitators should be available: one to lead the group discussions and one to take notes.

Equipment
- Flip chart
- Marker pens
- Camera
- Recording device to document the discussions

Expected outputs
This exercise produces a visual representation of the current resources of the community, in the form of maps (Figure 21) and tables drawn on flipcharts. It is also provides a synthesis of the discussions.

Figure 21
An example output from the Resource Mapping exercise

Mapping Formal and Informal Organisations and Institutions

Brief description
This exercise is conducted by one of the three mixed break-out groups (up to 20 people), simultaneously with the Resource Mapping and Individual Strength Mapping: Community Valentines exercises. To save time, the same mixed break-out groups from the first three activities on Day 1 can be used.

Participants list all the groups and organisations present in the community and draw a diagram that represents the relationships between them. The list includes local associations, both formal and informal, and related external agencies and individuals.

Formal associations, such as provincial administration, chief and village elders, religious groups or sporting clubs, can sometimes be easier to identify than informal associations like youth groups, families or groups of friends. However, identifying informal associations is important to allow for the involvement of all stakeholders, to account for multiple governance structures that exist in diverse communities, and to promote the perception of legitimate processes. In the case of community planning in the context of PAs, participants should consider all formal and informal organisations which relate to the PA.

Specific objectives
- To completely map out all of the formal and informal organisations and institutions that the community relates to, and how these organisations relate to each other.
- To characterise existing organisational and institutional capacity that the community can build upon and use to coordinate activities and resources.
- To provide information on projects that have previously been implemented in the community, which the subsequent Community Action Plans can build upon.

Activities and time frame

Step 1
Ask participants to brainstorm and list all of the formal and informal organisations and institutions they relate to in any way. In the context of PAs, request participants to name all formal and informal organisations and institutions that mediate their relationship with the PA.

Step 2
With instruction from the participants, draw a diagram of how these organisations and institutions relate to each other. A Venn diagram, which shows how the membership or management and focus of organisations overlap, is often a good format. The groups in the diagram can then be connected with arrows to show interrelationships (Figure 22). Different styles of arrows can also be used to give information on the nature of the relationship between organisations, if applicable. For example, a solid arrow (——▶) represents a strong relationship; a dotted arrow (∙∙∙▶) indicates a weak relationship; and a long arrow intersected by a short arrow (——⋌▶) represents a conflicted relationship.

Step 3
Once the organisations have been identified, ask participants how long they have been in operation/active in the community; how regularly they have contact with them and for what purposes; how much they trust each organisation; and what their experiences with them have been like. Record the details of the main points of contact in a notebook.

TOTAL TIME: 1 HOUR

Facilitation and equipment requirements

Facilitation
A minimum of one facilitator per group is required to assist in this exercise. Ideally, if the group is large, two facilitators should be available: one to lead the group discussions and one to take notes.

Figure 22
An example of a diagram showing relationships between Formal and Informal Organisations

Equipment
- Flip chart
- Post-it notes on which to record organisations
- Camera
- Recording device to document the discussions

Expected outputs
This activity produces a visual representation, or 'map', of all formal and informal organisations and institutions present in the target area, and their relationships to each other and the community. This can also be used to determine technical experts to invite to Day 3.

Individual Strength Mapping: Community Valentines

Brief description
This exercise is conducted by one of the three mixed break-out groups (up to 20 people), simultaneously with the Resource Mapping and Mapping Formal and Informal Organisations and Institutions exercises. To save time, the same mixed break-out groups from the first three activities on Day 1 can be used.

Each participant writes an anonymous 'Community Valentine' about one of the other participants. In the valentine, they detail all of the 'good things' about the other person, which can be skills (e.g. carpentry, business skills, childcare), qualities (e.g. honest, fair, kind) or community perceptions of them (e.g. respected, important). Nothing is too small or insignificant, and every quality is useful in the process of community development. The Community Valentine is then returned to the person it was written about.

Everyone reads their own valentine to the group. This has a multitude of positive effects. Firstly, each participant leaves feeling happy and appreciated. Secondly, the whole community becomes aware of the skills and capabilities that exist within their community. Finally, the exercise builds trust, goodwill and relationships within the community. Ultimately, a list is produced that allows the community to mobilise the resources they have for adaptation activities, based on these individual attributes.

Recoding these aspects of individuals is crucial for backcasting the following day, which builds on existing strengths and assets, and assigns responsibilities to particular individuals. The activity is an incredible process: people are always smiling ear-to-ear while they read out their Community Valentines (Figure 23). Forums rarely exist in which people receive this kind of positive feedback and the outcomes are profound and multiple.

Figure 23
Participants enjoying the Community Valentines activity

Specific objectives
- To capture the skills, knowledge, expertise and assets of individuals – essential for the backcasting exercise later in the workshop.
- To increase awareness of people's attributes among the community as a whole.
- To provide participants with positive feedback about their skills and capabilities.

Activities and time frame

Step 1

Arrange the participants in a circle facing each other. Using stickers or post-it notes, place a number on each person, so that the other participants can clearly see it. Give each participant some note paper and a pen.

Step 2

Privately assign each participant a new number of another participant. Keep a record of who has been assigned with which number. Once you have assigned everyone a number, or 'valentine', quietly and individually inform each participant which number they have been assigned, i.e. who they will write their Community Valentine to. They will know who that person is as everyone is wearing 'number badges' (post-it notes). Ask the participants to keep their assigned number (valentine) a secret.

This takes approximately 5 minutes.

Step 3

Instruct the participants to reflect on all of the positive qualities of the person they have been assigned (while maintaining anonymity) and ask them to write down four or five of these (to ensure all participants receive an equal number of compliments) on a sheet of paper. These can include skills, such as livestock rearing or building; knowledge, such as traditional medicines; or qualities, such as hardworking and honest. In the case of illiterate participants, scribes will need to write the notes for each person (Figure 24) and read them out in the format described below.

This takes approximately 10-15 minutes.

Figure 24
A scribe recording an individual's Community Valentine

Step 4

Collect all the notes (valentines) and return them anonymously to the subject of the note.

Step 5

Each person is asked to read aloud the Community Valentine they have received. In the case of illiterate participants, read their Community Valentine aloud on their behalf. During this process, take notes on skills, knowledge, assets and qualities present in the community and where to find them; this information is useful during the following backcasting exercise. Compile a summary of the characteristics (without listing names) on a flip chart for reporting back to the larger group.

TOTAL TIME: 1 HOUR

Facilitation and equipment requirements

Facilitation

A minimum of one facilitator per group is required to assist in this exercise. Ideally, if the group is large, two facilitators should be available: one to lead the group discussions and one to take notes.
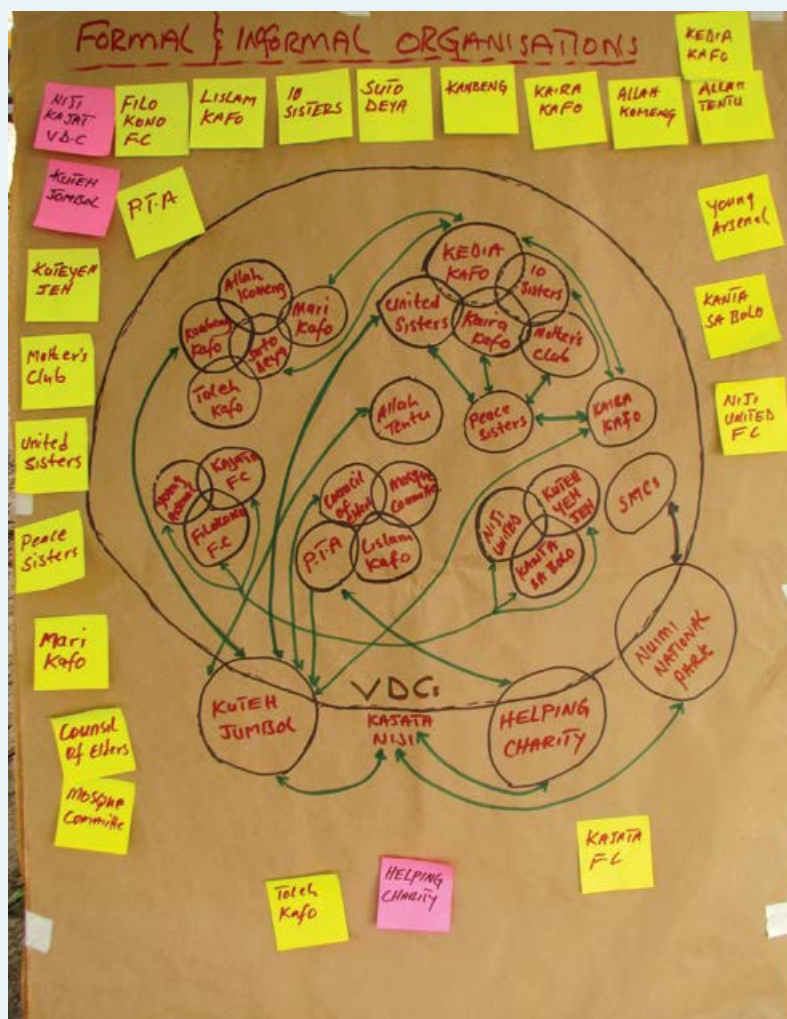
Equipment
- Post-it notes
- Note paper and pens for each participant
- Flip chart
- Camera
- Recording device to document the discussions

Expected outputs

This activity maps individual skills, knowledge and assets within the community.

Report back from break-out groups

Once all three activities have been completed, participants report back to each other, either in a large group or by rotating from one station to another .

Daily Calendar by Season

Brief description

For this activity, participants are divided into groups according to the number of seasons that exist in their region; each group is assigned one season to focus on. For their allocated season, the group maps out their daily activities from waking to sleeping for the three following cases: 'normal times' (standard years); 'times of scarcity' (bad years); and 'times of abundance' (good years). By mapping each case on the same diagram, it is easy to compare activities between cases.

Figure 25: A participant reporting back to the large group on the organisational mapping activity

On the same diagram, separate marks are also drawn for the activities of men, women and children. Depending on how many seasons exist, participants can be divided into gender groups in order to better understand variations between the groups (for instance, one male group and one female group for the rainy season; the same for the dry season; totalling four groups). Please note that each group needs at least one facilitator.

Producing such a Daily Calendar by Season is vital in highlighting the daily labour and consumption patterns across the seasons, and the corresponding production cycles, in order to inform prioritisation and planning, and to find response options that are appropriate for the local context.

Specific objectives
- To clarify the daily labour and consumption patterns during times of scarcity, abundance and normality across the seasons.
- To highlight production, harvesting and herding annual cycles.
- To provide information and context for prioritisation and planning exercises, in order to see which response options are appropriate for the community.

Activities and time frame

Step 1
Prior to the activity commencing (perhaps, during lunch break), confirm the number of seasons that the target area goes through with key informants, and divide participants into groups by season.

Step 2

Arrange the participants in a circle facing each other and place a flip chart and different coloured marker pens in the centre. Ask participants to describe the features of the season they are discussing in terms of temperature and rainfall.

Step 3

Draw a horizontal line along the bottom of one flip chart page, with a little space below the line for activities that take place before and after sunset. Draw concentric arcs above the horizontal line, treating the centre of the line as the centre of the arcs. The arcs represent timelines from waking to sleeping. The smallest (lower) arc represents a timeline in a bad year, the middle arc represents a timeline in a normal year, and the largest (upper) arc represents a timeline in a good year. Where the arcs intersect the horizontal line on the left-hand side, this represents sunrise; and where they intersect the horizontal line on the right-hand side, it represents sunset. Leave enough space in-between the arcs so that notes can be taken or pictures of different activities can be drawn around the arcs. The arcs may be continued some distance below the horizontal line to capture activities that are carried out before sunrise and after sunset (Figure 26).

Figure 26
Preparation of a Daily Calendar by Season

Step 4

Considering each arc separately (starting with normal years, followed by good years and then bad years in order to be most time effective), work around the arc from rising until sleeping, capturing all of the activities conducted by each social group (men, women and children) during the day. This includes labour patterns of different groups of people (e.g. boys who herd cattle, women without children, elders, etc.) so as to fully capture the

diversity of household labour and income contributions. The activities are placed in relation to the position of the sun. In addition, include resource gathering (e.g. water), recreation, meals, and any other relevant details on the Daily Calendar.

To facilitate the process of drawing in activities, ask participants a series of questions about activities, labour and consumption patterns throughout the day, and encourage them to tell stories whenever possible to explain their answers. If participants cannot remember a time of abundance, encourage them to refer to folklore or stories from elders who have died. As the participants dictate their days, record it on the prepared sheet using both words and pictures. You can help participants to draw these items themselves once they have seen how the process works. This gives them an opportunity to suggest corrections if the calendar does not adequately capture what has been explained (for example, how each daily task correlates with the placement of the sun). Using bright markers and cartoon-like drawings helps keep the participants interested throughout this process, and the final poster board ends up looking a bit like a rainbow (Figure 27).

TOTAL TIME: 1 HOUR MINIMUM (longer if possible)

Figure 27
An example of a Daily Calendar by Season

Facilitation and equipment requirements

Facilitation
A minimum of one facilitator per group is required to assist in this exercise. Ideally, if the group is large, two facilitators should be available: one to lead the group discussions and one to take notes.

Equipment
- Flip chart
- Coloured marker pens
- Camera
- Recording device to document the discussions

Expected outputs

The exercise offers a very clear map of production and consumption patterns, as well as adaptation mechanisms, by comparing the different arcs. Through this calendar, it is possible to:
- Produce comprehensive lists of income-generating activities undertaken by participants.
- Quantify crop yields and rates of crop failure.
- Identify the sources and extent of livestock losses.
- Determine the extent to which the participants have been reliant on emergency food-aid and other services provided by government agencies and international organisations.
- Develop a better sense of the division of labour.
- Distinguish coping mechanisms that further degrade the community's environment and assets from those that are neutral or beneficial.
- Identify how the PA is used.
- Identify multiple stressors other than the drivers of food insecurity.

Preparatory steps for Day 3's backcasting activity

In order to continue the workshop in the most effective way, it is necessary to do some preparation before starting the third day's activities. This preparation includes inviting key organisations and institutions to the backcasting exercises, and compiling a list of the community's priorities to focus the planning process. The following two sections cover what needs to be done between Day 2 and Day 3 of the workshop.

Linking with support organisations

Brief description

Based on the activities thus far, including the mapping of goals and institutions, it is possible to identify sets of agencies or organisations that may be able to support the development and implementation of detailed Community Action Plans by providing technical expertise and knowledge. Representatives of these institutions should be invited to participate in the initial backcasting exercise to begin developing relationships with the community. They can also assist with planning when the community needs help in identifying options that are beyond their experience.

Specific objectives
- To identify institutions with the capacity to support the Community Action Plans. Such institutions include the PA; government departments of the environment, forestry, water management, agriculture, fisheries, and development; NGOs with relevant expertise; or private companies, such as electricity providers.

- To invite representatives of these organisations to be present for the backcasting activity on Day 3 of the Community Planning Workshop so that they can assist with those details of the plans which relate to them and require their input. Note that these external representatives must not dominate the process in any way – they are merely there to provide technical support.

Activities and time frame

Step 1
Use the collective knowledge of the project team and facilitators about national and local institutions and consider any additional organisations that were discussed in the Mapping Formal and Informal Organisations and Institutions activity (see p. 50) to identify relevant organisations to include in Day 3's activities.

Step 2
During Day 2 of the workshop, make contact with these organisations and invite representatives to the third day of the workshop, as well as to relevant follow-up activities. Note, however, that it is advisable to identify certain organisations that are likely to be required to attend in advance of the workshop, and give them notice of a possible pending invitation. If the community is remote and/or technical experts need to be invited officially with more than one day's notice, you may need to identify and invite technical advisers prior to the workshop by anticipating Community Priority Issues. You can do this in consultation with village elders during the initial scoping of the village (Section 2.2). Alternatively, a break can be built into the workshop between Day 2 and Day 3 in order to allow enough time to invite relevant experts.

Facilitation and equipment requirements

Facilitation
One or two project team members or facilitators are needed to identify and contact relevant institutions and invite representatives.

Expected outputs
This activity ensures that relevant support agencies are present to assist with detailed planning process (backcasting).

Compiling a list of Community Priority Issues prior to backcasting

Brief description
A list of Community Priority Issues must be compiled before step-by-step Community Action Plans can be developed through backcasting. In order for this to be done in the most time-efficient way possible – and to ensure that resulting goals are well defined, achievable and sustainable within the PA context – this list is put together by the facilitators and project team at the end of Day 2. It is based on issues raised by the community during all the activities of the first two days of the workshop; in particular, on the three visioning activities and the Challenges Clustering and Ranking exercise. It is likely that these will include resilience-building options that address development in general, as well as more specific adaptation strategies.

After creating a comprehensive list, ensuring that no community priorities have been left out, the team prioritise five to eight Community Goals, as well as a list of five to eight Alternative Livelihood Activities. The goals should be chosen as objectively as possible, avoiding any sectoral biases the project team might have. They should be based on the priorities and challenges that most reflect the community's issues and that address vulnerability to priority disturbances in the target area. The team should also consider the achievability of goals within the scope and scale of the project, and with the authority and technical expertise available (for example, although building a road may be a community priority, such a project represents a massive infrastructural undertaking that would require sign-off from high-level authorities and is unlikely to be feasible within the PA; therefore, workshop time is better spent developing plans for more achievable goals). Both the Community Goals and Alternative Livelihood Activities should become clear from the first two days of the workshop. They are presented to the community on the third day of the workshop. The community then votes on their top six Community Priority Issues – three Community Goals and three Alternative Livelihood Activities – for which they develop step-by-step plans.

Giving participants the opportunity to develop actions plans for both Community Goals they have identified, as well as Alternative Livelihood Activities that could be successful, allows resulting plans to achieve a sustainable social and ecological future in the face of climate change. If successfully implemented, diversifying livelihood activities could not only increase income-generating opportunities that address development needs but could also build resilience to climate change.

Specific objectives
- To create a comprehensive list of Community Priority Issues identified by the community during the first two days of activities, particularly the visioning and challenges activities.
- To prioritise 5-8 Community Goals and 5-8 Alternative Livelihood Activities that will be voted upon by the community on Day 3 of the workshop, ultimately, creating six priorities to carry forward into the backcasting exercise.

Activities and time frame

Step 1
Compile a list of all priorities identified by the community from all three visioning exercises (Collages, Future Village Map and Visualisation), and a list of all the challenges identified in all three break-out groups during the Challenges Clustering and Ranking exercise (men, women and the mixed group). Reviewing the Responses Stories, Vulnerability Mapping and Daily Calendar by Season outputs can also provide valuable information, particularly on the selection of Alternative Livelihood Activities.

Step 2
Identify the top 5-8 Community Goals arising from these activities (for example, by highlighting those that occur most frequently across all activities) and discuss the main issues mentioned by participants about these goals. This discussion allows you to reformulate or combine Community Goals to create better defined goals for the future (for example, further define 'education' as 'improved quality of education'; or combine 'tree

Figure 28
Facilitators and project team reviewing activity outputs to identify community priorities

planting along coastline', 'erosion' and 'good environment' into one goal entitled 'healthy and durable coastline').

Step 4

Identify 5-8 Alternative Livelihood Activities that have the potential for success in the target area and within the PA context. The initial scoping of the village and activities on the first two days of the workshop should provide enough information about the types of activities that might work in the given environment (e.g. large-scale honey production, aquaculture, value-addition to nut production, etc.). It is likely that some Alternative Livelihood Activities have been tried in the past, but could be developed further in the future in a different or better way (Day 1's activities are likely to reveal such information). Furthermore, having an understanding of the existing individual capacities, resources and institutions provides an understanding of what could be achieved.

Facilitation and equipment requirements

Facilitation

All facilitators and project team are required to discuss and decide on the Community Priority Issues.

Expected outputs

The output of this exercise is a list of 5-8 Community Goals and 5-8 Alternative Livelihood Activities that are based on previous workshop activities, and informed by the participants. This list will be used during the backcasting exercise on Day 3.

Building a step-by-step plan

Introduction to backcasting

Before opening the third day of the Community Planning Workshop, ask participants to present their invitation letter when registering to check that all invitees (or their nominees) have returned. Give participants their name badges when they sign in. Use different coloured stickers on the badges to easily identify which break-out group participants belong to, avoiding confusion later on. Ask participants to return their badge at the end of the workshop.

Once all participants have registered, gather everyone together to reopen the workshop and welcome participants. Start the workshop according to local custom, as required, and hold it in the local language to ensure that everyone can participate. Reintroduce yourselves and reiterate the purpose of the workshop. Brief the group on the itinerary of the day and provide detail on the activities.

Day 3 of the workshop is conducted in four phases: phase one introduces the whole group to backcasting through a practice round; phase two sees the whole workshop vote on its top six Community Priority Issues (three Community Goals and three Alternative Livelihood Activities); phase three is the main backcasting activity, which is conducted in mixed break-out groups over two rounds, allowing for breaks (for ease, you can use the same three groups from the previous day's activities); and phase four is a plenary, feedback session where participants showcase their findings from the break-out groups, and discuss and agree further steps.

In this section, all four phases are combined and detailed in the following brief.

Discussion of Community Priority Issues and community vote; Backcasting priority issues (mixed break-out groups); Report back from break-out groups and consideration of further steps

Brief description

Backcasting is a systematic process that works backwards from a desirable future, identifying the steps required to connect that future to the present state. At each step of this process, we ask the question "if we want to attain 'x' [current step], what would we need to do or have in place for that to be possible?" This question is asked over and over again until the present state is reached. The steps determined in this process can then be implemented in the present in order to achieve the community's desired future.

In actual fact, people think in this 'backcasting' way all the time. For example, you might reflect: "if I want to be at work by 9am, I will need to catch the bus at 8:30am, which means I will need to leave the house at 8am, which means I will need to finish breakfast and be packed by 8am, which means I need to be out of the shower by 7:30am …", and so on. We are, therefore, all familiar with the process of stepping backwards from a desired outcome in order to work out what would need to happen to get us to our goal.

Backcasting focuses on the agency of people to overcome adversity and to achieve their desired future, as well as the steps required to attain those conditions. This is in contrast to forecasted planning, which proposes steps that are merely a continuation of the current condition. When working from the present, people are often blinded by their current

difficulties and limitations. Working backwards from the future produces a huge spectrum of options that people have not previously thought about.

In the exercises described in this manual, backcasting is implemented using a large sheet of paper and post-it notes. Key features of the present (assets, resources, etc.) and future (Community Goals, etc.) are listed on post-it notes and placed vertically down the left-hand and right-hand side of the paper respectively. The aim is to move successively from the right to the left, filling in the space with information by continuously asking the questions: "What would we need/need to do to achieve this? What comes before that?" Thus, the space between the future and current state is filled in with steps that form a plan of how to achieve the community's aspirations.

Specific objectives

- To develop a step-by-step plan of how to reach the community's desired future resilience and adaptation outcomes by building on all the resources that exist within a community, and drawing on all the capacities available.

Activities and time frame

Step 1

Set-up for all backcasting: place a large sheet of brown paper on a wall or in the centre of the group. Place post-it notes representing the specific outcomes to be reached (the Community Goal or Alternative Livelihood Activity) on the right-hand side of the sheet as a vertical list. Place post-it notes representing current strengths, assets and resources on the left-hand side of the sheet (Figure 29) – there should be as many of these as possible and they do not need to be arranged linearly.

Figure 29
A facilitator preparing a backcast for practice round

Step 2 (Practice Round)

Before presenting the list of Community Goals and Alternative Livelihood Activities compiled on Day 2, introduce the concept of backcasting, explaining how it works and undertaking a practice round with the whole group. This ensures that participants grasp the process before moving on to developing their Community Action Plans. On a separate flip chart sheet (placed horizontally), go through an example of backcasting something simple and familiar, such as making a meal that everyone is familiar with (Figure 30), so that the participants understand the exercise.

TOTAL TIME FOR INTRODUCTION AND PRACTICE ROUND: 1 HOUR

Figure 30
An example of a backcasting practice round using 'eating groundnut soup' as the future goal

Step 3 (Community Vote)

Once participants understand how backcasting works through the practice round, present the group with the list of Community Goals and Alternative Livelihood Activities that was compiled at the end of Day 2, prior to backcasting. It is important to explain to the participants how the list was developed, and to emphasise that all goals and activities are based on the visions, challenges and descriptions of community assets and environment that were provided in the previous workshop activities – thus, everything originates from the community and represents their goals for the future. It is also important to note that the list includes the most frequently mentioned priorities, but that all other points raised will be written down and given to them after the workshop. Also, explain that the goals to be backcasted are those that are achievable within the scope and scale of the workshop, and with the authority and technical expertise available (for example, although building a road may be a community priority, such a project represents a massive infrastructural undertaking that would require sign-off from high-level authorities and is unlikely to be feasible within the PA; therefore, workshop time is better spent developing plans for more achievable goals). In addition, use this opportunity to introduce the outside technical experts.

After this introduction, present the list of Community Goals and Alternative Livelihood Activities to the participants and allow everyone to vote on their top three Community Goals and top three Alternative Livelihood Activities (Figure 31). To eliminate bias in the voting process (participants seeing how others have voted and making their choices based on the popularity of these votes), record people's votes individually, and in secret, on your own list of the options available. If all the facilitators have a list, you can create private 'voting stations', speeding up the process.

Once all participants have voted, count the votes and present the top six Community Priority Issues for backcasting.

TOTAL TIME FOR VOTING: 1 HOUR
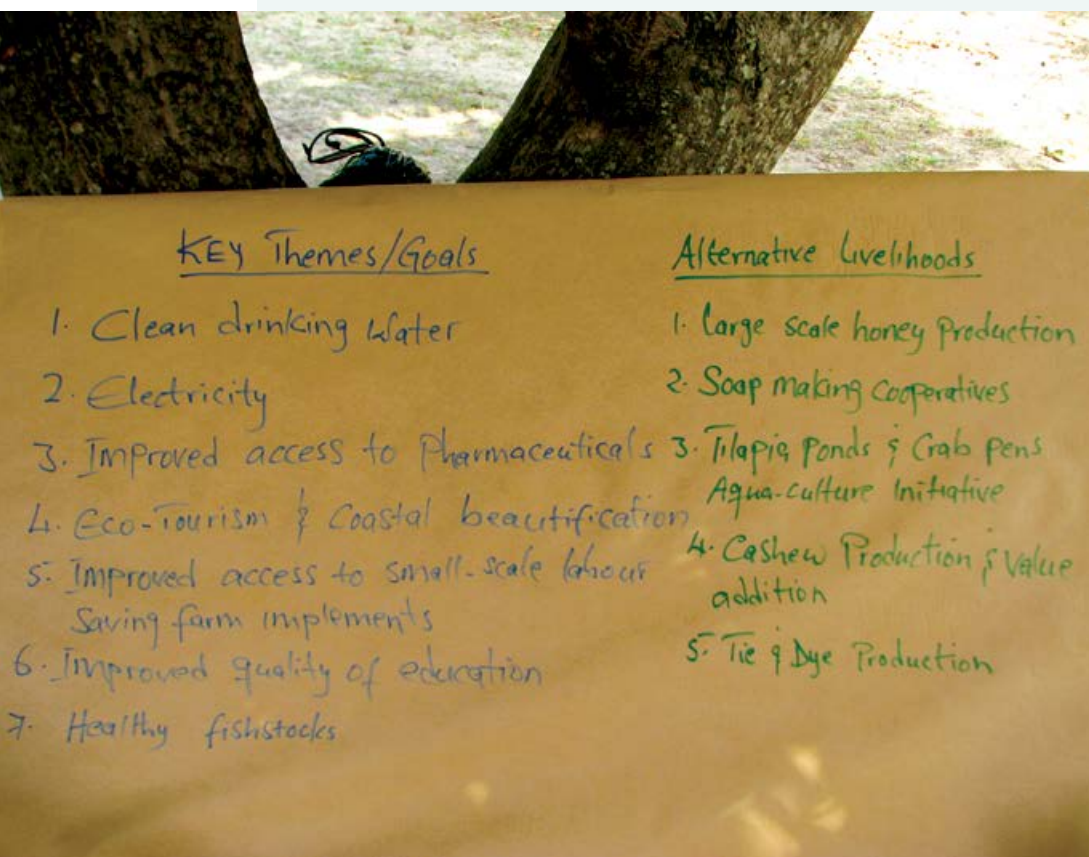
Figure 31
An example of presenting Community Goals and Alternative Livelihood Activities for voting

Step 4 (Backcasting)
Split the whole workshop into 3 groups of up to 20 people. To save time, participants can stay in the mixed break-out groups from the previous days' activities. Each group will backcast one Community Goal and one Alternative Livelihood Activity. Assign facilitators and technical experts to the groups based on their knowledge of the subject, if possible.

Begin by backcasting the break-out group's Community Goal. Starting from the outcome, help the participants to think of the preceding stage necessary to attain that outcome, and then the preceding stage of achieving that outcome, and so on, right back to the present state (Figure 32).

Figure 32
An example of backcasting access to electricity and honey production

For example, consider the outcome 'adequate water supply for irrigation' and follow this line of questioning:

Question: what are all the ways in which this could be achieved?
Potential answers: small farm dams, large dam, pumps from nearby surface water, boreholes and pumps.

For each of these items, then ask the question: what would we need to do to achieve this?

For instance, small farm dams could stimulate the following chain of thoughts among community members: "we would first need to find some land on which we can dig a hole, and then we would need to dig the hole on it. We have available land in our community, which means that branch of the backcast is finished, as land exists in the present. To dig a hole, we would need tools and our own labour, these are also things we already have in the present, so this backcast is also finished."

Throughout the process of backcasting, the external experts and PA staff can sit in on the group most relevant to their expertise and offer advice to the participants on additional steps they can add to make the plan more complete and robust; they can also suggest changes given certain constraints that the participants may not have considered, or help the participants along if they get stuck. Advise the experts not to dominate the process, however, allowing participants to think for themselves, before being given advice.

Backcasting of one Community Goal takes approximately 1.5 hours.

BOX 5 GUIDELINES FOR FACILITATING BACKCASTING

The facilitation style for this process is very active and requires the facilitator to fully understand how backcasting works, so that they can help participants think about possible options and steps. Supporting organisations are also encouraged to assist the community in identifying appropriate steps.

The facilitator is responsible for ensuring that the community does not get blocked or stuck on a particular item/activity in the chain for any reason. For instance, if not having enough money to implement an activity is a sticking point, the facilitator should encourage participants to think about all of the ways in which they could possibly obtain the required money, no matter how many steps it takes. The facilitator should remind participants that it is always possible to take a step. This is the attitude that must be used when any obstacle is encountered: simply think through all of the ways in which an obstacle could possibly be overcome and never let the group get stuck.

Along these lines, it is also important to encourage participants to think of ways in which the community can contribute to the plans – no plan should begin with only one track to seek outside funding and support. Plans can include several tracks, and the community should always be involved in some way.

Facilitators should also ensure that the steps that are backcasted outline the community actions that need to take place to get the process started (including village meetings, training sessions, business development, etc.), rather than focusing on backcasting a specific task. For instance, the outcome 'adequate water supply for irrigation' might require a pipe to be constructed, but the steps involved in construction can be summarised in one post-it note (highlighting the need for community labour), thus avoiding it becoming the main focus of the backcasting.

Step 5
Repeat Step 3 for the break-out group's assigned Alternative Livelihood Activity.

Backcasting of one Alternative Livelihood Activity takes approximately 1.5 hours.

Step 6
Bring everyone back to together in one space and request the nominated representatives of each group to feed back. Open a discussion on the next steps; assign the responsibility of carrying specific steps forward to particular community members and identify particular support organisations for other relevant activities.

TOTAL TIME FOR BACKCASTING: 3 HOURS

Facilitation and equipment requirements

Facilitation
A minimum of one facilitator per group is required to assist in this exercise. Ideally, if the group is large, two facilitators should be available: one to lead the group discussions and one to take notes.

Figure 33
A participant reporting back on the backcasted plans

Equipment
- A large sheet of paper
- One pen per participant
- Three colours of post-it notes: one for the future goal; one for present resources, knowledge and skills; and one for the in-between steps
- Marker pens
- Camera
- Recording device to document the discussions

Expected outputs
This process produces step-by-step Community Action Plans that aim to achieve the community's desirable vision of the future by building on current resources, assets and states.

Closing the workshop
Once the backcasting activity has been completed by all groups and they have reported back to one another (Figure 33), the whole workshop can be formally closed. This should be done according to local customs, which will often involve the village leaders saying a few words. If time allows, some of the external technical experts or PA staff may also want to address the participants.

The facilitators and project team should thank the participants and external experts for their participation, and explain the next steps including: analysing the results of the workshop; summarising results in a document that can be shared with the community, the PA and other relevant external stakeholders; returning to the community to present and validate the results with participants, village leaders and PA staff; and starting to discuss options of taking certain plans forward (see Section 4).

Workshop Evaluation Questionnaire

If participants are literate, hand out a brief questionnaire evaluating their experience of the workshop during lunch on the final day; collect it during the afternoon break. Suggested questions include:

- During the workshop:

  - What did you enjoy most?

  - Was there anything you did not like?

  - Was there anything that surprised you?

  - Was there anything you did not understand and needed further clarification on?

- What could we do to improve the workshop?

- Do you have any reflections on the workshop that you would like to share?

3.2 | Follow-up Interviews

The results of the Community Planning Workshop should be cross-checked through individual Follow-up Interviews to ensure that specific perspectives have not been marginalised by the group process. Group processes are essential for community organising and adaptation planning; however, it is unlikely that marginalised perspectives are adequately captured in such a group process as it is most useful in capturing dominant shared perspectives. Both group and individual techniques have their own strengths and weaknesses; thus it is important to compare and synthesise results.

In particular, 'hot topics' or issues that may create tension in the community, such as access to specific resources, may need to be followed up individually as it is likely that they will not be freely discussed in a group setting. Furthermore, Follow-up Interviews can help to provide more information on relations between the community and the PA. This may be particularly valuable when thinking about the implementation of the Community Action Plans developed in the workshop, as well as helping to inform PA managers how best to interact with the community.

Who to follow up with:

1. People who did not attend the workshop in order to complement information on issues discussed by attendees (triangulation of results).

    a. As with the selection of the Community Planning Workshop participants, the interviewees for Follow-up Interviews can be selected through the process of randomisation using the same list of village inhabitants or households (Section 2.4).

Depending on the time frame and scope of the project, the following can also be interviewed:

2. Marginalised groups who potentially could have found it difficult to express themselves in the workshop.
3. A stratified sampling of all social groups to cross-check differences in frames, values, goals, etc. (if points 1 and 2 are covered, this may not be necessary).

Figure 34
A facilitator interviewing a community member

When interviewing those who did not attend the workshop, consider using the questionnaire below, amended to fit the environment and context of the project. This basic set of questions can easily be expanded to include any other topics of interest that emerged from the workshop or that the project team is particularly interested in. Before starting the interviews, the project team and facilitators should discuss any additional topics they would like to include in the interviews. Interview results should be entered into an electronic spreadsheet so they can be analysed and integrated into the overall technical report of the workshop activities.

Suggested basic questionnaire:

Name	
Gender	
Age	
Marital status	

1. How many people live in your household? And what is the highest level of education of each (including 'none'), including skills training and apprenticeships? If the latter have been obtained, list where they were obtained.						
Name (list all household members)	Gender	Age	Education obtained? (Yes/No)	Level of education	Type of education	Where obtained
Household member 1						
Household member 2						
Etc.						

2. Over the last 12 months, which livelihood activities has your household engaged in? What portion of the harvest/catch do you sell?		
Livelihood activity	Yes=1 No=0	What portion of the harvest/catch is sold? 0=none sold; 1=minority sold; 2=half sold; 3=majority sold; 4=all sold
Rice farming		
Cous farming		
Vegetable farming		
Goat rearing		
Cattle rearing		
Sheep rearing		
Chicken farming		
Nut harvesting		
Beekeeping		
Fishing (wild-caught)		
Aquaculture		
Oyster collection		
Clam collection		
	Specify wage employment, small business, other below	
Wage employment (skilled)		
Wage employment (unskilled)		
Small business (self-employed)		
Other		

3. How many of the following (livestock and capital assets) do you own? Have you ever had to sell any of your assets (both livestock and capital assets) to cover an unanticipated expense? If so, what was this unanticipated expense?			
How many of the following do you own?	Number	Have you ever had to sell any of your assets to cover an unanticipated expense? Yes=1; No=2	If yes, what was this unanticipated expense?
Goats			
Cows			
Sheep			
Chickens			
Bicycle			
Motorcycle			
Car			
Boat			
Mobile phone			
Mechanised farm implements			
Radio			
TV			
Solar panel			
Generator			
Other (specify)			

4. If you have travelled from your village at any point, where did you go and how far away was it? Why did you need to travel?		
Travel destination	Distance from village	Reason for travel

5. Have you seen any changes in the natural landscape surrounding your village in the last 10 years?	
Yes=1; No=0:	Specify changes:

6. Have you seen any changes in the weather over the last 10 years?	
Yes=1; No=0:	Specify changes:

7. Have you seen any changes in the numbers and types of wild animals and fish stocks over the last 10 years?	
Yes=1; No=0:	Specify changes:

8. What are the advantages and disadvantages of living in a protected area?
Specify:

9. How would you describe your village's relationship with the protected area?
1=always in agreement; 2=sometimes in agreement; 3=sometimes in disagreement; 4=always in disagreement:

10. How do you think the relationship between your village and the protected area could be improved?
Specify:

3.3 | Scenario Development Exercise

Once the Community Planning Workshop has been completed, an exercise follows that develops scenarios for alternative plausible futures and applies them to the Community Action Plans. This tests the plans and identifies how they might be impacted by such scenarios. What emerges is a collection of ways in which the action plans can be continually improved, making them more resilient, robust, flexible, achievable and complete in the face of uncertainty; thus, increasing the awareness of participants to potential pitfalls. It also builds capacity within the community for decision-making and planning under uncertainty and change. Scenario development is, therefore, an important component of the resilience and adaptation planning process as plans need to be able to withstand, or adjust to, a variety of climate change impacts with varying degrees of certainty.

In order to strengthen ties and increase dialogue between PA managers and communities, both PA staff and community members should be invited to the Scenario Development Exercise. Bringing the two parties together again at this stage also provides another opportunity for PA staff to offer input into the Community Action Plans and, where applicable, to increase their sustainability within the PA context. PA staff are also likely to add discussion points that focus on biodiversity conservation throughout the activity, which helps raise community members' awareness of such issues.

Preparatory steps for the Scenario Development Exercise

Setting group size and selecting participants
The total, optimal group size for this exercise is 30 people, consisting of approximately 22 community members and eight PA staff. This group is later divided into four representative break-out groups (for example, an equal number of men and women, and two PA staff per group).

Participants for this exercise are selected from the group that attended the Community Planning Workshop (an equal number of men and women should be picked). During the workshop, facilitators get to know the attendees, making them well placed to select participants for the Scenario Development Exercise based on attendees' levels of engagement in the process, as well as their interest in community development in general. The success of this exercise will be greater if participants are more active, vocal and have a certain level of knowledge and understanding to contribute to the process. Reducing the original group size also allows for more in-depth conversations, both in whole-group discussions and in the break-out groups. Continuing to work with this group of participants also allows the project team to identify the most active and engaged community members, who can be designated as key village communication contacts at the end of the Scenario Development Exercise. These 'Communication Champions' will act as a principle contact for the project team if they have follow-up questions, need additional information, or require help with organising certain logistics throughout the action plan implementation phase.

Participants can be invited individually in the days following the Community Planning Workshop. Even if the time frame for the community-based workshop component is tight, it is advised that participants have a break between the two workshops. Facilitators can carry out Follow-up Interviews with villagers who did not attend the Community Planning Workshop over the two days following the workshop (Section 3.2) and distribute invitations for the Scenario Development Exercise at this time; thus, participants will have a two-day break. PA staff should be invited earlier so that they have more notice.

Refining the backcasted plans

The project team and facilitators should also use the time between the two workshops to revise, complete, digitise and print the Community Action Plans developed during the backcasting activity, in order for each break-out group in the Scenario Development Exercise to have a clean copy of each plan (Figure 35). There will be six plans in total for each of the Community Priority Issues (three Community Goals and three Alternative Livelihood Activities). Refining and digitising the plans prior to scenario development is advisable as the plans developed in the workshop may be quite basic and messy, and represent the skeleton for what will later become more complex plans for implementing adaptation activities. The more complete the plans are for scenario development, the more beneficial the outcomes of the exercise will be.
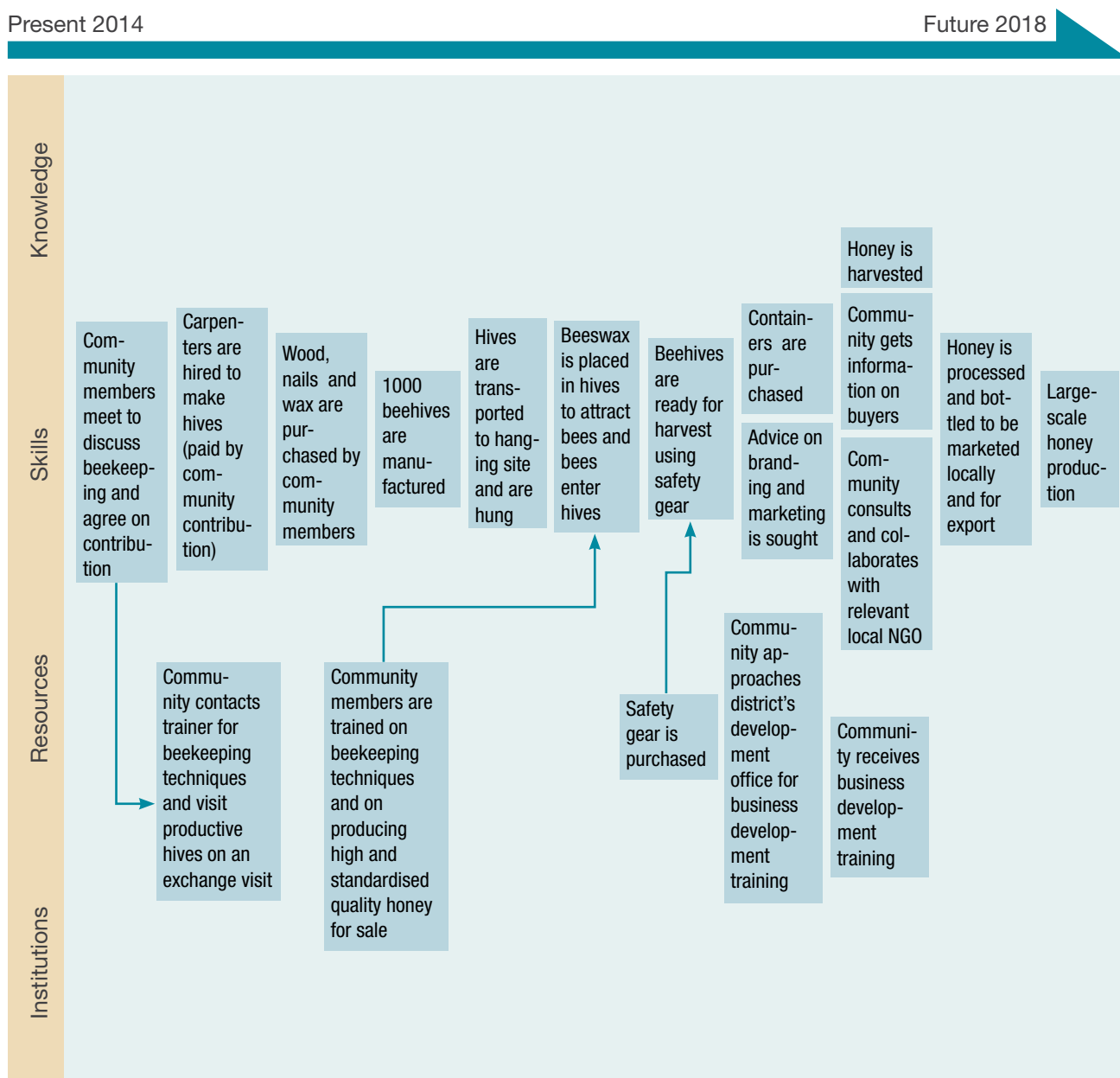

Figure 35: An example of a digitised step-by-step Community Action Plan for the Alternative Livelihood Activity of large-scale honey production (created via a backcasting exercise)

In some communities, where printing is not possible, facilitators can refine each backcasted plan on a large sheet of paper using post-it notes, firmly stuck down with tape so they are not lost. During the Scenario Development Exercise, each plan should be placed on a large board so that each participant in the group can see it clearly. This allows participants to see and reflect on each step of the plan during testing. The six backcasted plans are rotated among the different groups, so that, at the end of the session, each break-out group gets the opportunity to test all six plans under their given scenario.

Choosing climate change variables for the Scenario Development Matrix

As mentioned in Preparation (Section 2.3), it is important that the project team are familiar with the most relevant and recent climate change projections available for the location in which the community-based workshop component will take place. This can be gathered from sources such as IPCC reports or the World Bank Climate Change Knowledge Portal Beta (http://sdwebx. worldbank.org/climateportal/), or from other projects that have been working in the area. To further help determine the most appropriate and relevant variables to the target community, the project team should also consider the types of change that will occur as a result of the climate change projections and what hazards they might cause. Important information to review include the likely frequency, intensity, variability and uncertainty of hazards. More information and useful resources related to this can be found online at sources such as the UNEP (2015) Coastal Ecosystem-based Adaptation Decision Support Tool, Step 3a (http://web.unep.org/coastal-eba/hazards).

Using such information, two climate change variables should be identified by the project team that would most severely affect the target community in the future. These two variables are used to form the axes in the Two-axes Approach (see p. 78) of the Scenario Development Exercise. The two variables must then be formulated into two extreme states (e.g. extent of sea level rise becomes low or high rise of sea level, and level of annual rainfall becomes increase or decrease in rainfall). These do not need to be interpreted in their most extreme forms (e.g. no rainfall at all, or constant rainfall) as these are unlikely to occur. The agreed scenarios will be used during the Scenario Development Exercise.

Running the Scenario Development Exercise

The Scenario Development Exercise is undertaken in two phases: phase one is the Two-axes Approach which develops four distinct scenarios for alternative plausible futures; and phase two tests the Community Actions Plans in the face of these scenarios, leading to more robust, resilient and flexible plans.

In the pilot sites for which this manual was originally designed, the four distinct scenarios were developed by the communities themselves, based on the top two uncertainties they proposed and voted for. These uncertainties represented key social, environmental, climatic, economic and political uncertainties relevant to the village and the PA in the future (Figure 36). As any plan can be affected by any of these kinds of variables, it is desirable to test the Community Action Plans for robustness under scenarios formed by a variety of uncertainties, such as environmental, climatic, economic and social factors. This approach can be used by project teams if time allows. However, if time is short, the scenarios should be formed by climate change variables in order for the exercise to be most beneficial to the resilience and adaptation planning process described in this manual.

Please note that the first part of the Scenario Development Exercise (Two-axes Approach) described in this manual is different from the approach that was tested in the pilot sites. This is because the original approach allowed the participants to freely discuss and plan for their Priority
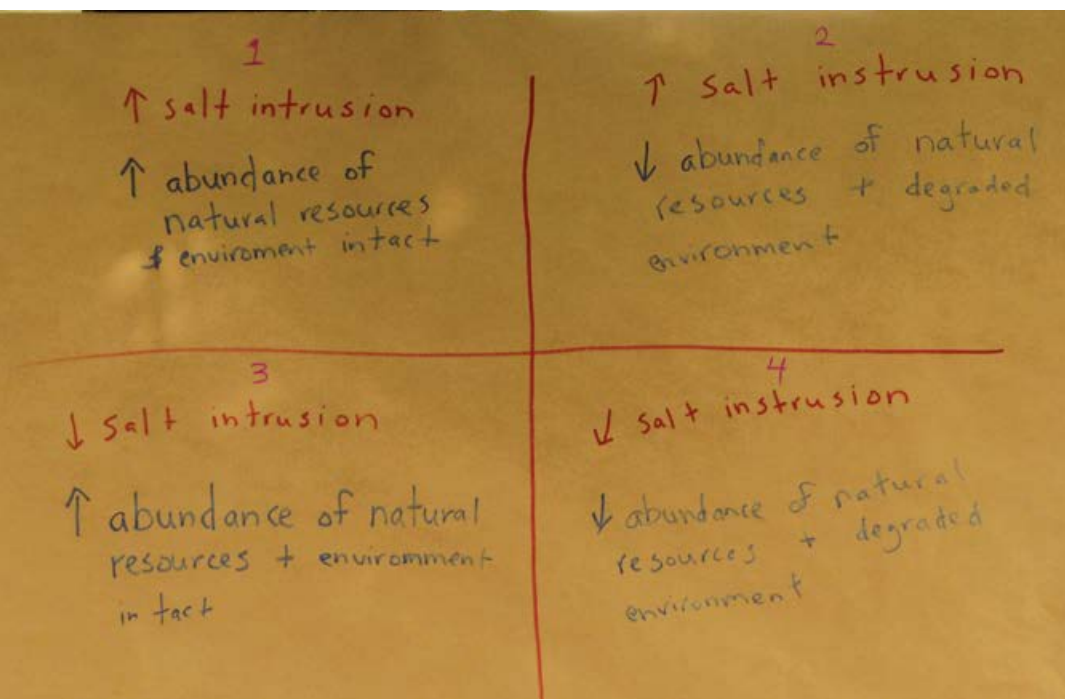
Figure 36
An example of scenarios developed by a pilot community in the Gambia

Issues without being restricted to certain areas of concern to the project team, such as climate change or biodiversity conservation (i.e. the facilitators did not bias the process). However, taking this approach can mean that scenarios are developed which do not include climate change impacts. The Two-axes Approach has, therefore, been modified to ensure that the Community Action Plans are framed by climate change. By doing so, the process of ensuring that plans will be designed in a climate-resilient way and will lead to successful adaptation options can start within the community, rather than with the project team during the Refining and Implementing steps (Section 4).

Indeed, even after the Scenario Development Exercise is complete, the project team will still need to refine and cross-check the Community Action Plans with scientific data and PA management processes to ensure that actions are climate-proof, sustainable and appropriate in the local context.

Welcome and introduction
Before opening the Scenario Development Exercise, ask participants to register and check that all invitees have arrived. Provide participants with a name badge when they sign in – this will make it easier for people to address one another in their discussion groups. If you kept the name badges of participants from the Community Planning Workshop, redistribute these to the returning participants.

Once all participants have registered, open the Scenario Development Exercise according to local custom, usually involving speeches from local authorities, and welcome everyone. The majority of participants will have attended the Community Planning Workshop, but be sure to introduce the PA staff and tell group that they will be participating in this exercise as well. Explain that because the exercise involves reviewing the Community Action Plans developed in the previous workshop under different scenarios, the expertise of the PA staff will be valuable to ensure that plans can be implemented in the PA in a sustainable way. The PA staff can also help the community think about how the PA and its natural resources can help support the plans. After this brief opening, introduce and begin the Scenario Development Exercise. Hold the entire workshop in the local language to ensure that everyone can participate.

Brief description

The Two-axes Approach uses the top two climate change variables that are projected to most severely affect the target community (e.g. extent of sea level rise and amount of annual rainfall) and determines two extreme states for each variable (e.g. low or high rise of sea level, and low or high level of annual rainfall). The combination of these two variables with two extreme states yields four scenarios, as shown in Figure 37.
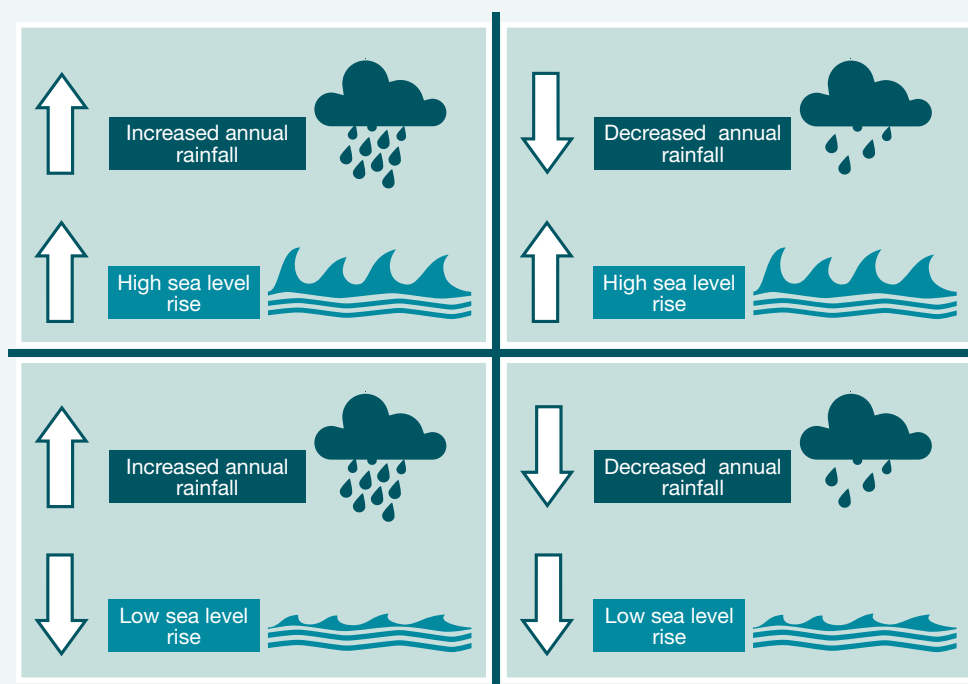
Figure 37: An example of a scenario development matrix using climate change variables

These scenarios are discussed in detail with all the participants together to ensure that they become comfortable with the scenarios and can imagine what a future under each would look like, including understanding the various implications or secondary effects of the changing variable (e.g. an increase in sea level rise can lead to increased coastal erosion; low annual rainfall can lead to increased salt intrusion).

This exercise should help participants recognise that they have the skills, knowledge and ideas to overcome barriers to their action plans and encourage them to overcome any form of challenge in the future. Furthermore, the exercise will increase the robustness of their action plans by stress-testing them under each scenario. This integrates additional steps into the action plans and develops contingency plans, where applicable.

Specific objectives
- To set up four distinct scenarios based on two climate change variables, defined by two extreme states each.
- To discuss these scenarios with participants to help them to understand the level of impact a changing climate could have on their Community Action Plans.
- To form the basis of the next step of the exercise which tests the Community Actions Plans in the face of these scenarios.

Activities and time frame

Step 1

Introduce the activity to the whole group of around 30 participants. Highlight that scenario development is a mental exercise that helps build capacity for decision-making under a range of plausible futures. Explain that the scenarios are not exact predictions of the future; instead, they serve to challenge people to think critically and creatively about uncertainties in the future in order to strengthen their adaptive capacity in any given context.

To help the participants to better understand the exercise, provide the example of stress-testing cars in different environments: "If Toyota designs a new car to be used primarily in a city, they will still test the car for its endurance and performance in other environments, even if it may never be driven in these, such as the desert, the snow, through a river, etc. In the same way, we will stress test each of the action plans your community developed in the Community Planning Workshop in different environments – or scenarios – in this activity."

Step 2

Working with the whole group of participants, explain that there are a number of uncertainties that lie in the community's future which can affect the action plans they have developed. For example, any number of social, environmental, climatic, economic or political factors can affect the action plans in the future and the community will need to be able to respond to these and adapt their plans accordingly. Clarify that the Scenario Development Exercise the participants are about to do could, therefore, be done with many different types of scenarios, but that, today, they will be using scenarios that focus on climate change.

Next, explain in simple terms the climate change projections for the region, where this information comes from (e.g. expert sources), and that these projections may vary to a certain degree. Make it clear that this external information was used to inform the scenarios the community will be using in this exercise, but that experiences of past and current climate change highlighted in the Community Planning Workshop were also considered in order to make relevant links with the external climate change projections.

It helps to have a number of climate change experience stories from the workshop to hand, so as to make discussions about climate change projections more accessible throughout the Scenario Development Exercise.

Step 3

On a flipchart at the front of the group, draw two lines that cross in the middle to create the axes that form four quadrants (Figure 37) and start filling in the climate change variables in their dual state as previously agreed with the project team to determine the scenario (see p. 76 for choosing climate change variables). While filling in the axes, one-by-one explain which variables each state of extreme is based on, and briefly describe each scenario this creates.

Following this brief description, ask the participants to describe what their village and the PA would be like in that particular scenario. Encourage participants to think about how the conditions would affect the village, the environment, their livelihood activities, and any

other activities or aspects. Additionally, ask them to think of the various implications or secondary effects of the climate change variables, for example:

- "If the sea level rises, this can lead to increased coastal erosion: how would this affect your farm? How does this affect your village?"
- "If there was very little rain during the rainy season, this could mean that the levels of salt in your field or lakes would be very high because, for example, there is not enough natural drainage to remove salts. Can you think of any other consequences of low rainfall? Would these affect anything else in your lives?"

Make sure that all the participants are contributing and try to gauge how well they understand the scenarios. Ensure that the PA representatives make contributions to the group discussions, also. Once you feel confident that the participants are comfortable with the four scenarios and have understood that it is important to think of the various implications or knock-on effects of the scenarios on different aspects of their lives, move them on to the next part of the exercise. Remind participants that the plans they developed in the previous workshop will be taken through each of the scenarios developed and discussed in different break-out groups.

TOTAL TIME: 2 HOURS (However, this can be adjusted depending on time and resources available and the level of detail to be discussed)

Facilitation and equipment requirements

Facilitation
One facilitator will be needed to lead the group discussion. The other three facilitators that will be needed for the second part of the exercise should assist in taking notes, completing information, ensuring participants get a chance to speak, and alternating leading the group discussion.

Equipment
- Flip chart
- Marker pens
- Notebooks
- Camera
- Recording device to document the discussions

Expected outputs
This exercise produces an understanding of the basic concepts of climate change projections, the Scenario Development Matrix with four scenarios on a flip chart, and a group understanding and analysis of these scenarios and their wider implications.

Robust planning through scenario testing

Brief description
The scenarios introduced to the participants in the previous step are used to test, revise and improve the Community Action Plans that were developed through backcasting during the Community Planning Workshop. Scenarios can be used to test whether a given plan is

robust, whether it is flexible enough to be feasible under different extreme scenarios, and whether it is detailed enough.

This activity inspires creativity and innovation; in particular, when a Community Action Plan does not do well under extremely difficult scenarios, participants are required to 'think outside the box' and go beyond what they know. This step also provides a good opportunity for PA staff to explain the importance of maintaining natural resources and ecosystem services to reduce the impact of extreme climate change scenarios.

What emerges from this activity is a collection of ways in which the action plans can be improved to become more climate-resilient, robust, flexible, achievable and complete in the face of uncertainty, increasing the awareness of participants to potential pitfalls. It also reveals which plans are not suitable under projected climate change, leading to major amendments or even rejecting a plan. Finally, it identifies knowledge gaps that need to be filled before making decisions regarding the implementation of adaptation options within the plans.

Specific objectives
- To test and improve Community Action Plans by challenging them with climate change scenarios.
- To build community capacity for decision-making and planning under uncertainty and a changing climate (i.e. adaptive capacity development).

Activities and time frame

Step 1
Divide the participants into four representative break-out groups (one group per scenario) with an equal number of men, women and PA staff per group. Each group will be assigned one scenario during this activity and will discuss each of the six Community Action Plans developed during backcasting within this context. If the plans have been digitised, distribute them so that each break-out group has at least one copy of all six. Agree on the order in which the plans will be discussed so that all break-out groups are working on the same plan in their scenario at the same time. It may be easiest to start stress-testing one of the alternative livelihood activities as these tend to be smaller-scale and more tangible in people's minds. Discussing plans in the following order may help participants understand and flow through the activity logically and with ease:
1. Alternative Livelihood Activity 1
2. Alternative Livelihood Activity 2
3. Community Goal 1
4. Community Goal 2
5. Alternative Livelihood Activity 3
6. Community Goal 3

Step 2
Give each group 5-10 minutes to review their scenario to ensure that everyone understands the conditions in which they will be testing the plans. The following prompts may be helpful:
- What would your community be like if this scenario came to pass?
- What would it look like?

- How would it feel?
- What would be the same and what would be different?

Figure 38
Participants reviewing the refined backcasted plan

Step 3
Spend 10 minutes reviewing and discussing the first backcasted action plan chosen for testing (Alternative Livelihood Activity 1) to ensure that all participants are familiar with the steps and no questions are outstanding.

Step 4
While examining the future vision at the end of the backcasted action plan, as well as each step towards reaching that outcome, ask the group to respond to and discuss the following questions (record answers in a notebook):
- Do you think this backcasted plan will work in your scenario? Yes/No? Why?
- What challenges might you face when trying to execute this plan?
- What opportunities may be available under this scenario?

Remind the group to think of the various implications or secondary effects of the climate change variables in their scenario.

Step 5
Ask the group to respond to and discuss the following questions to determine how the planning could be changed to overcome identified challenges and to integrate identified opportunities (record answers in a notebook):
- Are there any changes you feel should be made to the action plan under this scenario?
- Are there any steps you would add to make the action plan work?

If an action plan does not seem viable under the given scenario (e.g. a certain crop may already be on the brink of failing, and if rains became more erratic, the crop would not survive), brainstorm alternative options and ideas for altering the plans; add these as notes

to the backcasted plan (e.g. explore other crops that can withstand drought or diversify the livelihood activity to something else).

Repeat steps 3-5 for each of the 6 Community Action Plans

Step 6
Once all the action plans have been discussed by each break-out group under their given scenario, ask a nominated representative to report back to the wider group, briefly summarising what the future would look like under their group's scenario and how each plan would perform, including any changes that would need to be made to the plan.

During this final discussion, ensure that it is clear which of the 'add-ons' should be added to the actual action plans and which should be added as contingencies in the write-up of all Workshop activities.

TOTAL TIME: HALF A DAY TO ONE DAY (depending on how much time is available)

Facilitation and equipment requirements

Facilitation
Four facilitators are required – one for each break-out group. If resources and availability allow, a second note-taker can sit in on groups, or float between groups.

Equipment
- Post-it notes in multiple colours
- Enough pens for all participants
- Flip chart sheets

Expected outputs
This exercise constructs an analysis of the strengths and weaknesses of each Community Action Plan under different climate change scenarios. It provides an opportunity to revise and improve the plans, including basic improvements that work across all scenarios.

Closing the Scenario Development Exercise
Before closing the workshop, nominate one main village contact and an assistant contact to be the community's 'Communication Champions'. Select these champions based on their level of engagement and interest throughout the Community Planning Workshop and Scenario Development Exercise, as well as their levels of literacy, and their ability to communicate effectively with the project team in a common language (if applicable). It should be made clear that these contacts do not hold a position of decision-making, but rather serve as a middle-woman/ man between the project team and the traditional decision-making bodies of the village.

Once this has been done, the whole exercise can be formally closed. This should be done according to local customs, which will often involve the village leaders saying a few words. If time allows, some of the PA staff may also want to address the participants.

The facilitators and project team should thank the participants and PA staff for their participation, and explain the next steps including: writing up and analysing workshop and interview results; refining and prioritising Community Action Plans; and returning to the community to report back on the workshop results and discuss how they can take plans forward (see Section 4).

04

Refining and Implementing

Following the community-based workshop component of this manual, a number of steps should be taken to move from simply planning to implementation. The exact nature of these steps will, of course, vary depending on the local context. However, there are some general steps that can be taken to ensure the following: a) the results from the Community Planning Workshop are used in a meaningful way; b) backcasted plans are transformed into carefully designed resilience-building and adaptation actions; c) all relevant stakeholders are consulted and engaged in planning and implementation of activities, as is appropriate; and d) benefits from activities are extended locally in a way perceived as fair.

These general post-workshop steps include:

- **Writing up and analysing workshop and interview results.** In order to capture the full picture emerging from undertaking the community-based workshop component of this manual, findings should be written up into a comprehensive technical report. This report will inform the planning of specific activities that build community resilience and that implement adaptation options. Additionally, it will help ensure that such activities fit within the complex social, economic, environmental, climatic and institutional web of the community.

  The technical report will also identify any knowledge gaps, in particular, relating to designing appropriate and robust adaptation options. These gaps can be filled by asking follow-up questions or by undertaking additional external research. Such additional information will be important for informing the implementation of the Community Action Plans.

  All workshop findings also should be considered carefully by PA managers and staff in order to determine whether current management strategies should be adjusted, or if new ones should be developed. Information of particular interest may include that which relates to the community's use of natural resources, the potential/observed impact of climate change on the ecology of the area, and how to manage the vulnerability of the community to climate change in the context of the PA.

  In addition to the technical report, compiling a short document that summarises the workshop results and Community Action Plans enables easy presentation of the results to local stakeholders, potential funders and technical partners. This summary is also a useful tool for approaching managers of other PAs, and others working on climate change adaptation in the country, to determine whether similar exercises can be conducted with different communities.

- **Refining and prioritising Community Action Plans.** Based on a thorough analysis of the community-based workshop component of this manual, and external scientific data, the project team should refine each of the six Community Action Plans, ensuring that any outlined action or step is: resilient under current and projected climate change; unlikely to cause maladaptation; sustainable and compatible with PA management; and appropriate in the social, economic and political context of the community. Once this has been done, the project team must prioritise which Community Action Plans – or components thereof – they are able to support. This decision might be influenced by the budget and time available, project goals, or institutional mandates.

- **Reporting back on workshop results.** In order to ensure that the community-based workshop component findings accurately reflect the community's situation, and to inform PA staff and local and national government officials of the workshop results, a validation meeting should be arranged in the community. At a minimum, community leaders, nominated Communication Champions, PA managers and staff, relevant government officials, and appropriate technical experts should be invited to this meeting. If feasible, a number of the participants should also be given the opportunity to attend. This allows all relevant stakeholders to provide feedback and continue to stay engaged in the planning process.

  During this meeting, the project team should explain any changes they have made to the Community Action Plans and why they have done so. The project team should make clear why certain plans, or components thereof, are likely to be successful or not, as well as why certain actions can be supported by available funding (if applicable); for instance, this might

include the feasibility of actions under climate change projections, or restrictions of the PA. If external funding is available to support particular Community Action Plans, or components thereof, this meeting offers an opportune moment to get community and PA approval of the proposed activities.

- **Identifying funding sources and allocating funds.** If external funding is not available through a particular project or funding stream identified, the project team should meet with representatives of the community, PA management, government officials, and external technical partners to identify alternative possible funding sources. Once other funding sources have been identified, the allocation of funds across the different Community Actions Plans, or components thereof, should be discussed and agreed with this group of representatives. Distribution channels, technical partners, time frame, and accountability structures should be negotiated, and agreements put in place for the funds to be distributed as progress is made towards adaptation outcomes.

- **Implementing Community Action Plans.** After carefully refining the technical aspects of each action plan to ensure that the activities are designed in a climate-resilient way, do not harm the environment or clash with the PA management objectives, partners from the community, PA and external technical sources can be identified, and the Community Action Plans can be implemented. The plans should be initiated at a time when they will not conflict with particularly busy periods in the community's calendar (for example, during the rainy season). Appropriate ecological cycles should also be taken into account, if applicable (for example, best season for planting mangrove seedlings). The aim should be to follow the previously agreed time frames and activities, as well as to stay within budget. But it is also important to remain flexible to changes and manage implementation adaptively.

- **Monitoring and evaluating adaptation actions.** It is important to design a monitoring and evaluation (M&E) system to accompany the implementation of Community Action Plans in order to track the implementation of specific adaptation initiatives included in the plans, and their impact on vulnerability. Appropriate methods should be used by which context, process and outcomes can be measured. Effective monitoring also allows for informed adaptive management decisions to be made. When deciding on which M&E methods to use and who will be responsible for it (e.g. PA staff, community groups, local NGOs, project team), it is important to keep in mind the available financial and human recourses, and technical capacity, to ensure it can be carried out effectively. In addition, it is important to align the M&E plan with other monitoring activities in the area, such as those undertaken within the PA. The PA itself should consider how it can monitor the activities being implemented, and develop monitoring techniques to gain a better understanding of change in key resources that are relevant to the community and are ecologically important. Ideally, the M&E system should be aligned with the PA monitoring strategy.

05

Annex 1
Workshop Materials

5.1 | Systemic Integrated Adaptation (SIA) social differentiation supplementary model

The following module was developed by the CGIAR Climate Change, Agriculture and Food Security (CCAFS) Systemic Integrated Adaptation (SIA) programme as a supplement to be added to the standard Women's Empowerment in Agriculture Index (WEAI) Household Questionnaire (IFPRI, 2012) to collect information on points of social differentiation that are relevant for the

studied population. This module should be adapted to each studied population and used in addition to any more generalised household or baseline survey to collect additional information. The module used alone has limited utility.

The survey questions within this module were selected after a community workshop and multiple focus groups to identify three broad areas of social differentiation specific to the population which are not typically included in a household survey or the WEAI. The aim is to try and tease out some of the micro differences between households that distinguish one household's adaptive capacity or well-being more generally, from that of another household within the area. While areas such as land holdings, education level, farm productivity, assets, access to credit, etc., often explain the majority of differences between households and as such are typically included in household surveys, other micro social differentiations can also help to partially explain differences between the achievements and deprivations of households.

In this example, the areas identified are: 1) whether the household has access to remittances; 2) whether any member of the household does not have public (fee based) health insurance; and 3) whether a household member has a disability or impairment of any kind.

MODULE G. CHARACTERISTICS OF DIFFERENTIATION. As the enumerator, you may need to remind the respondent(s) of the confidential nature of all responses and that they can choose not to respond to any question. If more than one person in the household has a disability, please adapt questions I03 – I09 and include each individual separately.

Respondent ID:

	ID(s) from roster:	
G01. Do any members of your household not have valid health insurance? (a valid health insurance card which is not expired) 1=Yes 2=No **If yes, list household member ID code from module B roster of each household member without valid health insurance:** _____ .	**CODE 3:** **(G05) ORIGIN OF DISABILITY OR IMPAIRMENT** ▪ Experienced since birth — 1 ▪ Result of an injury/trauma — 2 ▪ Result of an illness — 3 ▪ Developed during childhood — 4 ▪ Developed during adulthood — 5 ▪ Developed during old age — 6 ▪ Rather not say — 7 ▪ Other (specify): _____ 8 ▪ Don't know — 98	
G02. Do any of your children experience difficulty learning in school? 1=Yes 2=No		
G03. Are any of your children less developed physically or mentally than other children their age? 1=Yes 2=No	**CODE 4:** **(G06) CONDITIONS OF DISABILITY OR IMPAIRMENT** ▪ Impaired mobility of upper limb(s) — 1 ▪ Impaired mobility of lower limb(s) — 2 ▪ Impaired manual dexterity (ability to use hands) — 3	
G04. Do any members of the household have a physical or mental disability or impairment? This includes reduced mobility, e.g. difficulty walking. 1=Yes 2=No If yes, list the **ID code(s)** in next box. If no >> I11	**ID(s) from roster:**	▪ Major injury to or ailment related to the spinal cord or brain — 4 ▪ Developmental delay, minor — 5 ▪ Developmental delay, major — 6 ▪ Impaired hearing — 7
G05. What best describes the origin of the physical or mental disability or impairment? (Code 3)		▪ Impaired vision — 8 ▪ Impaired speech — 9 ▪ Learning disability — 10
G06. What best describes the conditions of the individual with a physical or mental disability or impairment? List up to 3 codes. (Code 4)		▪ Cognitive/intellectual disability, minor — 11 ▪ Cognitive/intellectual disability, major — 12 ▪ Psychological disorder — 13 ▪ Rather not say/don't know — 98

OBSERVE, DO NOT READ ALOUD

G07. Enumerator, if you observe someone within the household who visually appears to have a disability or impairment, but the information is not offered, please make a note of this here:
_____.

ID from survey roster, if known:

Conditions from **Code 4** based on anecdotal observation of individual(s) within household who visually appears to have a disability.

G08. Is the individual involved in either farm or off-farm productive activities? (this includes household work and odd jobs)
Yes=1
No=2
If yes, please specify: _____.
If no >> I10

G09. Is the individual solely responsible or the primary personal responsible for any of these activities?
Yes=1
No=2
If yes, please specify: _____.
If no >> I10

Enumerator, were these activities included in modules D and E? If not, please add them or explain why it is not possible to fit them within the categories on a separate sheet of paper.

READ ALOUD: Think about the decisions that were made concerning the activity just described. **G10. Who makes decisions about how this activity should be done?**	**Code**
G11. Whose idea was it to start this activity?	
G12. Who decides what should be done with the income of this activity, if any?	

Codes for G10-G12
- Person with the disability — 1
- Person with a disability's parent — 2
- Person with a disability and parent, jointly — 3
- Other household member — 4
- Person outside the household — 5

G13. Do any of your extended family members live outside of the community for work?
Yes=1
No=2 (no >> END)

G14. If yes, is this person consulted for major decisions of the household?
Yes=1
No=2

G15. If yes, is this person the primary decision maker on any major decisions of the household?
Yes=1
No=2

G16. Does this person send cash or goods to support the household?
If so, please estimate the portion of annual household income this provides.
Yes, portion of household income:_____.
No=2

5.2 | Workshop materials shopping list

The essential materials needed for the community-based workshop component of this manual are:
- Post-it notes in at least 4 different colours – several packages totalling 400+ note papers
- 30+ coloured marker pens
- 300 coloured dot stickers
- Good quality masking tape (6 rolls)
- 50 pens
- 20 small pairs of scissors
- 10 glue sticks
- 36 small booklets (6 for facilitators and 30 for participants, if applicable)
- 50 large sheets of paper (25 for training and 25 for the workshops), or a large roll of paper that can be cut into appropriate sizes
- Selection of magazines (should be colourful, locally relevant and from different subject areas)
- Large wooden fibre boards which large papers can be pinned to
- Clipboards for facilitators
- Name badges for workshop participants and facilitators
- 1 A4 notebook to record attendance
- Paper and envelopes for invitation letters
- Voice recording devices
- Camera

5.3 | Example invitation letter for workshop participants

Please note that the example invitation letter is intentionally written in a very general manner in order to avoid 'pre-framing' of invitees. Framing the workshop to any particular issues, project context or funds can dramatically limit the nature of community participation, their ideas and engagement in the process, and the extent of their involvement in the future. Keep this in mind when redesigning the invitation letter in any project context.

> ### Invitation to a Community Planning Workshop in [name of community]
>
> Dear [name of community member],
>
> We would like to invite you to a [4]-day Community Planning Workshop in [name of village]. The workshop will identify your community's goals and create a plan to achieve those goals. Below are details of the workshop:
>
> - Dates: [dates]
>
> - Time: [9:00am to 3:00pm] each day
>
> Please bring this letter along to the workshop.
>
> If you are unable to attend, please nominate someone else of the same gender who lives near to you or in the same family, and is above the age of [16 or 18] to attend on your behalf and give them this letter to bring along. If you need more information or help, please call: [telephone numbers].
>
> Thank you very much in anticipation of your response.

06

Annex 2
Tips for Facilitators

6.1 | Facilitator guidelines

The following list of qualities needed by the facilitator is at least as important as any specific method or tool. A certain level of expertise in facilitation is crucial as a lack of skills can alienate a community and have seriously negative impacts on future collaborations.

- **Relax, be flexible and avoid being dogmatic.** Practitioners of participatory techniques must learn rapidly and progressively, with conscious exploration, flexible use of methods, improvisation, iteration and cross-checking. Rather than following a blue-print programme,

it is much better to adapt through a learning process. It is important to stay relaxed as participants can absorb any tension held in the facilitator, which has a very negative impact on their ability to share, think, learn, and buy-in to the process; thus, it can affect the research and practical outcomes.

- **Be sensitive to context.** Adjust your approach to take account of every new context. Do not be tempted to assume that what has been appropriate in previous experiences is applicable without first considering the differences in time, location, culture, size of group, historical juncture, perceptions and expectations of the target community. Continuously monitor and evaluate your approach and adjust it accordingly.

- **Approach each situation with humility and respect.** Adaptation is a highly complex and multi-dimensional issue beyond the full comprehension of single individuals or experts. Appropriate adaptation strategies require the engagement of as many diverse stakeholders as possible in order to minimise unexpected detrimental consequences of an intervention. This process begins with having a sense of awareness and respect for the fact that each person brings unique skills and knowledge to the table, and that the experience and formal education that researchers and experts contribute to a process are valuable but limited. People who have lived their whole lives in communities and who have a direct stake in the outcome of an intervention have vital knowledge to contribute.

- **Shared and reversed learning.** It follows from the principle of respect above that you need to be prepared to learn from others in ways you may not have planned. This involves changing your behaviour and attitudes (from dominating to facilitating), gaining rapport, asking people to teach you (rather than vice versa), respecting people, and having confidence in what they can do and achieve.

- **Acknowledge different ways of knowing and understand the potential of local knowledge.** Be prepared to accept and value the expression of knowledge in ways that differ from traditional, scientific, Western-based logic and knowledge systems. A tremendous diversity of knowledge systems exists in different communities, including local experiential knowledge, intuitive knowledge and traditional knowledge.

- **Understand that the variety of stakeholders, and the relations between them, matters.** Consider the power dynamics, inequalities and norms of expression and decision-making that exist before attempting to engage people as a group. Be sensitive to techniques that engage marginalised groups (for example, separate engagement with female members, or engagement with groups along hierarchical lines). Also, be aware of the potential personal consequences for information providers if those in power are challenged. Employ techniques that take into account existing norms and social structures in an appropriate way.

- **Respect the will not to participate.** Part of demonstrating respect and building trust in any community is accepting the right of any member to choose not to participate. However, you may seek to discover why someone chooses not to participate in order to identify potential problems, such as participation fatigue, power differences and inequality within the community.

- **Be self-aware, practice active listening and continually reflect.** Have critical self-awareness and take responsibility for your actions and judgements. This includes reflecting on the possible impacts of preconceived notions and participation in the research or action process. Continuously examine your behaviour and try to improve.

- **Embrace uncertainty.** This may be necessary throughout the engagement process where participation, input and outcomes may differ from what you had planned. It is important to understand that concrete answers do not always exist. The introduction of information with high degrees of uncertainty may be a cue to investigate a different direction.

- **Explain context.** Namely, how the information gathered in the assessment will be used so that the exercise is not extractive and participants can see the value of engaging.

6.2 | Dealing with potential conflicts in workshop groups

If a controversial issue causes significant tensions in the group, it may well be worth stopping the activity to dedicate time to the following conflict resolution process. It helps you to view the issue from multiple perspectives and develop a fuller picture of the complex reality that all participants are part of. The conflict resolution process has three stages: 1) the Believing Game; 2) the Doubting Game; and 3) Defining. The entire process begins by selecting the controversial statement to be the basis of the activity. For example, "collection of shellfish from a 'no-take zone' is our right."

Participants may find their first experience of this process difficult. It may seem artificial, perhaps uncomfortable, and maybe even threatening. Under some circumstances, playing the game may challenge deeply held beliefs and the security that accompanies these. If methodological belief, followed by methodological doubt – almost certainly an unfamiliar process – is to take hold and have a chance to produce worthwhile results, participants need to experience it with some frequency.

Entering into, and truly experiencing, unfamiliar or irritating points of view takes time and effort; but it invites listening, instead of arguing, and fosters empathy, rather than antagonisms. Essentially, it encourages an understanding that there can be competing truths, each of which has some value.

Note that the suggested times for these activities can be shortened, depending on the context. For example, if you need to interrupt an activity to resolve conflict without greatly disrupting the flow or throwing off the overall workshop schedule, you can do a rapid version of the activities below in 15 minutes, taking 5 minutes per game.

The Believing Game

Brief description
Consider the controversial statement that is the basis of the activity. Typically, when we debate controversial issues, we argue eagerly for our own opinions; we listen to opposing arguments mainly to find flaws and, when we do, we interrupt and attack them. We are more interested in proving ourselves right – in winning the argument – than seriously considering another viewpoint, thereby continuing to think. The idea behind the Believing Game is to suspend judgement, promote continued thought, open oneself to the strengths and values of a perspective with which one does not agree in part or in whole, and work towards believing that perspective.

Activities and time frame

Step 1
Ask participants to write some points down as an initial record of their thinking on the issue to be considered.

Step 2
Ask participants to raise their hand if they believe the controversial statement.

Step 3
Ask all participants to listen to the viewpoint of those who believe the controversial statement and suspend judgement while doing so. They should ask themselves:
- What does she/he see that I don't?
- How could this argument possibly be right?
- Which elements can I agree with?

Participants should try to suppress the inclination to disagree until later.

Step 4
Ask all participants to think of reasons the original statement could be agreed with in some way. They can only make statements that support the controversial issue being considered. They are not pretending or role-playing. They are finding and speaking from places in themselves that honestly connect with the statement.

Tell participants they should not make any negative or challenging statements.

Record all of the points made about why the controversial statement could be seen to be true.

TOTAL TIME: 20 MINUTES

Brief description

The Believing Game is the first step in a critical thinking process. In the second step, the more familiar Doubting Game, we can ask probing questions, attack faulty logic, point out inadequate evidence and provide information that rebuts the controversial statement. Just as the former asks for a systematic, disciplined effort to believe a point of view, no matter how unfamiliar or ridiculous it may seem, so the latter invites participants to engage in a systematic, disciplined effort to inquire into, or doubt, a point of view, no matter how familiar and reasonable it may seem. The Doubting Game begins with learning how to ask and to analyse questions.

Activities and time frame

Step 1

Begin by asking people to think about all of the reasons why the original statement could be disagreed with.

Step 2

Tell participants they should make any negative or challenging statements now, and that this is not the time to defend anything.

Record all of the points made about why the controversial statement could be seen to be false.

Like the Believing Game, the Doubting Game requires repeated experiences if participants are to become good questioners and inquirers.

TOTAL TIME: 20 MINUTES

Defining

Brief description

Having believed, doubted, and investigated further, participants can now work at integrating their thinking. This stage involves examining the statements recorded during the Believing Game and Doubting Game and noticing how the truth of any given statement is dependent on the definition of key terms. Thus, clarification is required in order to properly understand where another party is coming from.

Activities and time frame

Step 1

Ask participants to reflect on the following points:
- Have your experiences opened possibilities for finding some common ground on the issue?
- Are you feeling and thinking somewhat differently than you were originally?
  - How? Or why not?

- What does this mean for one's actions in a world where most issues are complex and certainty about them is rarely, if ever, possible?

Step 2

Highlight to the participants that the answers to a lot of these questions depend on the way the key terms are defined. For instance, 'does development depend on industrialisation?' depends on definitions of both development and industrialisation, which people can disagree upon; so what is the 'real' definition?

Since people are the only sources of word meanings, there is no 'real meaning' to be found. This is true not only for such potentially controversial terms as 'development' and 'climate change', but also for such seemingly innocent words as 'girl'. Someone who says: 'Come here, girl', may intend to be loving, sarcastic, contemptuous, or something else. It is not words that have meanings, but it is us who give them meanings.

Help participants to understand that there are multiple ways of defining words and that each serves a different purpose.

TOTAL TIME: 20 MINUTES

Expected outputs

This activity leaves participants with a richer understanding of both sides of an argument and an ability to comprehend a more complex reality rather than being radicalised in their own point of view.

07

Annex 3
References

Ampomah, G. and Devisscher, T. (2013) *Adaptation toolkit. Guidebook for researchers and adaptation practitioners working with local communities*. Dakar: ENDA – Energie Environnement Développement, and Stockholm: Stockholm Environment Institute. http://www.africa-adapt.net/media/resources/893/adaptation-toolkit.pdf

Borrini-Feyerabend, G., Dudley, N., Jaeger, T., Lassen, B., Pathak Broome, N., Phillips, A. and Sandwith, T. (2013) *Governance of protected areas: from understanding to action*. Best practice

protected area guidelines series no. 20. Gland: IUCN. http://cmsdata.iucn.org/ downloads/governance_of_protected_areas___from_understanding_to_action.pdf

Cooperrider, D.L. and Whitney, D. (2005) *Appreciative enquiry*. San Francisco, CA: Berrett-Koehler Publishers.

Dudley, N., Stolton, S., Belokurov, A., Krueger, L., Lopoukhine, N., MacKinnon, K., Sandwith, T. and Sekhran, N. (eds) (2010) *Natural solutions: protected areas helping people cope with climate change*. Gland: IUCN-WCPA, WWF; Washington, DC: The World Bank; Arlington, VA: TNC; New York, NY: UNDP, WCS. https://cmsdata.iucn.org/downloads/natural_solutions.pdf

Gross, J., Watson, J., Woodley, S., Welling, L. and Harmon, D. (2014) Responding to climate change: guidance for protected area managers and planners. Best practice protected area guidelines series: consultation draft only. Gland: IUCN World Commission on Climate Change. http://worldparkscongress.org/drupal/sites/default/files/documents/docs/CC_BPG_screen_TOC. pdf

Helfgott, A. (2011) 'Resilience, adaptation and development' course. Oxford: School of Geography and the Environment, University of Oxford.

International Food Policy Research Institute (IFPRI) (2012) *Women's empowerment in agriculture index*. Washington, DC: IFPRI, Feed the Future; Oxford: Oxford Poverty and Human Development Initative (OPHI). http://ebrary.ifpri.org/utils/getfile/collection/p15738coll2/id/126937/ filename/127148.pdf

Intergovernmental Panel on Climate Change (IPCC) (2014) *Climate change 2014: impacts, adaptation and vulnerability*. Barros, V.R. and Field, C.B. (eds). Cambridge: Cambridge University Press. http://www.ipcc.ch/pdf/assessment-report/ar5/wg2/WGIIAR5-AnnexII_FINAL.pdf

Mikkelsen, B. (2005) *Methods for development work and research: a new guide for practitioners*. London: Sage Publishers.
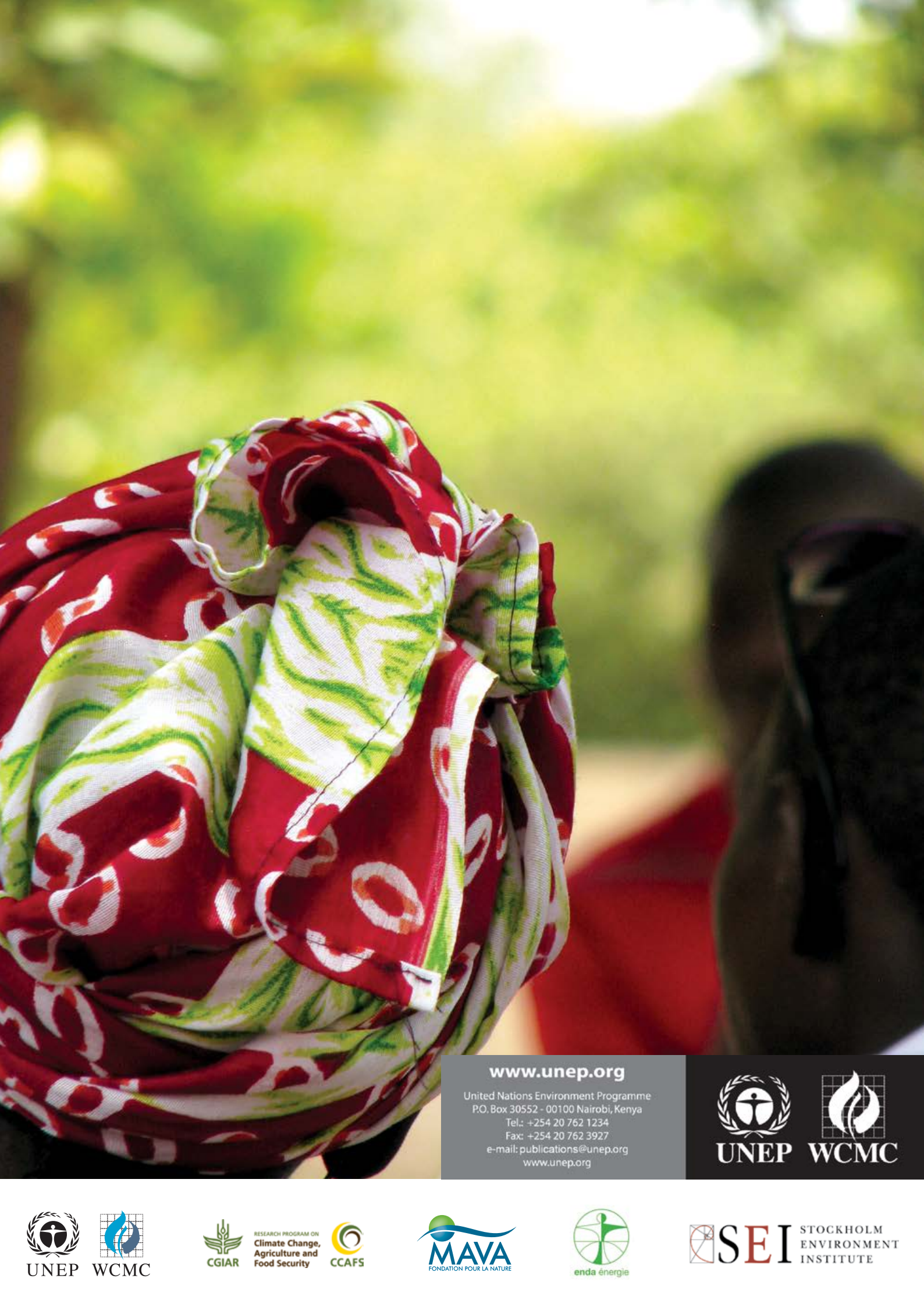
Munroe, R., Hicks, C., Doswald, N., Bubb, P., Epple, C., Woroniecki, S., Bodin, B. and Osti, M. (2015) *Guidance on integrating ecosystem considerations into climate change vulnerability and impact assessments to inform ecosystem-based adaptation*. Cambridge: UNEP-WCMC. http:// www.ebaflagship.org/downloads/pdf/VIAG_Guidance.pdf

United Nations Environment Programme (UNEP) (2015) Coastal ecosystem-based adaptation decision support tool. [online] Nairobi: UNEP. http://web.unep.org/coastal-eba/hazards

The World Bank. World Bank climate change knowledge portal 2.0. [online] Washington, DC: The World Bank. http://sdwebx.worldbank.org/climateportal/

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