Participatory Approaches to Conservation with Local Communities and Indigenous Peoples

An Open Access Toolkit

RSPB Centre for Conservation Science

Abstract

Participation of local communities and indigenous peoples in global conservation efforts is indispensable for both social justice and sustainability. Participatory approaches encompass principles, methods and techniques that aim to promote effective partnerships in the face of power imbalances. They can support better collaboration where there are potential conflicts, improve knowledge-sharing and decision-making processes, and lead to locally relevant solutions that are supported by those who are most directly affected by environmental issues.

This toolkit aims to promote the wider use of participatory approaches in global conservation by signposting the many tools and online resources that are available. Its chapters contain links to guidance documents, websites, online toolkits, videos and training courses which have arisen from a variety of disciplines such as international development, research and innovation, public health, pro-democracy movements and from within the conservation community itself. It's "Method" sections give more detailed information about Participatory Mapping, Visioning Methods and Participatory Action Research, to give a flavour of what participatory approaches look like in practice.

The toolkit is intended for environmental practitioners, conservation organisations, community mobilisers, and anyone else working with, or as part of, local communities to address environmental issues. The resources that are signposted through this document may be useful for managers, project planners, fundraisers, field staff or researchers. We hope this toolkit provides inspiration and ideas for the practical tools that can support participation of local communities and indigenous peoples in conservation efforts.

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About

This toolkit was prepared by Sorrel Jones, Alix Zelly, Alice Blencowe and Natasha Constant with funding from the Royal Society for the Protection of Birds Centre for Conservation Science, with graphical design by Alice Blencowe. We have done our best to ensure that external links in this document are relevant and appropriate. However, the authors are not responsible for any online content or websites to which the document has links. For queries please contact Sorrel.Jones@rspb.org.uk.

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Contents

Introduction

Context

Conservation deals with inherently social issues: from land and resource governance to human behaviour. Environmental challenges and solutions are intertwined with people's livelihoods, cultures, history and knowledge, and can play out in contexts where hierarchies of power create social injustices. Unsurprisingly, long-term conservation success often depends upon the nature of relationships between actors in a landscape. Participatory approaches represent ways to promote effective and equitable relationships, bridging power gaps and supporting collaboration between different groups of people. They aim to strengthen rights and amplify voices of disadvantaged groups in ways that can help deliver social and environmental sustainability.

Conservation across much of the world has roots in colonial histories and approaches that prioritised "fences and fines" have excluded local people and harmed livelihoods. Colonial legacies can also be seen in global patterns of financing and resource access as well as in the types of knowledge that is prioritised to guide conservation actions. Such imbalanced power structures have far-reaching negative impacts for conservation, and it is increasingly apparent that attention to social justice is integral to successfully reversing declines in biodiversity and restoring ecosystems. A wider adoption of participatory approaches can contribute to ensuring local communities and indigenous peoples are at the centre of decisions about their lands and resources and are supported in managing their environments sustainably.

Scope and Aims

Participatory approaches have been developed in many different fields, from international development to public health research, to pro-democracy movements, and an enormous range of resources are available to support their use. This resource map aims to signpost these as a way to inspire a wider adoption of participatory approaches among environmental practitioners in different geographic settings. We seek to include as broad a range of resources as possible, to reflect the huge variety of settings and needs that relate to participation in environmental issues.

This document provides links to websites, databases and repositories, case-studies, information sheets, academic publications and videos which offer guidance to practitioners in a vast array of approaches. These range from methods that provide

only the very minimum level of participation (e.g. for gathering the perspectives or views of local actors as a basis for decisions made by others) to a more genuinely bottom-up form of engagement (e.g. where local actors take the lead on designing and implementing interventions). The best approach in any given context will usually need to be hand-made to fit the particular circumstances, so the resources are not presented as blue-prints to be followed step-by-step. Rather, they are a broad collection of ideas, tools and examples from which practitioners can draw inspiration for ways to embed participatory approaches more effectively into their own settings.

Structure

This toolkit is organised into three sections: Chapters, which introduce themes that come up when applying participatory approaches in a given conservation setting alongside relevant resources; Methods which look in detail at a few selected techniques, in a "cheat-sheet" style format, and a Resource List with links to resources organised under themes.

The first two Chapters aim to introduce readers to the basic principles and foundational tools that are at the heart of participatory approaches. Subsequent Chapters are intended to bring together resources that relate to common conservation themes. Some Guiding Questions are included as prompts for planning a participatory approach, and a Resource Map at the end provides links to relevant online resources.

Methods pages describe three techniques: visioning, participatory mapping and participatory action research. This short selection is intended to give a flavour for some of the tools that can be found in the resources that are signposted elsewhere in the toolkit. The content includes a simple overview, so that the essence of a technique can be quickly captured, and links to case-studies and additional resources.

Finally, the Resource List at the end of the toolkit contains the resource links from across the document, loosely categorised to help direct users to the tools they need.

Overview of the chapters

Engaging people effectively is first and foremost a matter of adopting a participatory mindset. Chapter 1 outlines principles and foundational concepts of participatory approaches and introduces some of the different disciplines from which participatory tools can be drawn. This section seeks to give a general overview of what participatory approaches involve. The resources highlighted at the end of the chapter include best practice guidance documents for core issues such as stakeholder

engagement, as well as online resources that give comprehensive oversight of participatory principles and the methods through which they can be applied.

Chapter 2 gives a more practical oversight of how participatory approaches are applied. It describes foundational "building blocks" for the process of establishing good relations and understanding of social contexts, and factors that need to be considered to design methods. Core engagement techniques of workshops and group activities are introduced, along with the practical aspects of how to address barriers to participation. The resources at the end of the section provide a showcase of the variety of tools that can be used. Resources include online repositories and databases, as well as review documents that summarise a selection of tools. There are also links to several introductory training resources for core skills such as facilitation.

Social equity, power relations and mutual learning are core aspects of participatory engagement and are particularly relevant for sustainable management of land and natural resources. Chapter 3 outlines how participatory approaches can be applied to contexts of area-based conservation, which concern issues such as free, prior and informed consent, development of (co)management plans, governance of wildlife and addressing human-wildlife coexistence.

Learning and knowledge-sharing is essential for solving challenges and developing effective solutions. Chapter 4 looks at how participatory methodologies can be applied in the context of conservation research. These range from co-developing knowledge, integrating different forms of expertise, using human-centred design principles to develop solutions, to "Action Research" where participatory knowledge production is linked to locally-driven actions to address a societal issue. It also covers selected methods from the social sciences, such as interviews, that are often integrated into participatory approaches.

Monitoring, evaluation and learning are often embedded in programmes or organisations to improve their effectiveness and generate evidence about impacts. Chapter 5 outlines how participatory approaches can be integrated across all stages: from supporting development of locally relevant indicators, establishing bottom-up monitoring and accountability, to identifying complex pathways of impact. The resources highlight several specific methodologies that have been developed to promote participation in monitoring and evaluation.

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Quick-Start Resource Guide

Learning Resources

Participatory principles and conservation practice:

- The Partners Principles Online Toolkit is an excellent starting point with videos, scenarios, and training guide based on a comprehensive set of principles for conservationists to engage local communities.
- Ethnographic toolkit and learning resources for Orangutan (and other) conservationists supports ethnographic approaches for participatory engagement with communities. There's a toolkit a visual summary and comic-style scenarios.
- Integrating Rights and Social Issues in Conservation: a trainer's guide from BirdLife International addresses stakeholder engagement best practices.
- https://www.participatorymethods.org/ from the Institute of Development Studies provides a wealth of information and resources relating to participatory approaches.
- GAtES e-learning modules are 1-hour lectures showcasing a selection of participatory approaches as tools to promote public engagement in environmental decision-making
- The Just Restoration Training Curriculum provides learning materials that can be delivered as a 3-day workshop, or adapted as needed, to support reflective learning on social justice issues in ecological restoration contexts.

Ethics Guidelines

Ethical guidance about Free, Prior, Informed Consent (FPIC):

- Oxfam's comprehensive guidance is available in several languages (select "Free, Prior, Informed Consent Manuals").
- FPIC guidance from Conservation International
- Making FPIC work for forests and people (2010). Focusses on indigenous rights and land resources
- Practical ethics for PGIS practitioners, facilitators, technology intermediaries and researchers, gives guidance for participatory mapping approaches.

Ethical guidance about international research partnerships:

- The Cape Town Statement on fairness, equity and diversity in research provides a framework and best practice guidance.

Guidance on a specific theme

Partnership working:

- Successful partnerships, a guide (OECD) gives a framework for area-based partnerships.
- The Enhancing Participation in Partnership booklet offers practical advice and tools.
- The partnering Initiative archive has free e-books such as Talking the walk also The Brokering Guidebook: navigating effective sustainable development partnerships.

Land rights issues:

- Rights and Resources Initiative's Bundle of Rights Methodology provides a framework for understanding statutory land and tenure rights of indigenous and local communities.
- These three modules from the BeneLex programme outline how rights legislation and treaties relate to natural resources.
- The UN Declaration on the Rights of Indigenous Peoples is a key reference document.

Participatory mapping for land and resource management:

- Good Practices for Community Mapping (IFAD) has general guidance and case-studies.
- Forest Peoples Programme: Participatory Mapping: some guidelines for communities and the organisations that support them focusses on issues relating to land-resource rights.

Participatory monitoring and evaluation:

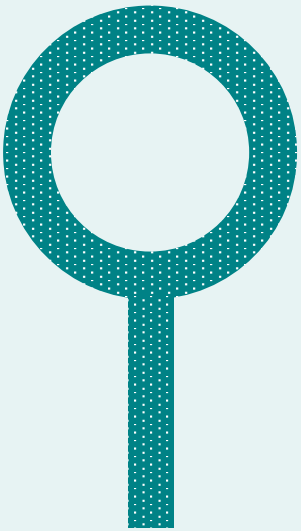
- https://www.betterevaluation.org/ has a great variety of searchable resources.
- Guidance on Conducting a Participatory Impact Assessment (FFI) offers a good starting point for conservation settings.
- The Monitoring and Evaluation Universe resource package (INTRAC) has vignettes about specific techniques, and using case-studies and stories of change.

Participatory research:

- The Centre for Social Justice and Community action (Durham University) a website with several toolkits for community-based research and participatory action research.
- The ConSoSci Partnership provides training resources and a resource library on Social Science in Conservation.

Gender Mainstreaming:

- The Gender Equality Toolbox, Bill and Melinda Gates Foundations includes measuring empowerment, qualitative techniques and a resource links section.
- The CBD Best Practice for Gender and Biodiversity has several useful case-studies and reflections for gender mainstreaming in conservation settings.



Collections of tools and case-studies

Searchable repositories and databases:

- Participedia hosts a huge number of case-studies, and provides methods' pages, and links, mainly in community development contexts.
- Policy Power Tools Website has easy-to-read information sheets and full descriptions in Spanish, Portuguese, French and English for a huge variety of techniques, particularly oriented to community development work.
- Action Catalogue hosts many methods mainly oriented to promoting democratic decision-making in European settings.

Conservation-specific case-study collection

- People not Poaching hosts 160 contributed case-studies relating to effective community engagement on illegal wildlife trade issues

Toolkits showcasing a selection of techniques

- The Plan Vivo Participatory Toolkit covers 17 tools oriented to carbon projects: Stakeholder Analysis, Problem Analysis, Visioning, Local Institution Mapping, Well-being Assessment, Climate Vulnerability Assessment, Historical Timeline, Seasonal Calendar, Participatory Resource Mapping, Social Mapping, Assessment and Utilisation of Forest and Tree Products, Assessment and Utilisation of Blue Carbon Ecosystem Products and Areas, Community Meeting, Focus Group Discussion, Semi-structured Interview, Public Hearing, Public Audit and Engaging with Disadvantaged Groups
- Participatory Methods Toolkit: A practitioners manual by J. Slocum: a pdf with step-by-step detail on: Charrette, Citizens Jury, Consensus Conference, Delphi, Expert Panel, Focus group, Participatory Assessment, Monitoring and Evaluation, Planning cell, Scenarios, The World Café. And describes 40 other techniques.

Monitoring and Evaluation Techniques

Ripple Effects Mapping:

- Ripple Effects Mapping is one useful technique for understanding impact pathways.

Most Significant Change:

- This vignette describes the Most Significant Change method from betterevaluation.org. The guidance has been translated into several languages.

Participatory Impact Pathway Analysis:

- Participatory Impact Pathways Analysis (PIPA) is described in this wiki-style platform

Academic papers on research methods

Interviews:

- Young *et al.* (2018) A methodological guide to using and reporting interviews in conservation science research.

Focus Group Discussions:

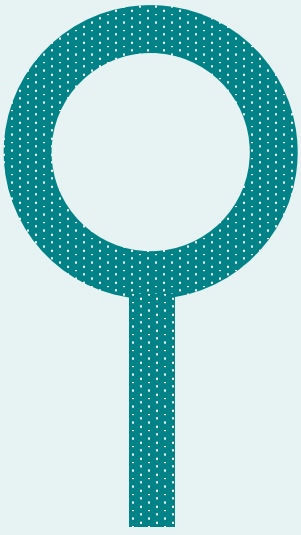
- Nyumba *et al.* (2018) The use of focus group discussion methodology: Insights from two decades of application in conservation"

Science Shop Process:

- Urias *et al.* (2020) A framework for Science Shop processes: Results of a modified Delphi study.

Participatory Modeling:

- Voinov *et al.* (2018) Tools and methods in participatory modeling: selecting the right tool for the job



Principles of Participation

Chapter 1

Photo credit: Dodly Prosper, with The Royal Society for the Protection of Birds and The Turks and Caicos National Trust

Foundations of participatory approaches

Underlying principles

There is no single method or technique that defines a participatory approach. Rather, participatory approaches emerge from adopting a mindset and set of principles. Guiding principles have been developed specifically for conservation settings, such as the Snow Leopard Trust's PARTNER principles, as well as in the contexts of rural development and participatory research. The common themes for any set of participatory principles are of giving people more opportunity to influence decisions which affect their lives, promoting fair or democratic processes, and working from the "bottom-up" rather than imposing ideas from the top down.

Importance for conservation

Participatory approaches are seen as valuable to conservation to support rights-based approaches, social justice, and fair, democratic processes. They are also viewed as important for effective conservation, since this requires sustained local partnerships, with information-sharing, support, or ownership of people in the landscape. Some of the main reasons are:

- Participation can help build local ownership and support for conservation activities, which is critical for their sustained success.
- Participatory approaches create more opportunity for locally-driven interventions, led by people who are intimately familiar with the social and environmental context. Solutions developed with local participation are more likely to incorporate complex issues which outsiders may not be able to understand fully. For example, resource-use or livelihood decisions are governed by many subtle factors including culture, social norms and values.
- Decision-making processes that are fair, democratic and transparent help to build trust and effective partnerships. This supports long-term collaborations, bringing together the strengths of different actors.
- Participatory approaches bring together greater diversity of experiences and perspectives. This can reduce the risk of biased or incomplete information and generates insights and decisions that are more robust and better reflect reality.
- Participatory approaches help ensure conservation supports human rights and social justice goals. For instance, by favouring democratic processes and fairer, more transparent decision-making.
- Participatory approaches are essential to deliver internationally agreed standards such as the UN Declaration on the Rights of Indigenous Peoples and Kunmig-Montreal protocol which demands "equitable and effective participation and the respect of the rights of Indigenous Peoples and local communities to their lands, territories, and resources".

Guiding principles for participatory methods can be found here:

https://snowleopard.org/partners-principles/ **These principles were developed by conservationists working with rural communities in Asia.**

www.participatorymethods.org **These principles have been developed by the international development community.**

participatorymethods.org provides more information on applying participatory principles, which can include:

1. The right to participate: **Everyone has the right to shape decisions that affect them.**

2. Hearing unheard voices: **Seeking out and making conditions for people to be heard who usually have less say in decision-making.**

3. Seeking local knowledge and diversity: **Starting from the expert knowledge people have about their environment, recognising diverse perspectives, realities, experiences and interpretations.**

4. Reversing learning: **Being prepared to let go of preconceptions and openness to learning from local actors.**

5. Using diverse methods: **To bring in as many people as possible and create an equal basis for engagement.**

6. Handing over the stick or pen: **Thinking about power relations, and those with higher status sitting back, keeping quiet and making space for others.**

7. Attitude and behaviour change: **With outsiders' taking on attitudes of respect, building rapport, active listening, facilitation and knowing when not to speak.**

Levels and Dimensions of Participation

Levels of participation

The phrase "participatory" is used to mean many different things. Approaches which claim to be participatory may actually be exploitative or merely inform people about predetermined outcomes. At the other end of the spectrum, approaches with the greatest participation can place all the decision-making power in the hands of participants, with any external actors only there to facilitate the process or possibly provide technical or logistical backstopping. In this case, participants might lead all stages from conception, design, decision-making and implementation. A well-known way to think about levels of participation is "Arnstein's Ladder" (Fig 1).

Engagement that is tokenistic, or which serves only to make decisions by powerful actors seem more legitimate, can damage relationships and erode trust. At the other end of the spectrum, genuine participation can help address social justice concerns, empower participants, or promote democratic processes that last beyond the time-frame of a project.

Dimensions of participation

Participation takes place across different dimensions: who takes part, at what stages in a process, and with what level of influence. To properly plan participatory engagement, it is important to consider each of these dimensions and to clearly define the scope and goals of participation. These need to be clearly communicated to participants to establish appropriate expectations.

Types of participation suggested **by Sarah White (1996):**

Nominal**: a tick-box exercise, where powerful actors want to give legitimacy to their plans but participants have no influence on outcomes**.

Instrumental: **a "means to an end". E.g. Local skills and knowledge are used for implementation.**

Representative: **people are given a voice in decision-making and implementation, but those with less power may have less influence.**

Transformative: **empowerment of those involved, resulting in an alteration of the structures and institutions that lead to marginalisation and exclusion.**

Figure 1. A depiction of Arnstein's (1969) Ladder of Participation.

Defining social justice goals

When participatory approaches are intended to promote social justice outcomes, it can be useful to discuss and agree which dimensions of justice are to be prioritised, and what "improved" social outcomes would look like in practice. Justice is commonly framed as having 3 inter-related components:

- *Recognitional justice* relates to properly acknowledging diverse cultures or identities.
- *Procedural justice* relates to fairness in decision-making processes.
- *Distributional justice* refers to how costs, risks and benefits are shared.

These components can be helpfully combined into the idea of "*participatory parity".* This term describes the extent to which influence over decisions and their outcomes is evenly or unevenly distributed among actors.

How these components are prioritised will produce different justice goals. For instance, design of programmes might be oriented toward subtley different aims such as:

- To maximise involvement of a full range of different actors and stakeholders (i.e. focus on representation).
- To ensure that everyone has an equal say in decisions and that democratic, transparent processes are used (i.e. to focus on fair processes).
- To create outcomes that address existing inequalities, so that those with less to begin with are prioritised (i.e. focus on outcomes).

Being clear about the social justice goals and priorities of the project can help with striking the preferred balance between such choices.

Building Trust

A key aspect of participatory approaches is an emphasis on building trust-based relationships, which are a pre-requisite for effective partnerships. Conversely, participatory approaches that are poorly implemented can harm relationships.

Trust-building advice can be summarised as:

- Effective, open and timely communication
- Transparency in decision-making processes
- Respectful attitude and nurturing mutual understanding
- Attention to history, e.g. start by addressing past issues that have contributed to mistrust
- Actions can speak louder than words, demonstrating commitment to address someone's concerns can be a powerful way to build trust
- Dedicating sufficient time and resources to building, repairing or maintaining good relationships with actors.

It can be helpful to acknowledge trust-building as a specific aim of a conservation project. This conceptual framework helps to identify the different ways that trust can be created to support sustainable resource management. In summary, people might

trust or distrust a particular institution based on:

- Their own pre-disposition (whether they are a trusting person).
- How likely they think it is that the institution would cheat them, based on the apparent costs and benefits, and past experience. For instance, if an organisation has repeatedly broken promises about building a road, and it does not seem to be in their interests to build a road, it is unlikely someone will trust them to do so.
- How close a person feels to the staff or institution they represent, in terms of general affinity (friendliness) or shared values. This is often built from good inter-personal relationships, such as regular, positive interactions with staff who listen and are responsive.
- The degree to which there are fair and transparent procedures in place, with systems to prevent cheating or unfair conduct.

Power Relations and Social Context

Participatory approaches are about ensuring everyone has a chance to speak, that the full diversity of views are considered and actors who normally have least opportunity to share their views and knowledge in any given forum are provided with an equal platform. This means carefully considering who should be involved, their power relations and issues of representation - who speaks on whose behalf. Usually, participatory approaches are concerned with seeking out the "unheard voices", or those who are normally marginalised. To do this effectively, it is important to develop intimate knowledge of the local setting, the actors involved, and their relationship to the environmental issues and to each other. The focus should be on spending time in communities or with partners, building relationships and trust and listening to a broad range of views.

Participatory approaches can help document and express views of those with least power, in order to influence decision-makers. Local voices might be expressed through many forms including maps, videos, stories and visual arts.

An excellent set of principles for participatory conservation are the **PARTNERS principles** developed by the Snow Leopard Trust. Their website gives a full description and examples for each of these principles:

PRESENCE: **Spend time in communities and build relationships.**

APTNESS: **Locally relevant solutions or projects.**

RESPECT: **Ethical and equitable partnerships.**

TRANSPARENCY: **Ensuring clear communication across all actors.**

NEGOTIATION: **Seeking robust joint agreements.**

EMPATHY: **To really understand costs, benefits and other impacts of conservation for local people.**

RESPONSIVENESS: **Integrating monitoring and adaptive management.**

STRATEGIC SUPPORT: **Attention to enabling factors that community-based initiatives need, such as policies and government. The balance between working with governments versus opposing harmful policies.**

Obtaining Free, Prior, Informed Consent

People need to be fully informed about what participation involves before agreeing to take part in a process or programme and be at liberty not to participate. How to seek free, prior and informed consent (FPIC) is therefore one of the first questions to consider and requires dedicated time and resources. The process of establishing FPIC can also be supported by participatory principles. For instance, attention is needed to understand local power relations, social context, representation and other factors that influence the extent to which different groups are fully informed and able to freely express their consent or otherwise. More guidance on FPIC processes can be found in Oxfam's Guide to Free, Prior and Informed Consent *(2010)*. If there is any research element associated with a project, it is likely to also require approval from a human ethics committee (often these are based at research institutions).

Seeking Consensus

Participatory approaches often involve bringing people together to collectively develop solutions or actions. This can mean analysing a situation from a range of perspectives and promoting dialogue and consensus among diverse actors who might have conflicting priorities. Multi-stakeholder engagement and conflict mediation can play important roles. Some techniques, such as Citizen's Assemblies, bring in external knowledge to support collective decision-making.

Cyclical, Iterative Processes

Participatory approaches are usually delivered through iterative processes, which involve several rounds of engagement that build on each other. This will be seen in almost any application of participatory approaches, from collaborative planning or decision-making, to consensus-building, creating a shared vision, participatory monitoring, evaluation and learning systems. A common challenge is budgeting sufficient resources, and allowing sufficient time, for processes that involve repeated rounds of engagement activities.

Monitoring and evaluation approaches enable adaptive management through cycles of learning and adapting. Examples include Participatory Impact Pathways Analysis, and Most Significant Change.

Integrating Diverse Knowledge Systems

The way different types of knowledge are recognised and prioritised is also important to support bottom-up approaches. Most conservationists are familiar with formal scientific knowledge and quantitative research methods, but these can have limitations for understanding complex social systems. As a basis for decisions and actions, locally relevant knowledge systems can be more appropriate. For instance, lived experience is one of the richest sources of understanding about a social-ecological environment, but can be under-valued or over-looked. Participatory approaches can help make conservation more relevant to people in a landscape by starting from local's own knowledge and experience, rather than an outside perspective.

WILDTEAM offer the following guiding principles for stakeholder engagement in conservation settings as part of their manual on Integrating Social Issues into Conservation (INTRINSIC):

- Start early: encourage the project team to engage stakeholders well in advance of when participation is needed.
- Respect differences: encourage the project team to engage each stakeholder in a way that acknowledges and appreciates their identity.
- Enable involvement: encourage the project team to create the conditions that

will enable all stakeholders to get involved if they wish to do so.
- Concentrate on consensus: encourage the project team to plan and carry out their project in a way that achieves their desired conservation impact, while also helping to fulfil stakeholders needs.

Reflexivity and Active Listening

Applying participatory principles requires creating the circumstance to respectfully learn from local actors without imposing top-down judgements or values. This is not to say that there's no place for critical examination and dialogue, but that the starting point is one of listening first and recognising validity of unfamiliar types of knowledge, value systems or viewpoints. Active listening is an important skill for relationship-building that involves seeking to understand fully what someone is saying before responding or passing judgement (see this paper by Staddon et al., 2021). Reflexivity, or critical self-examination, is a useful technique for exploring pre-existing biases. It involves paying close attention to our own position relative to others and how this might influence our own interpretations and how others perceive us or behave. Reflecting on our own or our organisations' position (e.g. in terms of power, past experiences, cultural or socio-economic backgrounds) relative to those of other stakeholders means this can be factored into the design of participatory approaches.

Capacity strengthening, training, partnership working

Participation principles apply to partnership working. For instance, partnerships involving international as well as national organisations can often be made more effective and equitable through participatory ways of working. Imbalances of power or resources, legacies from colonial histories, and differences in the culture or values of different institutions can be a barrier for collaboration, often creating situations where local partners are not able to contribute equally to project development or implementation. Participatory principles may help toward developing anti-colonial approaches, but these often require a deliberate effort since established hierarchies and power structures often generate non-participatory approaches as the default.

Common features in participatory approaches

Attention to wider social-cultural context

Dedicate time and resources to build good understanding of the socio-cultural setting

Tailor approaches for each context

Attention to power-relations and social justice

Creating space to hear the "unheard voices"

Commitment to rights-based approaches and anti-colonial approaches

Consideration of training or capacity strengthening opportunities

Influence over decisions or outcomes is shared more fairly. Powerful actors "hand over the stick"

Emphasis on (long-term) relationships and work involving partnerships

Attention to trust-building

Prioritising effective, timely communication

Transparent decision-making processes

Cyclical, iterative processes

Several rounds of engagement

Outcomes or workflows may not be predetermined but are allowed to evolve

Adaptive and responsive to new insights or shifting dynamics

Participatory approaches from different disciplines

There are several different disciplines that have developed participatory approaches. This has resulted in a rich diversity of tools and strategies that conservation practitioners can draw on to suit their own needs. This section gives an introductory flavour of the diverse ideas and practices that have emerged from different disciplines.

International Development

The international development community have created a suite of approaches for engaging local actors in participatory ways going back to the 1970's. These strategies were primarily developed as a response to the "top-down" approaches that were previously applied by international aid organisations, but which failed to effectively involve local actors in the design and delivery of social development projects.

The suite of methods termed "Rapid Rural Appraisal" (or RRA) emerged as a way for such organisations to effectively gain understanding of social contextual issues via the perspectives and knowledge of community members, without wasting resources on inefficient survey techniques. This idea was further developed into "Participatory Rural Appraisal" (or PRA) then "Participatory Learning and Action" (PLA): placing more emphasis on the principles of participation and how collective learning could be translated into locally-driven action. Important principles include seeking unheard voices and diverse knowledge, reversing learning (so that external organisations learnt from local experts), and handing over the reigns of power so that disadvantaged groups could play leading roles in their own socio-economic development.

These methodologies were closely related to approaches developed in the context of agrarian reform which sought to develop and introduce improved agricultural practices and technologies, for the better of rural societies. The "Farmer First" approaches, and concepts like Farmer-to-farmer learning are particularly relevant for agricultural aspects of livelihoods.

Some examples of resources from the development community are this resource collection and this website which gives a background to participatory methods as well as a wide range of resources for practitioners.

Pro-democracy, civil rights movements, and social reform

Many methods that help support citizens' participation in planning and decision-making have their origins in pro-democracy or civil rights advocacy. Social activist movements, including feminism, have been important in developing participatory philosophies, principles and practices. Social reform movements have also been linked to development of participatory approaches, especially in labour, education and public health. In the sphere of education, approaches were developed by which students could benefit through more active participation in their own learning process. In public health there have been many strands of participatory approaches: to improve the quality and delivery of health research and interventions, and also to leverage health benefits for participants linked to the process of participation itself. Many of the participatory approaches that emerged from these contexts emphasise collective action, bottom-up decision-making and citizen empowerment.

Some examples can be found here and here.

Social science tools

One key element of participatory approaches is being responsive to the wider socio-cultural setting, and dynamics of power and relationships. Social science disciplines (especially anthropology and sociology) are concerned with understanding these issues, so many techniques used in these fields are also found in participatory approaches. Familiar techniques such as interviews, focus group discussions or questionnaire-based surveys are already widely applied in non-science settings, albeit often with different standards of rigour when compared to research uses. Underlying principles behind social science methodologies – for instance bias and positionality – and greater appreciation of the full range of tools, along with their strengths and weaknesses, remain helpful in supporting participatory approaches. Approaches to analyse and interpret qualitative data (which includes narratives or discussions) can help conservation practitioners draw useful findings from participatory approaches.

Participatory research approaches, such as Participatory Action Research and Community-Based Research have also emerged from the research community, and represent a radically different approach to generating and using knowledge.

Arts-based approaches

Effective participation often involves sharing experiences and different perspectives, which can be done in diverse, creative ways. Visual media, such as videos, can be a very powerful way to communicate and are used in "participatory video" approaches (see here). Related techniques that utilise film-making with other techniques such as interviews and workshops include "Community Voice" (more here), while "PhotoVoice" (see here and here) utilises images to prompt reflection and discussion as part of participatory research for social change.

Theatre and role-playing can also be used in participatory approaches, as powerful ways to explore stories, experiences or scenarios. Often the aim is to drive social change, or bring unheard voices to the attention of decision-makers. Examples can be found here.

Narratives and stories can play an important role in helping outsiders learn about a social context. The process of examining stories can also generate insights. This is the basis for use of stories in participatory research methods, such as "Participative Narrative Inquiry" (more here).

Resource Map

Participatory Principles

Using Ethnographic Research for Social Engagement: A Toolkit for Orangutan (and Other) Conservationists is an excellent introduction to ethnographic tools that can support participatory engagement and provides an overview of why and how participation contributes to better conservation. The toolkit is available in English and Bahasa Indonesia.

https://snowleopard.org/partners-principles/ The Snow Leopard Trust provide this excellent online toolkit that gives guiding principles for participatory engagement of local communities in conservation programmes, termed "PARTNERS" principles. Chapters and videos explain each of the principles, with a short list of "Do's" and "Don'ts" for each one. They also provide a series of webinar videos where practitioners discuss how PARTNERS principles have been put into practice in a wide range of conservation settings around the world, with a podcast series and a guide for trainers.

Rights and ethics

The UN Declaration on the Rights of Indigenous Peoples is "the most comprehensive international instrument on the rights of Indigenous Peoples. It establishes a universal framework of minimum standards for the survival, dignity, and well-being of the Indigenous Peoples of the world and it elaborates on existing human rights standards and fundamental freedoms as they apply to the specific situation of Indigenous Peoples." This document is adopted in the Kunmig-Montreal Global Biodiversity Framework.

To see more...

Explore other relevant resources at the end of this Toolkit:

1. TOOLKITS
2. RESOURCES SHOWING LOTS OF METHODS
5. RIGHTS AND FPIC
8. PARTNERSHIP RESOURCES
9. CONSERVATION RESOURCES
10. GENDER / DECOLONISING
12. CASE STUDIES

Building Blocks of Participation

Chapter 2

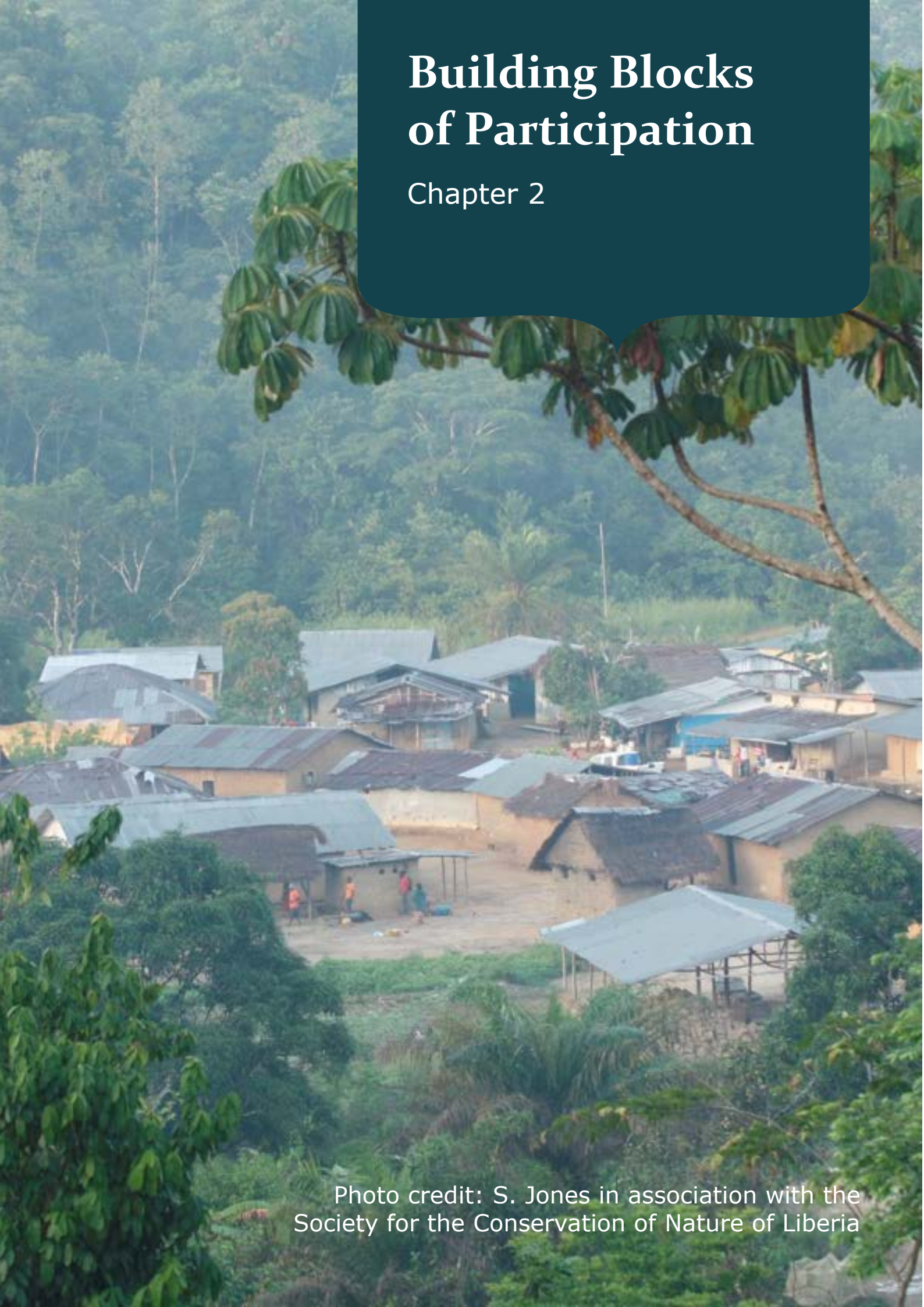


Photo credit: S. Jones in association with the Society for the Conservation of Nature of Liberia

Putting the principles into practice

There are several core methods or techniques that are helpful for projects aiming to follow participatory principles. Usually these are centred on learning from and talking to people, bringing people together for discussions or collaborations, or establishing participatory decision-making processes. This chapter introduces some foundational "building blocks" that are commonly used, and basic tips to enhance participatory elements.

Most participatory engagement approaches will use some form or other of group discussion, workshops, conversations or interviews, with many possible adaptations and extensions. The way these activities are designed and used can help promote participation, whether the purpose is for learning, collaborative planning, transparent and democratic decision-making, monitoring and evaluation or something else. This chapter therefore also includes tips on addressing some common barriers for participation when planning a workshop.

Relationships and familiarity with social context

Participatory approaches require establishing a good understanding of people and the wider context in which they live. Without insights into cultural nuance, political undercurrents, historic contexts and many other subtle or hidden aspects that govern society and decisions, it can be much harder to establish the mutual understanding upon which trust depends. The following section describes some of the main ways to establish good foundational understanding.

Spending time in communities

The most fundamental way to build familiarity is to spend as much time as possible being present in a community, observing and listening to people. Staff who are themselves from a community can be a great asset to an external organisation. Similarly, an office or field base situated in the heart of towns or villages can foster open communication. Where a permanent presence is not possible, it is important to ensure regular field visits, and that as many decision-making processes as possible are held in the affected communities themselves so that there is transparency. Ethnographic approaches can be valuable, where a trained social scientist spends long periods of time embedded in a social landscape to learn about people's daily lives and the bigger picture of their socio-cultural setting.

Relevant resources: The PARTNERS toolkit includes guidance for why and how to become familiar with a community, with case-study examples from snow leopard conservation. There is excellent guidance on ethnographic approaches for conservationists with examples from tropical countries and orangutan conservation. This training manual for integrating rights and social issues into conservation is useful for trainers who want to help teams build social issues and local participation into their ways of working.

Desk-based learning

It is not always possible to spend time in communities from the start of a project. However, it is still possible to gain some background knowledge from existing documents and speaking to people with relevant knowledge or experience. Desk-

studies involve collating published reports or other documentation, and speaking to relevant people, in order to learn as much as possible about a new setting or topic. It is particularly important to find out about previous programmes that have engaged local actors to avoid wasting people's time by duplicating effort, repeating past mistakes, or 're-inventing the wheel'. Desk-studies often involve some type of analysis to produce insights or recommendations that are useful to guide further planning or decisions. For instance, to identify key knowledge gaps, issues or relationships that may require further attention.

Desk studies can be one component of a broader "Situational Analysis": a critical assessment of all the available information sources on a particular topic or issue. Depending on the aims and scope of the project, there may be several forms of data collected as part of a situational analysis, including monitoring and evaluation of previous or ongoing interventions, interviews, participatory workshops etc.

Relevant resources: This step-by-step guidance on a desk-based situation analysis is written for public health practitioners, but is translatable into conservation issues too.

Mapping stakeholders and their relationships

At the very heart of any participatory approach is the principle that you need to start from the perspective of the participants. The understanding of who stakeholders are and how they fit into the broader context of a project and its participatory aims is therefore the basis for planning.

The purpose of stakeholder mapping is to identify all those who are relevant to a project or landscape. It can be important to distinguish rights-holders as part of this process: meaning stakeholders whose rights may be affected. Stakeholder analysis involves examining their roles and relationships, especially in terms of underlying structures and dynamics of power, and their relationships to the conservation issue at hand. Stakeholder maps provide a basis for a stakeholder engagement plan and are updated as projects and relationships evolve.

Spending time in communities and using desk-based research can help to develop insight into who the relevant actors are in a landscape, and what their complex power relations may be.

Stakeholder mapping and analysis are usually among the first activities to undertake for planning participatory approaches. They help answer questions such as:

- How establish Free, Prior Informed Consent, and from whom?
- Who should be included in participatory processes and how?
- How to engage stakeholders effectively and communicate with all affected groups?

Relevant resources There are a several guidance documents and templates available for stakeholder mapping and analysis. This best-practice manual provided by WILDTEAM is a good starting point.

This resource gives a succinct two-page guidance on Stakeholder Power Analysis, available in English, French, Spanish and Portuguese.

Recruiting Participants

When you have clearly planned who should participate, in what ways and for what purpose, then there is a practical challenge of how to reach out to potential participants. If there is already close and regular

communication with the target group then this is straightforward. However, seeking out "unheard voices" can often be a challenge, since these groups may experience barriers due to socio-economic factors, access to communication infrastructure, living in remote areas, etc. The most effective strategies often combine many approaches and make use of existing social networks and communication channels. For any method of recruiting people it is important to think about biases in who is more likely to be included or excluded. Several rounds of recruitment may be appropriate to maximise participation from hard-to-reach groups, adapting approaches at each round to fill gaps in who has been offered the opportunity to participate.

Some common techniques for recruiting people are:

- Snowball Sampling: asking people to suggest other people you should talk to. This is common in key informant interviews – where you interview someone with knowledge or experience of a particular issue, and ask them to direct you to other experts, then you ask those people to do the same and so on.
- Using existing social networks or community hubs: for instance, you might recruit participants through existing community groups, or via local forums such as public meetings, through social media networks or interest-group mailing lists. Or by going to places that are frequently visited such as shops, café's or working sites.
- Using media outlets such as newspapers and radio.
- Going door-to-door, or using a pre-existing list of contacts. Sampling techniques can be used to generate a random sample or one that is representative of a given population.
- Spending time in communities, building relationships and directly inviting potential participants.

Basics tools: Groups and Workshops

Participatory approaches frequently involve bringing people together in groups, for a huge number of reasons: e.g. to elicit a wider range of views or insights, to collectively generate ideas, share knowledge, discuss or analyse issues, to co-develop plans, to make joint decisions or reach a consensus. For example, in settings involving rural development issues, it is common for project staff to go to communities and engage with the local community members through an interactive discussion that may involve some prepared activities such as mapping or voting. It is often appropriate for participatory groups to come together for repeated rounds of discussion, as part of an iterative process of sharing, learning, feedback and planning.

Tips for Workshops

Workshops are a typical technique for participatory approaches. The following practical guidelines can help maximise the participation in a workshop.

Use skilled facilitators

Facilitators should speak the appropriate language(s), be familiar with the context, and be trusted by participants. In some cases, it will be best to seek external facilitators who have no relationship to different parties involved so they can be seen as neutral. However, if they are not knowledgeable, skilled and trusted, this could also cause problems. More advice on facilitation is below.

Be "optimally unprepared"

This means planning and preparing all that you can, but remaining flexible to follow the direction of participants, and adapt to the circumstances as they evolve. Usually, participatory processes shouldn't be closely controlled, and outcomes shouldn't be predetermined: the best results come from being open to what participants bring to the table.

Organise the space

Avoid making "classrooms" where one person stands in front facing others who sit like an audience. This would set a tone that people should sit passively and listen to someone who has authority, rather than participate as equals in a discussion. Barriers such as lecterns should also be avoided as these create a sense of "us versus them". Chairs or tables that are grouped or in circles are usually more conducive to relaxed discussion. It is also important to ensure participants are comfortable and at ease. This demonstrates respect and allows them to participate. Ensure that refreshments and any other provisions for participants' comfort are included in the planning.

The scope and aims should be clear and agreed by everyone

It is important that expectations are managed from the start, and that participants and facilitators are all on the same page. As well as collectively defining the aims or expected outcomes, it is common to mutually agree "codes of conduct" at the start of a workshop to create a setting for respectful communication and assist with the management of power dynamics or conflicts. It can be deeply frustrating to participate in a workshop with no clearly planned outcome, or where the outcome only becomes clear halfway through. Having a clear focus can keep discussions relevant and directed towards a tangible goal.

Smaller groups allow better participation

In large groups, only one person can talk at a time and everyone else must listen. It can be more effective to use smaller groups of around 7-10 participants, as this can give a chance for everyone to express their views. In a workshop setting, this can be done by organising "break-out" groups – splitting a larger group into many smaller ones, each of which discusses a topic, then reports back to the group as a whole. Small groups can also be configured more easily, for instance to ensure participants are comfortable expressing themselves or have a particular shared experience or knowledge. For instance, you can create groups for only women, young people, leaders or any other composition that is helpful.

Visual Aids

Activities involving some form of visual aids – such as collectively drawing a map or diagram - can be powerful ways to facilitate thinking, prompt discussion, and enable insights to be gained. This can also mean that the information from a discussion can be captured visually (e.g. in a photograph), rather than through detailed note-taking.

Many examples of visual approaches are found in participatory learning and action methods, used in international development. For instance: drawing "problem trees" with branches and leaves depicting inter-related social problems, and roots depicting the underlying causes.

Workshop Facilitation

Facilitators are people who are not participants themselves, but play key roles to

ensure workshops, discussions or other forms of decision-making processes proceed effectively and with full participation. The purpose for a facilitator might include the following:

- To promote equal participation, ensuring discussions are not dominated by a few loud voices
- To guide discussion, maintaining focus on the relevant topics and keeping time
- To help groups reach outcomes
- To help groups reach a consensus
- To manage underlying conflict
- To integrate different points of view

Facilitation of participatory processes is a technical skill that requires expertise and experience. In settings with conflicting parties it is important that facilitators are neutral. In some cases, it may be preferable to seek external facilitators who are not affiliated to a conservation organisation. For instance, if the organisation hosting the participatory process is also a participant or has a stake in the outcomes, then participants may feel the process is biased if the facilitator is affiliated with that organisation. However, an important pitfall to avoid is to hire an external facilitator who is not sufficiently familiar with the local context, the topic of interest, or the participants. Professional facilitators can also be costly, so the decision to hire external facilitators must be judged according to the context. For issues which do not involve conflicting views, and where the conservation organisation is trusted and seen as unbiased towards different participants, it is not necessarily a problem to use internal facilitators. However, it is still important that they are skilled and trained. More about facilitation can be found here.

Examples of Activities

Participatory workshops, or other forms of participatory engagement such as smaller discussion groups or interviews, can involve a combination of structured discussion and activities. Activities should be designed to suit the purpose, which may include:

- To gather different ideas, and record them visually (e.g. brainstorming or free-listing)
- To help organise ideas or topics (e.g. pile-sorting)
- To gather people's preferences or views (e.g. voting or ranking activities)
- To visually represent ideas that can help generate discussion, analysis and insights (e.g. mapping, diagrams, timelines, etc).

Some common activities are briefly described here and many more are described in the resource links below.

Dot-voting

This is a method to gather people's opinions or preferences in a way that is democratic. Each participant is given the same number of "votes", usually represented by stones or sticky "dots" of coloured paper. Everyone is asked to allocate their votes to the different options that are presented, according to which they prefer or consider most important. It is often useful to include follow-up discussions about why particular choices or preferences were given.

Ranking exercises

This involves groups or sub-groups ordering a set of ideas or items according to which they think are best, or most relevant. For instance, participants may be asked to rank livelihood activities in terms of which provide the most reliable income. Ranking can be done as a group or individually, and the reasons behind the rankings can form the basis for discussion.

Pile-sorting

This involves organising different ideas or items into categories. It can be a helpful way to organise many different ideas into a smaller number of themes, or to help reveal the way that people see the world in terms of

what is most relevant for classifying things together or as separate.

Mapping, time-lines, network diagrams and other visual representations

Visual representations are effective ways to capture ideas and prompt discussion or analysis. For instance, participatory mapping involves representing places, and the ideas, issues or concepts that are attached to them. For expressing changes through time, a line or several lines linking different events can be composed. Seasonal aspects of livelihoods might be depicted through a circular pictogram. Network diagrams can capture complex interrelated issues by showing pathways or connections between different elements for example. Tree-like diagrams can help depict how different elements follow on from one another to cause many outcomes.

All of the above visual representations can be created collectively by participants and are especially useful as a basis for discussion and interpretation. Visual representations can help people see connections that are not obvious by simply talking, and also serve to take people's attention away from the other participants which can help in settings where there are conflicting views. In general, advantages of using visual aids are:

- To easily convey a lot of information that is hard to capture
- To overcome language and literacy barriers
- To take attention away from participants and help manage conflicts
- To prompt more creative thinking through the physical process of drawing
- To serve as a prompt for discussion and analysis

Role-playing Games, Video and other media-based activities

Acting out situations and using tools from theatre can be an engaging and effective way to explore topics collectively. Similarly, creating videos, artwork, or collections of stories can provide powerful modes to communicate and express ideas, views or experiences.

Addressing barriers to participation

A central goal for participatory approaches is to reach people who normally have the least influence over decisions that affect their lives and facilitate their genuine involvement in conservation planning and action. Disadvantaged groups typically face more barriers to participation and these need to be actively addressed in the design of participatory processes. For instance, common barriers relate to intersecting factors such as socio-economic status and social-cultural norms, and involve issues such as geography, transport and communication infrastructures, education, language and literacy, access to technology, time availability, trust and past experiences. The needs of participants should always be central in developing an approach along with careful considerations of the costs and benefits they are likely to experience. The following are some of the common issues that unevenly affect different groups of people, and which should be considered when developing methodologies.

Costs for participants

Costs include time, travel, opportunity costs from other activities, or social costs if a process is controversial. Disadvantaged groups may be less able to meet these costs. Consider reimbursement if you are asking people for their time and be careful not to

pursue an approach which is exploitative, or creates a burden for participants. Benefits of participation may also be unequally shared. In some cultures, participants may be expected to give any monetary compensation they receive to someone else (e.g. their husband, or the village chief). Be mindful of entrenching existing power imbalances, or exacerbating inequalities.

Access to information

Some groups of people will not have access to the same sources of information, technological know-how or languages as others. Disadvantaged groups may be less likely to trust information from certain sources.

Speaking before others

Many factors might enable or inhibit the free exchange of views: e.g. power relations, cultural norms, trust, social pressures, interpersonal conflicts, politics, expectations, or seeking to change an outcome. It is important to consider who else is present in a group setting, and it may be appropriate to speak to individuals one-to-one, or in separate groups, such as women, youth, leaders, etc. Trusted facilitators are important, and getting information in multiple ways and from many sources can also help.

Where and when to engage participants

Arrange to meet participants at a time and location that is most convenient for them. Often it will be best to go to where people live or work. This also gives outsiders a better insight into people's lives, demonstrates respect and helps build trust. Meeting places should provide a comfortable atmosphere. If there is conflict, they should be neutral spaces. Depending on context it can be important for meeting places to be public (e.g. to provide an open, transparent, forum) or private (e.g. for sensitive topics).

Effective two-way communication

Disadvantaged groups are often more geographically isolated, or do not have access to convenient communication technologies. Information should be shared in a way that is accessible for participants. For instance, text and writing is inappropriate for participants with low literacy. Language and dialects and any visuals like maps, videos, photos, cartoons or drawings all need to fit the social-cultural setting. Approaches involving technological tools like phones, apps, tablets and online platforms might be inaccessible to some participants. It is also important to ensure participants are able to conveniently communicate with programme implementors or decision-makers. For instance, this may require that staff regularly travel to where participants live. Effective and timely two-way communication is essential for relationship building.

Trust

Some individuals or groups may be more likely to distrust an organisation or process, and this can present a major barrier to participation. Dedicated time may be required for relationship-building, use of trusted third parties may be appropriate.

Common Challenges and Pitfalls

A clear, realistic plan for how actors' participation will result in tangible outcomes

This needs to be in place and the long-term and short-term prospects for influencing decisions should be clearly communicated. The scope for participants to influence real-world outcomes needs to be made very clear from the start (i.e. as part of the FPIC process) to avoid misplaced expectations. As a general rule, outcomes should not be pre-determined or participants may feel (quite rightly) that there was not genuine participation. Even with the best intentions, a common pitfall is to waste people's time by conducting exercises that claim to be participatory, but which have no follow-through to tangible, lasting outcomes. Failing to be clear on what can realistically be expected as a result of participation can be damaging to relationships.

Participation may require long, flexible time-frames

Processes need to move at the pace of trust-building. Meaningful engagement may require several rounds of dialogue and feedback and needs to be flexible to fit participants' schedules.

Sustaining Motivation

Motivating and sustaining participation over time can be a challenge, especially if processes are too time-demanding, or if participants see little chance of influencing outcomes they care about.

Risk of frustrated expectations

If processes are poorly conceived, insufficiently resourced, badly implemented, or do not result in tangible outcomes, relationships with participants can be damaged.

Risk of unanticipated outcomes

Genuine participation can mean relinquishing control over decisions which can be a risk for an organisation seeking particular outcomes. Non-participatory approaches also entail risks, such as exacerbating social inequalities, creating conflict, alienating local actors or making decisions that lack legitimacy.

Lack of experience, skills and competencies for delivering participatory approaches

Participatory approaches demand specific skills and expertise that many conservation institutions do not yet have. Having champions within organisations with direct experience of participatory processes can be extremely important to guide and support what can otherwise be an unfamiliar process. Support at senior management levels is especially important since participatory approaches require ongoing commitments and need flexibility to allow for dynamic and evolving processes.

Guiding questions

The following is a rough outline of some of the key questions to consider when planning a participatory approach.

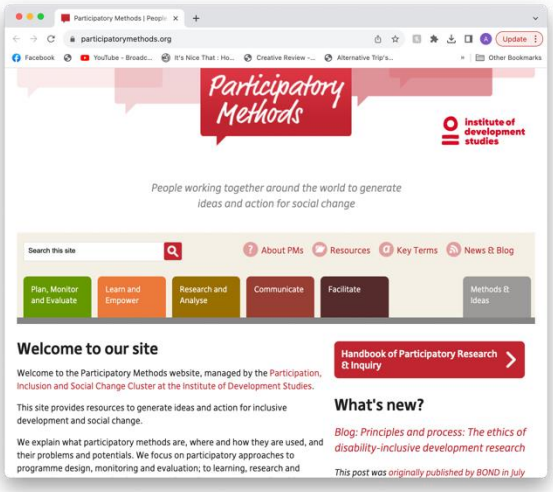
- Clearly define the scope and purpose of the activity or process
    - What is the expected short-term outcome (e.g. knowledge exchange, consensus on a decision, another outcome to be decided by the participants themselves)?
    - What is the long term outcome going to be, when can it be expected to be realised, how will the activity or process feed into that outcome?
    - It may be helpful to develop a Theory of Change to identify how an activity or project is expected to achieve an outcome, and what assumptions are being made.

- Decide whether you need more information about who is relevant
    - Build a stakeholder map
    - Describe how different stakeholders relate to the conservation issue, to your own organisation and to each other
    - Plan and conduct activities to fill your knowledge gaps
- Clearly identify who is going to participate
    - Whose voices will be included?
    - How is recruitment to be done?
    - How will FPIC be sought?
    - What could be the barriers for certain voices to take part, how are these to be overcome?
    - How will groups be represented?
    - Will some participants have different roles or participate in different stages?
    - What are the costs, benefits and motivation for participants?
- How is power addressed (Who has most power, who has least power?)
- What is the follow-up? Are there any risks or challenges that could prevent follow-up?
- What is needed to manage expectations appropriately?
- Is there sufficient time and resourcing?
- Is there sufficient skills and expertise among staff and participants? Will any training be needed?
- How will Free, Prior, Informed Consent be given? (note that this should be considered from the start and throughout the planning process).

Resource Map

Searchable online repositories and learning resources

Participatory Methods is a website with information, guidance and resources for using participatory approaches. It is an excellent starting point to gain appreciation of the topic along with tools and methods.



ActionCatalogue - methods This is a searchable database with filters for different programme objectives (e.g. design, empowerment, research); level of stakeholder involvement (e.g. dialogue, involving, collaborating, empowering, direct decision); geographic scope; type of participants; skills required and practical considerations. This website came out of an EU project aiming to support public participation in research and innovation, "Engage 2020", which has produced a series of resources. Examples tend to be projects that are associated with the European Union, and which are oriented toward promoting democratic processes to guide policies or decision-making.

To see more...

Module 1: Overview of Participatory Approaches - YouTube

Learning objectives are:
1) to get acquainted with the evolution and use-cases for participatory approaches and learn about implementation challenges;
2) to understand specifics of selected participatory methods and explore their application with hands-on examples – methods include open data initiatives, hackathons and gaming, collective ideation and co-creation;
3) to explore how participation tools are used in combination with specific objectives and to see what results can be achieved.

Explore other relevant resources at the end of this Toolkit:

1. TOOLKITS
2. RESOURCES SHOWING LOTS OF METHODS
12. CASE STUDIES

Participatory Approaches to Land and Resource Management

Chapter 3

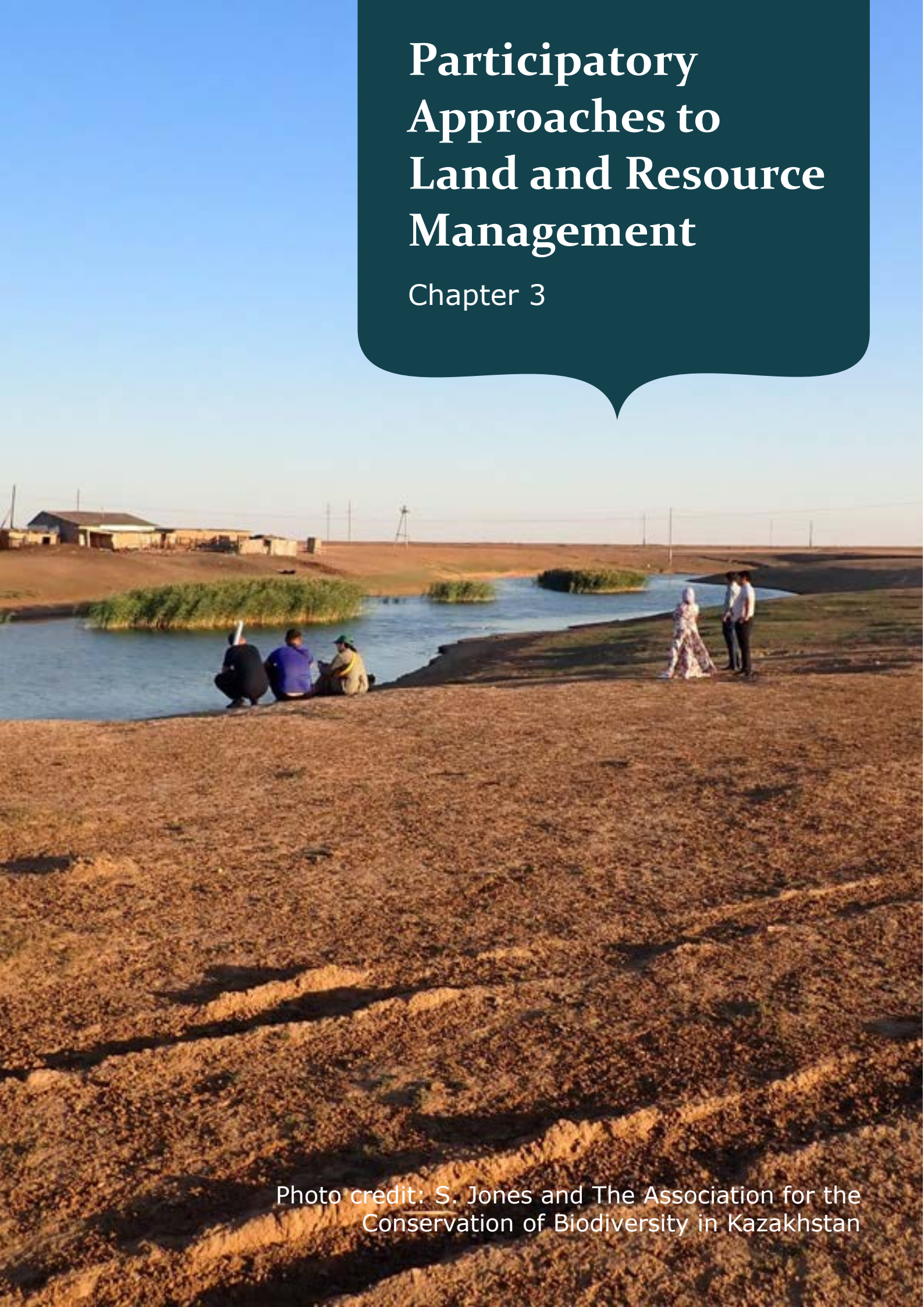


Photo credit: S. Jones and The Association for the Conservation of Biodiversity in Kazakhstan

Participatory Approaches in Land and Natural Resource Management

Unsustainable use of land and natural resources is one of the biggest challenges facing conservation, and one which many programmes seek to address. Approaches might focus on a local- or landscape- scale, and involve interventions such as protected areas, community-based conservation, resource-use governance, or habitat management and restoration. Land and natural resources can be the foundation of livelihoods and are inextricably woven into issues of power, culture, identity and politics. As such, land and resource use issues can be sensitive and contested as social needs coincide with the environmental, policy and economic landscape. Participation in decisions affecting access to land or resources is essential to ensure people's rights are respected, and area-based conservation interventions should always proceed only with the free, prior, informed consent of local actors.

Participatory approaches are likely to be important to (co-)develop management plans, establish rules and regulations, design benefit-sharing packages, support governance structures, address human-wildlife conflicts or build consensus among diverse stakeholders. The tools of participation can promote the trust, legitimacy, equity and efficacy that is necessary for long-term impacts.

Role of participatory approaches

Participatory approaches can play several key roles in land and resource management contexts, for example:

To support the process of obtaining free, prior, informed consent (FPIC) which is necessary for any intervention affecting peoples access or rights to land and resources.

To develop management plans, compensation packages and benefit-sharing mechanisms for effective and equitable management of protected areas.

To establish community-based conservation approaches, where land and resources are managed or co-managed by local actors.

To avoid or address conflicts about land and resource issues such as impacts of wildlife on livelihoods.

To integrate local knowledges and values into decisions e.g. about where to designate different land uses.

To advocate for communities' environmental rights and values.

To develop trust-based relations with local actors to build long-term success of area-based approaches.

Social justice, Rights and Free, Prior, Informed Consent

Land and resource governance are among the most sensitive issues that conservationists encounter. Land and resource governance is an intensely social-political issue: the distribution of rights to occupy land, to access natural resources or profit from their

use, fundamentally shapes the structuring of society. At the same time, the places we live in and call home are major elements of culture, identity, values and wellbeing. Failures of land-governance systems are often drivers of conflict and civil unrest, while conflict resolution can depend upon communities' empowerment to secure tenure and resource-use rights. Effective engagement and participation across many different stakeholders is needed to negotiate such socio-political complexities.

Land that is prioritised as valuable for conservation might coincide with areas of high rural poverty or be home to politically marginalised social groups. In such settings, access to natural resources can be fundamental to meeting basic livelihood needs but actors may be excluded from top-down decision-making processes. The rights of local actors to participate in decisions about natural resource use is enshrined in the UN Declaration on the Rights of Indigenous Peoples (UNDRIP) and the Kunming-Montreal Global Biodiversity Framework adopted by the Convention of Biological Diversity Conference of Parties. Participatory principles can play an important role in ensuring these rights are upheld, and that conservation management is equitable.

Relevant resources: Rights and Resources Initiative's Bundle of Rights Methodology provides a useful framework for understanding and evaluating the strength of statutory tenure rights for indigenous and local communities.

Understanding patterns of land and resource use

Tools such as remote sensing and bioclimatic modelling can provide valuable insights into environmental implications of land-use patterns, but don't tell us much about the socio-political context and underlying drivers. Therefore, we need the knowledge and perspectives of those who are using the land and resources in their daily lives to understand how these might be more sustainably managed. The participatory principle of seeking local knowledge is especially relevant where we seek to develop any management approach relating to land or resources. Social science methods, and techniques such as participatory mapping are common approaches to understand people's land use and values.

Relevant Resources: Ethnographic approaches and tools such as participatory mapping can help understand diverse perspectives and knowledge.

Bringing actors together, addressing conflicting priorities

Participatory approaches can help bring different actors together to agree on land resource management approaches. Management plans that are developed in a non-participatory manner can lack local legitimacy, fail to meet social equity standards and may be jeopardised by disputes and conflict between actors. Land resource rights are often hotly contentious issues, so participatory approaches to establish mutual agreement can be valuable to avoid or resolve conflicts and reach sustainable outcomes.

Relevant Resources: This conflict resolution training programme was developed for conservation practitioners. Negotiation and mediation techniques for natural resource management is a guidance document from the FAO.

Bottom-up conservation approaches, community-based resource management and participatory planning

Conservation can be supported through local governance of natural resources. For instance, Community-Based Natural Resource

Management (CBNRM) describes a governance system whereby communities explicitly manage their natural resources, often with the aim of achieving environmental and socio-economic sustainability. Participatory Land-use Planning is an important approach for establishing sustainable management of land resources at the local level (Box 1).

BOX 1 In Participatory Land-Use Planning, land-users are encouraged and assisted to develop plans that meet the needs of society while being environmentally and economically sustainable. Usually this involves ***facilitated workshops****, a process of* ***dialogue and negotiation*** *across diverse actors, and often some form of* ***participatory mapping****. The outcome is generally a mutually agreed plan, 'social territorial pact' or 'Development portfolio', that details how land resource management should proceed. This should ideally have formal recognition by higher authorities, such as tribal, municipal or state government. Participatory land-use planning processes can be valuable where higher-level planning processes are failing to meet local needs or challenges such as environmental degradation.*

Sustainable, local resource governance can fall within the category of "Other Effective Area-based Conservation Measures" (OECMs) as formally recognised by the IUCN. OECMs are defined in the Convention of Biological Diversity as: "a geographically defined area other than a Protected Area, which is governed and managed in ways that achieve positive and sustained long-term outcomes for the in-situ conservation of biodiversity, with associated ecosystem functions and services and where applicable, cultural, spiritual, socio–economic, and other locally relevant values (CBD, 2018)." OECMs often involve local actors in management, governance and decision-making roles.

Public consultation and participation can also form part of national or regional planning strategies, potentially involving large numbers of participants across cities, landscapes, regions or countries. Citizens may be invited to share their views and preferences (as in a public consultation) or to play a more active role in developing policy or land-use plans. This can be done through online platforms or directly during workshops or facilitated discussions. Techniques such as a 'citizens' assembly' can also incorporate expert knowledge into the debate.

Relevant Resources: This case-study offers a good example of how stakeholders were effectively involved in the design of Marine Protected Areas in the Virgin Islands. The partners used participatory mapping approaches, and the spatial planning tool Marxan, ensuring partners had access to training where appropriate.

This toolkit describes application of participatory and negotiated territorial development in the transborder zone between Ghana and Burkina Faso. The toolkit describes the process used to establish open dialogue to achieve a Social Territorial Agreement among diverse stakeholders. Tools such as interviews and community mapping, are described in detail along with lessons learned and contextual information.

Theoretical principles of participatory land use planning:

Improve perceived legitimacy of land-use plans

Incorporate local knowledge about current / historic uses and drivers or mechanisms

Incorporate local people's values and preferences

Make decision-making a more democratic process

Carbon-financing and benefit-sharing

To address the climate crisis, financial mechanisms have been developed to incentivise management of ecosystems for carbon benefits, often through protection or restoration activities. For instance, the Reducing Emissions from Deforestation and Forest Degradation (REDD) framework means verified projects can sell carbon credits on international markets. Such schemes require projects to follow social safeguards to prevent harm to local communities, and often require that income from the sale of carbon credits is equitably distributed. Participatory approaches are integral to properly involve local communities and develop appropriate benefit-sharing agreements among different stakeholders.

Relevant Resources: Plan Vivo, an organisation that has developed a prominent carbon-credit certification standard, have produced a Participatory Toolkit to support project developers and participants when planning and implementing participatory approaches into Plan Vivo projects. It has an introductory chapter describing key skills and competencies, as well as guidance on 17 tools: which range from topics such as integrating gender issues to techniques such as focus group discussions or social mapping.

Guiding questions

To effectively engage people on issues of land and resource management, it is important to gain as much understanding about a social-ecological landscape as possible. The following are suggested as prompts to build a broad picture of the many interconnected issues that can be relevant.

Understand social context, conduct stakeholder mapping and analysis (see also Chapter 1)

- Who are the relevant actors? Consider seasonal resource users (e.g. nomadic pastoralists) or those who may be affected but do not currently reside in the area (e.g. have relocated to another location for work or study)
- What are their power relations?
- What forms of power or influence do different actors hold in relation to land and resource issues?
- What are the trust relations among actors and with conservation organisations?

Understand land and resource governance, land tenure systems and how they operate:

- What are the relevant national, local and customary laws, rules, regulations and practices regarding land?
- What are the formal and informal processes and institutions of land and resource governance?
- What are the relevant management units, or land and resource classifications?
- What formal and informal rights do different groups of people hold? How important are the different types of resource-use rights (e.g. formal rights, de facto, de jure, customary)?
- How do people access land and resources in practice?
- How are these access and use-rights obtained? Are there differences for different groups (e.g. men, women, outsiders versus born citizens, etc)?
- How can access or rights be denied?
- What historic issues need to be considered?
- What dynamics, trends or changes need to be considered?

Understand the livelihood context

- How do affected land and resources contribute to livelihoods?

- What are the relevant economic and non-economic factors that influence use of land and resources for livelihoods?

Planning participatory engagement (see also Chapter 2)

- What is the scope of participatory engagement?
- To what extent will different groups of actors be able to influence final outcomes?
- Who are the "unheard" voices who might be affected by land or resource management decisions?
- How can you incorporate the opinions or needs of local actors who do not wield political power but who are affected?

See referenced methods:

Participatory Mapping: this varied suite of engagement techniques are relevant to land and resource governance issues, as they are particularly well suited to addressing issues with a spatial dimension. Participatory mapping approaches are described in more detail in the Method spotlight section on this topic.

Visioning methods: these approaches seek to understand people's preferences for the future, which can be important when developing management plans. More information about visioning approaches is provided in the Method spotlight section on this topic.

Resource Map

Participatory Mapping and GIS

Participatory Mapping: Some guidelines for communities and organisations that support them (Forest People's Programme Discussion Paper 2017): this guidance document is especially relevant in the context of using mapping as a tool to support local resource-users in land-use planning and resource management. It is aimed at communities themselves, or conservationists who are playing an advocacy role and has a focus on the rights of indigenous peoples.

How to do participatory land-use planning (IFAD): these notes offer practical suggestions and guidelines for country programme managers, project design teams and implementing partners. They provide guidance on specific methodologies that have been tested, with best practices and case-studies linked to thematic areas. They are intended to support the implementation of specific recommendations of IFAD's operational policies and project requirements.

An excerpt from "Mapping For Rights" - a toolkit prepared by the Rainforest Foundation UK designed to support community conservation in the Congo basin. Available from mappingforrights.org

Case study

British Virgin Islands – MPA Design | Reef Resilience: this case-study from the National Parks Trust of the Virgin Islands, and partners, describes a participatory stakeholder engagement process that was used to design Marine Protected Areas. Workshops with stakeholders involved participatory mapping methods as well as stakeholder dialogue approaches and integrating the spatial prioritisation tool MARXAN. The case-study lists a number of valuable lessons.

See more...

Explore other relevant resources at the end of this Toolkit:

4. NATURAL RESOURCE MANAGEMENT
5. RIGHTS AND FPIC
11. SPECIFIC TOOLS

Participatory Research

Chapter 4

Photo credit: S Jones

Participatory approaches to research

Applied conservation research means gathering knowledge that can help deliver the aims of conservation. This often involves learning about people and their relationships to the environment. In non-participatory research, the process and outputs are largely controlled by the researcher(s). In participatory approaches, participants may play a more active role, or in fact take the lead, in all or some stages of the research: such as developing research questions, compiling knowledge and information, analysing and interpreting data, making recommendations and using results to guide action. In participatory research, the researcher role can vary. They may instigate and guide the process, contribute technical skills or expertise, act as a facilitator to the process, or perform key functions such as designing and running experiments.

The role of participatory approaches

Addressing Power Imbalances

Knowledge generation and ownership can confer power. For instance, in agriculture, information about local hydrology or market prices could be very empowering to a farmer. All too often, however, the means to access and produce knowledge is unevenly distributed, and the types of knowledge that is prioritised by decision-makers is often subject to cultural biases. Participatory research approaches seek to redress such imbalances.

Seeking Diverse forms of Knowledge

A starting point is to consider biases in how different forms of knowledge-production are valued. Western scientific processes, and evidence based on empirical observations, such as randomised control trials, have proven useful to society. However, other valuable knowledge systems have tended to be denigrated or dismissed by decision-makers despite the richness of information they contain. Moreover, there are underlying biases in the body of scientific knowledge that arise from the cultural, linguistic, and geographic attributes of the world's most powerful academic institutions. Much of these biases have roots in colonial histories and narratives. A principle of participatory approaches is to seek out diverse knowledge, especially that which is held by the least powerful in society.

Ethics and "Parachute Science"

An important ethical concern for conservation research has been the issue of "parachute science". This refers to exploitative research practices, in which well-funded researchers "parachute in" to conduct research in a different country using the skills, expertise and logistical support of nationals of that country without properly sharing credit, ownership of results or data. Local scientists or research assistants are consequently denied the career advancement opportunities these bring. Guidelines to redress these practices are a useful starting point if external researchers are planning to conduct research. As an absolute minimum, external researchers should:

- Obtain proper permits and permissions (the latter may involve customary processes that are not formalised into national laws)

- Properly acknowledge the people who have contributed to the research, such as by offering co-authorship of manuscripts
- Ensure a fair data-sharing protocol is in place and agreed upon
- Ensure results and findings are shared with all those who participated in the research
- Consider how the research process is bringing value to the participants' community and local researchers or institutions. For instance, it may be appropriate to channel an equal amount of the research grant to a national student or researcher, provide mentorship or skills training to on-the-ground staff, engage with local institutions to ensure the work contributes to their research or capacity strengthening priorities.

In addition, steps that try to ensure in-country research programmes are supported and not undermined by external researchers include:

- Jointly developing research projects and programmes with in-country researchers
- Engaging with the next generation of scientists, integrating knowledge and skills-sharing into research activities.

Relevant resources: The Cape Town Statement on fairness, equity and diversity in research provides a framework and best practice guidance for researchers from wealthier countries seeking to work in economically developing settings.

This academic paper outlines the problems with parachute science in marine conservation and includes recommendations to address the issue.

Open Science and Open data initiatives

Another ethical consideration for research practices is the transparency and accessibility of data and research results. *Open science* and *open data initiatives* seek to promote more equitable and democratic approaches, by embedding principles of transparency and open access into the ways scientific knowledge is produced.

Relevant resources: The FOSTER portal is an e-learning platform with learning resources about many aspects of Open Science

Participation can add value to research in several ways:

Making research more relevant to society, with participants identifying the knowledge gaps that should be the priorities for research.

Integrating diverse ways of knowing to support more effective conservation.

Improving the quality of the research by involving local knowledge and expertise.

Promoting community learning and evidence-based action.

Empowering communities through strengthening processes for owning and generating knowledge.

Maintaining and strengthening respectful and trust-based relationships between local actors and conservation programmes.

Participation can improve the quality and value of research

Involving people more actively in the research process has several advantages. Importantly, in settings with ongoing conservation programmes, participatory approaches to research can help maintain and strengthen relationships between conservation organisations and local actors. Poor research practices conducted in the name of conservation can damage reputations and trust, even when researchers are not directly linked to an organisation.

Another big advantage is when people have ownership of research that concerns their lives they can help ensure it is relevant to the real world, and will be likely to act on the findings.

Applying participatory principles to research

Participation in setting the research agendas

A participatory research approach can mean using research tools to support communities or local groups tackle environmental problems. A starting point is identifying what the priorities for research should be, what issues are most relevant for local people, and what types of knowledge will be useful. In its simplest form, this can mean carrying out some form of consultation to elicit people's priorities for research. This then informs the research questions that will be addressed in a study to be carried out by a research team and shared with the community.

A good example of methods following this approach is the Science Shop model, where participants make use of technical knowledge and expertise of researchers to co-develop a research question that addresses their concerns. The research team can then design and deliver a project that will help answer this question, generally with close involvement of participants. The aim is to enable civil society organisations to gain access to knowledge and research.

Relevant resources: The resources section of scishops.eu provides a wealth of information about Science Shops, including FAQ, training resources, case-studies and two helpful guidance documents: Tricks and Tips for Setting up a Science Shop (available in several languages) and how to establish a Science Shop.

Community-research partnerships

Partnerships between community organisations and research institutions or "Community-based Participatory Research" is about building closer collaborations between researchers and people in society, usually through long-term partnerships. Research is done with and for communities instead of "on" them and aims to deliver mutual benefits for research institutions and the communities they work with. This approach has been particularly widely used in public health research.

Relevant resources: Community-Based Research: Getting Started. This free online training course is 3 hours per week for 3 weeks and gives an introduction to community-based research centred around citizen science methodology of the RELEIF Centre in Lebanon.

The Centre for Social Justice and Community action, by Durham University hosts several toolkits and resources relating to participatory research.

Participatory Action Research

This refers to research that is directed not only at generating knowledge, but simultaneously making that knowledge the basis of community actions to address a societal challenge. An underlying principle is to empower communities to create change, with participatory principles embedded across all stages of the research process, and to follow a cyclical process of learning and acting for change. For more about Participatory Action Research see the Methods section in this document.

Co-design

Human-centred design and co-design methodologies try to embed the needs of end-users all the way through the design of

new technologies or innovations, so they are best suited to serve people's needs. They are grounded in the concept of using design and innovation to improve society. Some key stages are "brainstorming", in which participants generate many ideas, and "prototyping" where possible solutions are tested before undergoing further development.

Relevant resources: This website dedicated to human-centred design provides a comprehensive resource, with overview, step-by-step guidance and case-studies in an easy-to-use format.

Some useful tools from science disciplines

Tools drawn from different fields of research have also proven valuable in participatory approaches. For instance, the social sciences include disciplines and methodologies that have been developed specifically to understand particular aspects of human societies or behaviours. Basic techniques such as interview methods can be adapted for use in participatory settings, while underlying concepts such as sampling bias can also be helpful. Ethnographic research techniques offer valuable ways to establish a good understanding of social and cultural contexts. Modelling approaches that have been developed across different scientific disciplines have also proven useful as ways to advance social goals, while the processes that underpin technology innovation and development have similarly been adapted into "co-design" approaches.

How respondents or participants are selected is important for understanding biases. Below are some basic concepts and approaches to consider.

"random" or "systematic" sampling **involves using some sort of randomising device (e.g. pulling out names from a hat), or choosing respondents systematically (e.g. every 3rd house along a street). This has advantages if you are concerned with making broad generalisations about a population, or want to conduct a statistical analysis, but is not always best for getting a full representation of views or in-depth understanding of a topic.**

"purposive" sampling **consists of selecting respondents with particular attributes (e.g. cocoa farmers who have experienced drought). The criteria you use, and mode of recruiting respondents will create biases.**

"snowball" sampling **is when you ask a respondent to suggest other people you should talk to, until you have spoken to everyone. You may find it hard to include respondents who are not linked to a social network using this technique.**

"saturation" **is the idea that when you have spoken to enough people to get a good understanding of a topic, you will notice that new respondents are just repeating the same topics and themes that have previously come up. When a researcher is no longer gaining new insights from speaking to more people, it is a good sign they have spoken to enough people to capture most perspectives on a particular topic.**

Interviews, conversations

Speaking to people via formal or informal conversations is invaluable to establish mutual understanding, learn about a specific social context, or about someone's

experience, views or preferences. Informal conversations can go in any direction and have benefits for building relationships and gaining broader insight into unanticipated topics. Formal interviews tend to be more structured, with an interviewer asking most of the questions and recording answers. Interviews may involve a fixed set of questions ("structured"), be more flexibly based around a guide with improvised follow-up questions that can go into answers in greater depth ("semi-structured"), or have no guide at all with topics remaining entirely open ("unstructured"). "Key Informant Interviews" involve people who have a specific expertise or knowledge about a topic. In participatory approaches, interviews can also be combined with other methods like transect walks (walking around a village or site).

Examples of interviews and their uses

"Unstructured Interviews" **have no pre-determined topic. Useful to establish broad contextual understanding of what people care about.**

"Semi-structured Interviews" **the interviewer has a guide of topics or questions that will be roughly followed, but they also improvise questions to follow-up on a theme or answer that interests them. This gives a lot of flexibility to learn more about relevant issues.**

"Structured Interviews" **follow a pre-determined set of questions. These might include open-ended questions (e.g. "Tell me about your thoughts on X…") or questions with a limited set of possible answers.**

"Group Interviews" **involve interviewing more than one person together.**

"Key Informant Interviews" **are conducted with respondents who are selected because of their particular expertise, knowledge or experience about a topic.**

"Oral Histories" **is a particular approach of learning about people's own lives to gain insight into the context, history and changing social or environmental factors.**

Interviews combined with site visits, transect walks, and other approaches. **For instance, asking relevant questions as someone is showing you their land. This has many advantages: it can be more instructive, more relaxed, means you can see things for yourself and make direct observations.**

Relevant resources: this open access paper provides "a methodological guide to using and reporting on interviews in conservation science research", with a literature review and checklist for conservation scientists.

Focus Group Discussions

A related technique from social sciences, Focus Group Discussions, involves a targeted group (usually of 5-10 people) who all share a particular expertise. When used in research, this is a structured form of interview with participants being rigorously selected in order to address a particular research question. However, the term "focus group" also gets used more loosely by non-academics, often in reference to a group discussion that may or may not follow a systematic structure.

Relevant resources:
This open-access paper reviews the use of focus group discussions in conservation and offers guidance on using and reporting this technique.
The toolkit for Focus Group Discussion from the Community Toolbox offers thorough guidance on the technique.
How to … Conduct a Focus Group Discussion (FGD) a Methodological Manual gives an overview and details important steps to run a

FGD, how to record and analyse results, and considerations such as multi-cultural groups and sharing findings. It is written for an organisation in the tropical health sector.

Interviews: some key considerations

- ***How are interviewees chosen?*** **Different approaches will inevitably involve biases, which should be factored into interpretations.**
- ***Are "unheard voices" being represented?*** **Different groups of people can be harder to reach than others.**
- ***How is the information recorded?*** **Voice-recording and note-taking are common for interviews with open-ended questions. But respondents' rights to anonymity and confidentiality must be maintained. Recording may involve later transcription, which may need to be budgeted for.**
- ***How will the information be used?*** **This should be clearly explained as part of FPIC process. Will responses be summarised? Shared with decision-makers? Analysed using statistical approaches or coding? Will people's answers be quoted in public reports?**
- ***Ethical processes and FPIC*** **need to be considered from the start, including approval from an ethics committee.**

Participatory modelling

Modelling tools from systems-based research disciplines can help understand the behaviour of systems involving many inter-linked processes with complex pathways of cause and effect. Social-ecological systems are a classic example of this situation. Models can help by generating a simplified version of reality – for instance, by describing a process in terms of a few key inputs and outputs. System models describe many components that can be linked together. This allows users to investigate the consequences of changing something, in a way that might not be easy to do without the model. Participatory modelling means bringing people together to create a shared representation of reality that incorporates diverse knowledge and experiences. Participants use this process and the model to support joint planning, decision-making or actions. Models might involve computers or apps, but can also be created physically with diagrams, drawings or other media. Participatory GIS is a closely related practice, in which models have a spatial element to them.

Relevant resources: This website offers a good introduction to participatory modelling and several case-studies.

This case-study example demonstrates a modelling tool called "Fuzzy Cognitive Mapping" which was used in a participatory modelling project relating to bushmeat hunting in Tanzania.

Recording and analysing data from interviews, data-sharing

If the purpose is for research, interviews or Focus Group Discussions are often recorded (with the interviewees consent) and the recording is later transcribed so that the text can be reviewed and analysed in the context of a wider dataset. Qualitative data analysis approaches, such as coding, may be helpful in some cases. Before any research commences, it is important for partners to mutually agree on who has rights to access and use data through establishing data-sharing agreements.

Concluding thoughts…

The tools described above are not inherently participatory so care and respect is needed to ensure they are not exploitative. As with other participatory approaches, the central

concern should be with the overall process and underlying principles. Participatory approaches follow the basic principle that scientific inquiry should have positive and equitable social impacts, and that knowledge should be open and accessible. This can be promoted by bringing people in not as "subjects" of research, but rather as co-researchers, and leaders in collecting and maintaining datasets, then analysing and using results to address their own social challenges.

Guiding questions

- How are the research questions relevant, and of value to, local actors or stakeholders?
- What will the benefits of the research outputs be to local actors and how will the findings be shared?
- Who is contributing their knowledge, and who is not?
- Who will participate in the different stages of the research process, and what level of participation will they have?
- How might the research process and findings interact with power structures? Are existing power imbalances being consolidated?
- How might the research process affect long-term relationships and trust between communities and conservation organisations?
- What biases are the researchers' own identity and position bringing to the research process (e.g. the framing of questions, the underlying narratives)?
- How are different forms of knowledge being integrated into the research process?
- Who has access to the knowledge produced?
- What are the intellectual and cultural property rights that need to be upheld?
- How will research lead to action, policy change and support better decision-making?
- Is the research approach supportive of national research institutions and researchers? Is it in line with the The Cape Town Statement on fairness, equity and diversity in research?

See referenced methods:

Participatory Action Research

Resource Map

Equity and Ethics in Research

The Cape Town Statement on fairness, equity and diversity in research provides a framework and best practice guidance for researchers from wealthier countries seeking to work in economically developing settings.

Community Research and Action Research

The Centre for Social Justice and Community action, by Durham University hosts several toolkits and resources relating to participatory research.

Seminar: environmental research with local and indigenous communities

The Global Peatlands Initiative hosted this online seminar which provides excellent experience-based guidance for conducting environmental research with local and indigenous communities. There is guidance on workshop facilitation and case-study examples from the UK, Canada and Indonesia, which include other methods such as participatory video too.

See more...

Navigate to other relevant resources at the end of this Toolkit:

6. PARTICIPATORY RESEARCH
11. SPECIFIC TOOLS AND TECHNIQUES
13. E-LEARNING AND WEBINARS

Participatory Monitoring, Evaluation and Learning

Chapter 5

Photo credit: Dodly Prosper, The Turks and Caicos National Trust and The Royal Society for the Protection of Birds

Participatory Monitoring, Evaluation and Learning

Monitoring, Evaluation and Learning (MEL) helps organisations learn about what works and what doesn't, so they can improve their approaches and adapt to changing situations. MEL is often also necessary to demonstrate to funders or supporters the impacts a programme has had, and what has been learned along the way.

Monitoring is typically a process that takes place throughout a programme's lifetime to gauge how well things are working and allows adjustments and adaptations as a project plays out on the ground. Evaluation often has a more specific aim of identifying factors that have resulted in impacts or changes, often after a programme has ended, in order to generate learning and guide future work. The most important step is learning from the monitoring and evaluation results. However, translating evaluations into concrete actions to improve programmes is also often one of the most challenging steps in the MEL process. Therefore, the central question to think about when developing a monitoring and evaluation strategy should be "How will the findings be used and by whom?". Participatory approaches can help improve the quality of MEL efforts, but also, crucially, how likely these are to be used to improve decision-making and planning.

The role of participatory approaches

Participatory MEL is founded on the common-sense logic that people with direct experience of a programme are best placed to evaluate it and act on the resulting insights. The 'participants' in this context can mean programme staff, local residents or particular target groups such as farmers, women's groups, etc.

With greater ownership over MEL processes, stakeholders are more likely to trust and act upon the findings and have greater investment in the overall process of adaptive management. Local people who are target beneficiaries of schemes (e.g. livelihood support, compensation, benefit sharing, etc) can help develop MEL systems that relate to their own needs and priorities, and identify complex pathways by which interventions may have had impacts. By applying the principle of listening to diverse and unheard voices, participatory MEL processes can generate a more complete picture of how a programme has affected different groups in society.

Participation can therefore be valuable across different stages in MEL, for instance: to decide how project "success" should be defined and measured; to develop indicators; to develop a theory of change; to monitor progress; to suggest or enact changes as part of adaptive management processes; to evaluate direct and indirect impacts; to analyse a projects' strengths, weaknesses, opportunities and threats; to generate interpretations and recommendations based on monitoring and evaluation results; to assess the relative importance of different outcomes.

A related topic is how to monitor and evaluate participatory elements of a programme. "Participation" and related outcomes such as empowerment and social justice are not easy to quantify, and often impacts of a participatory approach defy traditional monitoring and evaluation tools. This challenge is not the focus of this chapter but some relevant resources can be found in the site-level assessment of governance and equity guidelines.

Participatory monitoring and evaluation in practice

Stakeholder ownership

Participatory MEL can help build trust, motivate participants to act on findings, improve relevance and focus on stakeholder needs, and contribute toward empowerment and social justice goals. Ownership is created when actors play leading roles from the earliest stages of deciding what the ultimate aims of an MEL process is, through to developing and implementing the methodology, then collating, analysing and interpreting the results. This represents the most participatory forms of MEL. In practice issues such as the availability of participants' time, the specific objectives of an organisation, donor requirements, and the range of expertise and skills of different partners will determine what role is played by which actors, throughout the different stages of the process.

Capacity and skills development

Training can be an important component of participatory MEL process. This can support local actors to design and carry out a monitoring and evaluation programme, with potential extension support. Actors may need more information about existing approaches and tools to develop the best approach for their needs. Often, practical skills involving unfamiliar technologies or software, data processing and analysis tools are transferable and so create value beyond the lifetime of a specific project.

Participant feedback

Sharing and discussing the findings from monitoring and evaluation is crucial for validating conclusions and ensuring that results are appropriately used in planning or decision-making. This step is also a matter of transparency and trust-building, establishing respectful relations with participants and ensuring minimum standards of human research ethics.

Strengths of participatory monitoring

Programmes are evaluated in terms that are relevant to the people who were affected by it. Indicators reflect outcomes that are meaningful to participants.
Sends a message to participants that their views and opinions are respected and valued. Can help build trust.
Incorporating a wide range of perspectives offers a more complete overall picture. Findings can be triangulated from several sources and links across different elements of a programme can be revealed.
Evaluations can capture outcomes that are unanticipated, intangible, hard to quantify, or result from complex, non-linear processes.
Ownership and familiarity with monitoring results can mean participants are more likely to trust and act upon findings.
Those with decision-making roles can be held more accountable by groups whom the programme is seeking to target.

Combining approaches

A more complete picture about a programme's impacts can be achieved using complementary tools, rather than a single method. For instance, qualitative approaches like Most Significant Change or Ripple Effects Mapping are useful to understand complex, varied or unanticipated impacts and pathways. Quantitative approaches such as recording household income can supply evidence about measurable outcomes that might be hard to perceive otherwise.

Systems-based thinking

Tools such as "Theory of Change" or "Impact pathways" can provide a helpful framework for MEL. Many approaches involve co-development of a model for how a programmes inputs might behave (or did behave) by considering many inter-related pathways of cause and effect, and non-linear processes. Participants may collectively draw a diagram showing how an intervention has caused (or failed to cause) different effects.

Iterative process

Monitoring, evaluation, learning and improvement are part of a process that should be embedded into organisational ways of working. There should always be a clear strategy for how participatory MEL results will be used, and this should be considered right at the start of designing an MEL approach.

Common Challenges

Time and resources

Generally, the more participation from project stakeholders, the greater the costs. These include the time costs (for participants, facilitators, staff) and logistical costs of bringing people together for workshops or discussion sessions. Feedback processes are particularly important to budget for, but this can be challenging if they take place beyond the lifespan of a project. This is often the case where an "end of project" evaluation is conducted.

Conflicting priorities

Participants may choose to focus on outcomes or indicators that differ from those which programme managers or donors may wish to prioritise. It is important to clearly communicate any pre-requisites that are non-negotiable.

Participants' motivation and availability

Participatory MEL can be time-demanding for participants, and depends on their motivation and interest. If some groups are excluded due to availability or interest, the resulting process can be biased. Monitoring is most useful when conducted over long time-frames, but this implies sustained participation. If actors lose motivation to maintain a program, it might never generate findings that can be used in decision-making. Ensuring the process is of benefit to participants as well as the programme organisers might be a challenge.

Organisational support

Commitment is needed to integrate participatory approaches into existing M&E systems. Summarising participatory MEL findings requires a different set of skills compared to traditional methods. Having "champions" within an organisation that have expertise and understanding of participatory MEL can be invaluable.

Funder requirements

Funders can have prescriptive requirements for MEL processes and indicators. In particular, there is often an emphasis on quantitative rather than qualitative methods. Changing this might require applicants to make a case to their funders to allow flexibility in the type of MEL, as well as the timeframes.

Using results

Ensuring results are used to improve programmes is a challenge for all MEL approaches, but deserves special attention to ensure participants don't become disillusioned, which can damage relationships or erode people's willingness to engage in other activities.

Guiding Questions

Important things to consider before embarking on a participatory monitoring, evaluation and learning approach include:

Defining the purpose and scope of the Monitoring Evaluation and Learning process

- What is the underlying motive for developing a participatory MEL process?
- What are you seeking to learn, and why? E.g.
    - Is the intention to derive learning that is relevant to a specific context, or with general applicability to other settings?
    - Are you trying to fill particular knowledge gaps or answer specific questions about a process or outcome?
    - Are you seeking to identify impacts? If so, what types?
    - Is it to learn about effectiveness of a specific approach or activity?
    - Is MEL associated with testing assumptions about a theory of change?
- Who is going to use this learning? E.g.
    - An organisation
    - Fundraisers
    - Participants
    - The wider community of practitioners or local organisers
- What potential barriers need to be addressed to ensure that learning is applied, or results are used?
- What is an appropriate time-frame to address your MEL aims? e.g. for some types of impacts or monitoring aims, long-timescales may be appropriate, for others short-timescales may be needed to give more immediate feedback.

Think about the who, why and how of the participation

- What is the motive or reason for taking a participatory approach?
    - Is the aim to establish a process that will be continued by participants?
    - To improve the quality of an MEL process?
    - To improve the relevance of what is being measured?
    - To improve the likelihood of findings being acted on?
- At what stages is participation appropriate and feasible? E.g.
    - when deciding on the MEL aims themselves
    - planning what should be monitored or evaluated, and how
    - planning how learning will be applied
    - developing appropriate indicators or metrics
    - collecting data or making observations during an activity
    - after an activity or programme, has taken place
    - throughout the MEL process, from designing the scope, through applying learning, and cycling iteratively through the process.
- Who needs to contribute knowledge or experiences so that learning is robust and captures the full range of perspectives and knowledge-types?
- What will participants gain from the process and what is being demanded of them? Is the process equitable and valuable from their point of view?
- If the MEL is intended for different end-users (e.g. community groups, policy makers, funders, NGOs), what different priorities and needs do they have? Are there conflicts or trade-offs?
- Who has access and use-rights to data that is generated through the MEL process? Who will be responsible for storing and managing data?
- How will outcomes be shared with participants?

Resource Map

General MEL resources

The Better Evaluation website is a comprehensive resource for embedding participatory approaches into programme evaluations. It gives information about principles, approaches and specific tools for different steps in MEL processes, organised into an easy-to-use "Rainbow" framework. The resources capture several participatory approaches, including photovoice and collaborative outcome monitoring.

The website also includes links to further resources such as The engagement toolkit | Better Evaluation which provides more detailed guidance on a selection of specific tools.

This wiki-style website provides a comprehensive description of Participatory Impact Pathways Analysis (PIPA). The resources include an online manual, with guidance and resources for every step of a PIPA workshop, along with photos, examples and further references. The resource is available in Spanish and English.

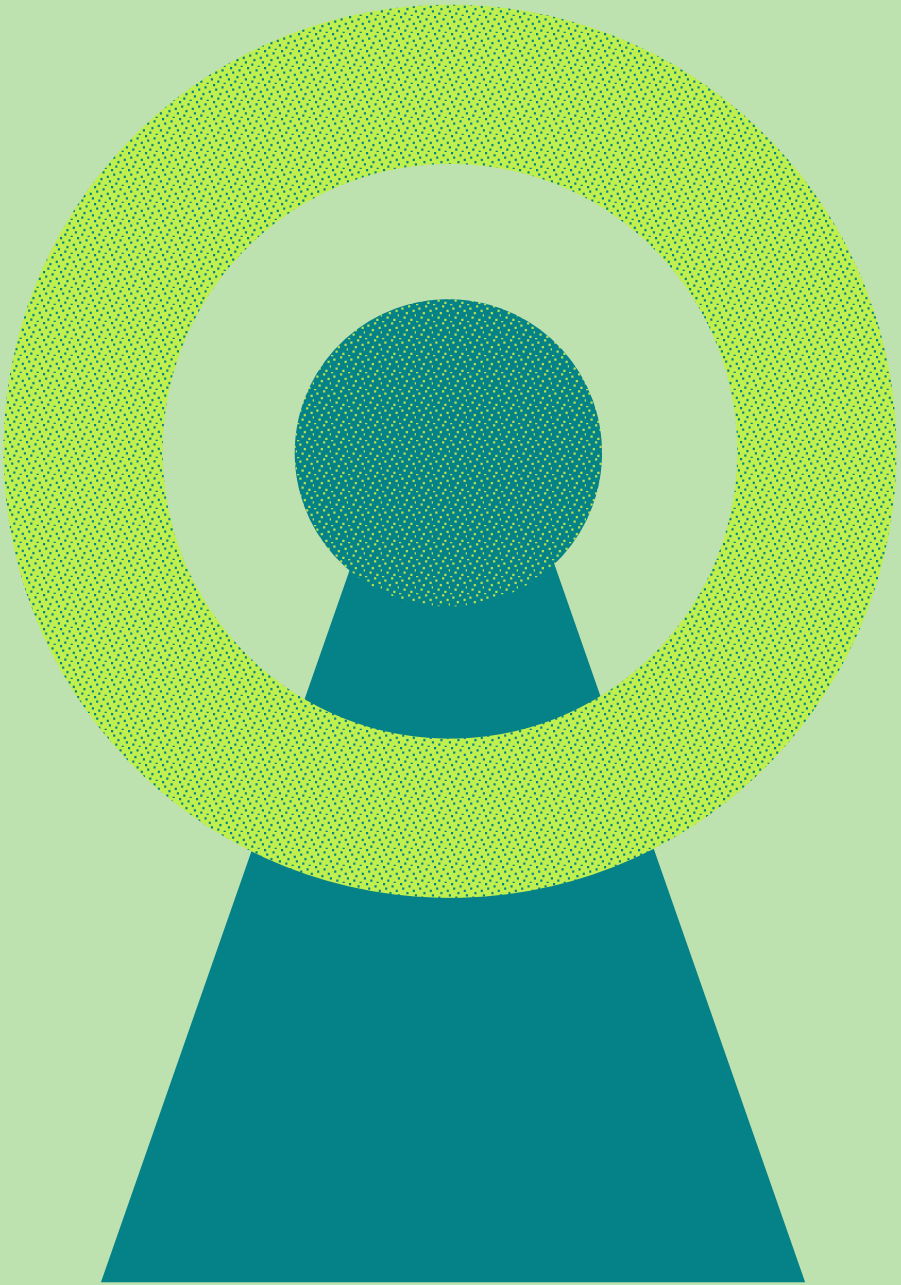
See more...

Navigate to other relevant resources at the end of this Toolkit:

3. MONITORING
11. SPECIFIC TOOLS AND TECHNIQUES

Method

Visioning



Cheat Sheet: Visioning

A foresight tool for visioning a desired future based on participants' values.

Steps

1. **Framing:** define the context
2. **Vision Pool:** generate ideas
3. **Review & Synthesis:** create a vision

Context

- Applied in conservation practice, typically in resource and land management decision-making processes at a local community level.
- Best implemented at the project design phase, creating ownership and local relevance.
- Used in a range of contexts, including: to help generate project buy-in, design resource management systems and in conflict resolution.

Timeframe

- Used as part of a long-term process, requires strong existing relationships and trust.
- The exercise itself typically requires at least a day, more often several days with ongoing engagement.
- Additional time required if looking to reach group consensus and a shared vision between interest groups.

How many?

- The exercise is best carried out in small groups. Time demand may limit how many groups to engage.
- If looking to achieve a shared vision, all stakeholder interests and sectors must be represented.

Nature of participation

- A co-design process creating community ownership in a project.
- The exercise generates social capital, through learnings and knowledge sharing.
- Participants are typically from local communities, or different interest sectors but can also be used in a policy-based setting.

Pre-requisites

Visioning exercises perform poorly if applied on their own. There must be a clear legacy in place for supporting communities to work towards their vision or their involvement in future governance and decision-making.

Outputs

- Creation of a vision statement which can take a range of formats like arts, maps, poetry or spoken word.
- Typically, qualitative data only.
- Analysis could include comparisons between different interest groups or identification of action steps.

Major considerations

- Time and resource demanding.
- Need to decide whether you are looking to reach a shared group consensus in the outputs or not.
- Requires legacy and ownership of the vision, including delivery of outputs in local language.

Background

Visioning as a participatory method first emerged in 1980s and 90s through the incorporation of systems thinking with participatory engagement. The tool has since seen a wide range of applications across disciplines, notably in sustainable planning (1), energy futures (2) and resource management (3).

'Visioning' is based on participants imagining their desired future state; its principles are based on the idea that in complex systems with high uncertainty it is impossible to predict the likely future. The outputs can be both a broad storyline description of a desired future or incorporate specific qualitative or quantitative measures, goals or targets. Visions can help a group adopt a more holistic view by encouraging 'outside the box' thinking, through a range of creative activities that illicit values and ideas from participants. It is therefore important that a vision is not constrained by either political or economic realities during its development.

Visioning is a form of scenario development. However, where visioning exercises tend to seek convergence in ideas starting from strengths and capacities, scenario development is a more divergent process of identifying different trajectories, both desired and undesired, that may result from real-world drivers. Visions and scenarios are distinct from predictions, which focus on the likelihood of a future state.

By incorporating participants' values, a vision can become a powerful commitment to management when shared between different interest groups and an energizing trigger for action (4). A vision can also create a sense of community, identity and ownership. These emotive descriptions become an impactful way of incorporating local views into policy and decision making processes (5).

A vision should have the following characteristics (6):

Visionary	Reflecting normative elements of desirability, out-of-the-box thinking and holistic perspectives.
Sustainable	Reflecting elements of transformations toward sustainability.
Systemic	Reflecting elements of holistic and complex thinking.
Coherent	Reflecting logical/compatible objectives.
Plausible	Reflecting empirical evidence.
Tangible	Reflecting clearly desirable objectives.
Relevant	Reflecting objectives that fit the local context.
Nuanced	Reflecting detailed desires.
Motivational	Reflecting inspiration for change.
Shared	Displaying a critical degree of convergence, agreement, and support by relevant stakeholders.

Steps

It is important to note that visioning is best conducted through an iterative and reflective process, however there are typically three key stages which can be followed (7).

1. Framing: defining the context of the vision

- Establish a focus group or conduct individual interviews to better understand the local context and build trust in the process. A guided walk may be a more suitable and informal way for communities to share their experience.
- Define the vision's purpose. Is it to establish aspirations or to be used for direct planning implementation?
- There may be a need to place boundaries on the vision, either spatially or temporally. Deciding these boundaries together creates more ownership by participants and develops an experience which becomes meaningful to them.
- Decide if you need to achieve group consensus or not, this will heavily shape the activities used and nature of your final vision output.

3. Vision Pool: generating ideas for the vision

- Ideas of the future state can be generated from pure imagination or grounded from present day experiences.
    - Imagination-based approaches require a creative mindset and can include varied activities including meditating, role-play and storytelling (7). Whilst this approach can unearth novel results it can be more difficult for participants to engage with.
    - Building on present-day experiences uses prompts to discuss likes and dislikes about a present-day situation. It may incorporate maps of the local environment to understand people's emotional connections to different places. Or ask participants to take pictures of areas currently important to them.
- Examples of activities: Dimension cards (8); Future wheels (9).

2. Synthesis and Finalising: transforming ideas into a clear vision

- The final vision creation should be part of a reflective and iterative process.
- If group agreement is needed there should be discussion of trade-offs. Can these be resolved? What are the key areas of agreement?
- The final vision is typically a clear, short statement which summarises the desired future state. It is important that this is given to participants in their own language and written in their words. Additional annotations, maps and descriptions may compliment the vision statement.
- Some analysis methods can be applied to the vision if required. Consistency analysis compares visions of different groups to explore trade-offs and resolve conflicts. A systems analysis could offer insights into systemic features of a vision such as key feedback loops or drivers.

Variations and adaptations to the approach

Vision to Action

After creating a vision, you may want to look at how this could be achieved by applying a 'back-casting method' to add short to medium term actions that cascade back from your vision state to the current state. Alternatively, a 'seed-based pathway' would have participants start at the present day and decide what is needed to grow into the future (10).

Combining with other methods

Using both an imaginative vison process with a quantitative systems model can offer comparison between different futures (11).

Participatory scenario visioning

A similar methodology, here we start with a broad visioning exercise before taking a more focused look at understanding the future impacts under different pathways and elements of plausibility under distinct system drivers. This may also include undesirable futures (11).

Participatory mapping

Visioning is commonly combined with participatory mapping exercises to understand connections between physical and cultural landscapes, before then creating a community vision of land management (12).

More about the approach

Visioning methods are most effectively applied when communities are part of the earliest design stages. People are more likely to see themselves as 'owners' of the problem and solution if they are actively involved in formulating local issues and shaping future desires (13). A community visioning process is an effective approach to encourage collective action and support local ownership (5).

Before selecting participants, you must decide whether you require an agreed vision. If this is the case, you will need to ensure representation of all interest groups within the participatory process to ensure its buy-in and longevity. Without sufficient representation, the vision could become shaped by the viewpoints of those most active within social groups or the limited perspective of one sector. Recruitment must occur gradually over an extended time period, building on the development of strong relationships and trust.

All participants need to receive a copy of their resulting vision narrative or map in their spoken language. Wengerd et al. 2022 shows this becoming a physical "example of the communities relationships and commitment to being involved in forest management and their ability to articulate their contribution" (12). Visioning can generate social capital in itself, through the creation of new sharing of knowledge and lived experience (2).

Case-studies

The following case-studies also involve mapping exercises to support the visioning approach, it is very typical of participatory approaches to use many techniques. More about mapping is found in the Mapping section below.

'Community visioning in a transfrontier conservation area in Southern Africa paves the way towards landscapes combining agricultural production and biodiversity conservation' (5).

Background: A visioning method was conducted with local communities in South Africa' transfrontier conservation area (TFCA) to establish their aspirations and planning capabilities and to evaluate the community vision against the goals of the TFCA; the integration of agricultural productions and biodiversity conservation at landscape level.

Method Applied: Local farmers created charts of local environmental and livelihood concerns, followed by a map of their future desired local landscape. These two tools resulted in the creation of the group's vision in the form of annotated diagrams and statements.

Lessons Learnt

The group decided on the time frame on which the vision is to be achieved.

Participants were given time to think, discuss, express or revise their opinions before making a final decision.

During the process it was decided they needed to divide the landscape and create separate visions for different areas based on variations in biophysical features.

'A biocultural approach to navigating participatory conservation trade-offs through participatory methods' (12)

Background: Visioning methods were applied in the southern highlands of Tanzania, Magombera forest reserve, in anticipation of protective status being granted to the Magombera Nature Reserve. Visions were created by four forest adjacent villages in the Kilombero district who would be influenced by impending protection status.

Method Applied: On the first day the group created a list of biophysical resources in the landscape, then used this to create a biocultural resource map detailing what resources are used, from where and highlighting areas which held cultural significance. In a secondary workshop the group used four prompt questions to create their community vision:

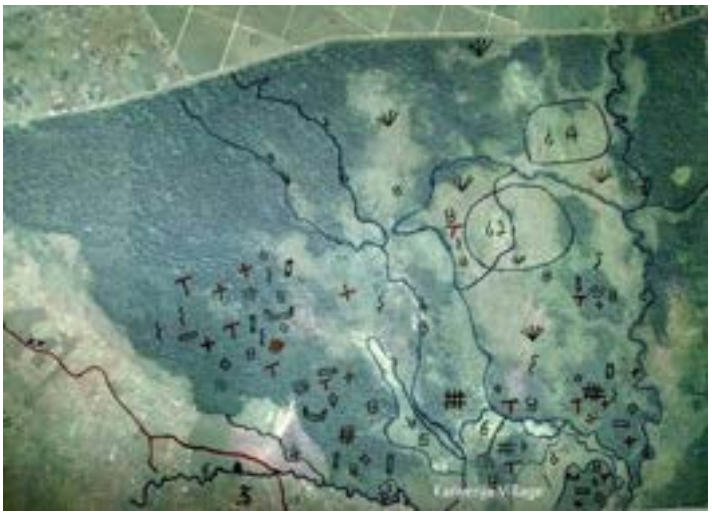
- How does your village want to use each of the biocultural resources listed in the future?
- How will you, meaning the individual village, manage those resources and who will hold the community accountable?
- In the case of a shared governance structure, which outside stakeholder would you want to partner with and why?
- What measures do you think would improve communication and transparency with an outside stakeholder/partner?

After these workshops, each village created their vision and two representatives from each came together for a two-day session to create a joint vision for the whole community. A spokesperson then presented this joint vision to regional and national stakeholders.

Lessons Learnt

The team quickly realised it was short-sighted to assume the needs of all four villages were uniform. Whilst a shared vision was achieved, the team felt this hid the complexities and variations previously shown in the four separate village visions.

During the workshops, the team managed power dynamics by separating men and women to ensure all contributions were valued. As a result, this also provided them an opportunity to understand how resource use varied between different parts of the local population.



Biocultural resource use mapped by the southeastern village, Kanyenja.From: Wengerd N. A biocultural approach to navigating conservation trade-offs through participatory methods. Ecology and Society. 2022;27(3):43.

Key considerations

What social-political contexts is the tool appropriate for or not appropriate for?

- Typically applied around land management, sustainable planning or resource use settings. However, this method also has applications across both community and governance settings.
- Can be applied at both a local scale or by policy actors across broader spatial scales.
- Visual prompts and art-based media make this tool appropriate for use in illiterate communities.

What level of commitment is needed from the implementing organisation?

- Best used when part of a longer-term process to ensure there is support in place for the development of a vision into action, and to ensure participants are included in future decision-making and governance structures.

Risks

- Some stakeholders may envision desired futures which are not possible. Be clear on how this will be handled.
- Visions are created in local systems; however, these are embedded within wider power structures and socio-political contexts. A tension emerges here between balancing the realism and idealism in visioning (14).
- If vision creation is not followed with support in action, communities can be left feeling powerless (1). Have decision-makers been incorporated in the visioning process? If not, what steps will be taken to adopt the vision?

What are the pre-requisites the organisation needs to have?

- This process requires strong existing relationships with local communities to establish trust and confidence. The framing step must include a deep look into the local socio-cultural context.

Demands it places on participants

- Participants will have to invest a significant amount of time, and must therefore feel ownership over the project.
- Participants may face personal risk if this tool is applied in resource conflict.
- You may choose whether or not to include decision-makers within your vision group. Without them, the resulting vision may lack any power but could better highlight the interests of marginalised groups. Set clear expectations with all participants.

Financial or logistical considerations

- Visions are often presented in qualitative and imaginative language, making them time-consuming to evaluate and disconnected from quantitative information on trends which influence future conditions.
- Visioning exercises are best conducted in-person. Multiple meetings will likely need to be arranged, as well as physical copies of the relevant resources.
- Given the time demand on participants, they may need financial compensation if not fully invested in their ownership of the visioning process.

Related resources

This website describes the "Participatory Evolution" approach, whereby many people can contribute to building scenarios or past histories, using a free online tool (you need to register and be approved as a facilitator) from https://parevo.org/. There is an app for participants. The tool also collects information about how people participated, which can be useful to understand engagement process.

Guidance for using participatory scenario workshops is available here.

Participatory scenario planning: Participatory research methods for sustainability . This succinct document outlines this technique as a research method and describes the process, as well as requirements, strengths and weaknesses.

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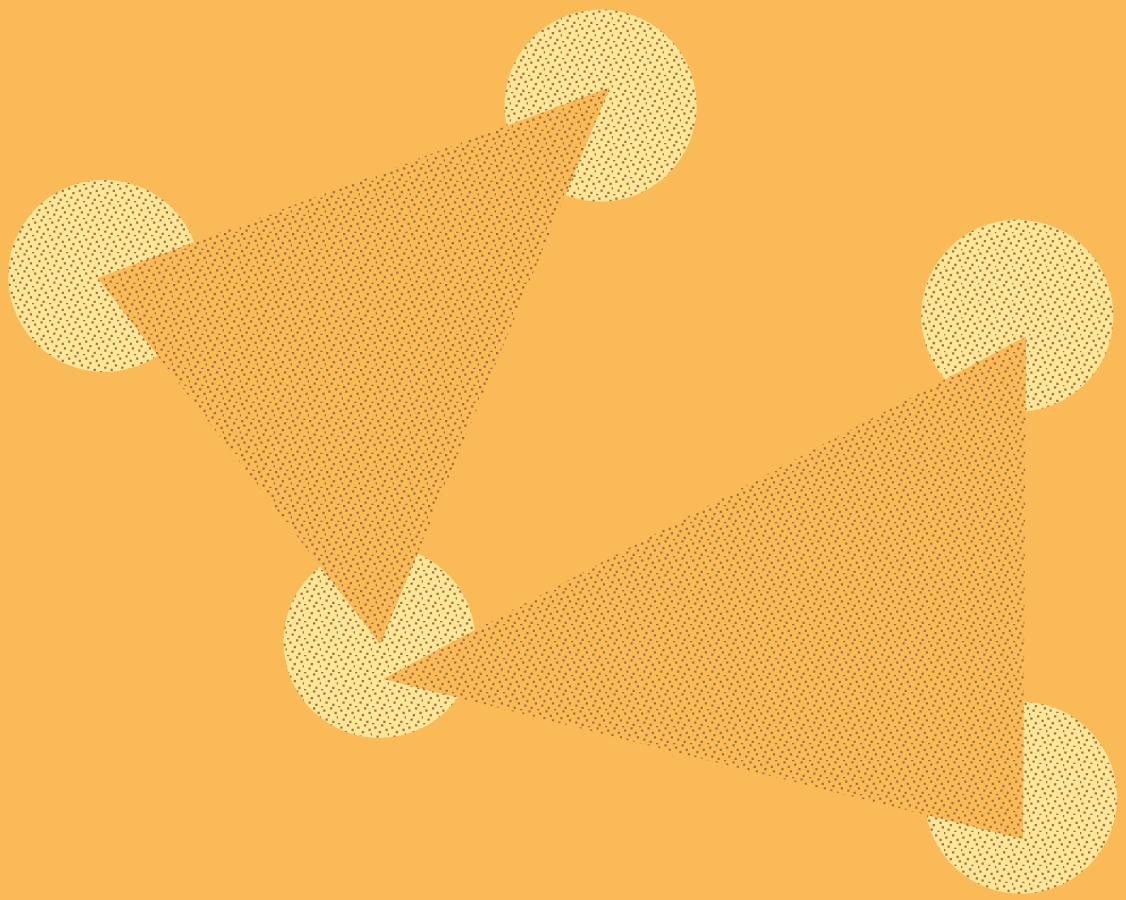
Method

Mapping



Participatory Mapping

Facilitated discussions in which participants jointly create and interpret maps

Steps

1. Engage with actors and context
2. Group Mapping and Discussion workshops
3. Decision-making and action

Context

- For learning about or addressing issues with spatial components, such as land and resource use or access, or landscape values.
- To co-develop management plans.
- Advocating for land rights and supporting communities uphold environmental and tenure rights.

Timeframe

- Workshops typically take 2-3 hours.
- For most contexts, several workshops are necessary (e.g. with different stakeholders, or as a series).
- Activities such as collecting original data with a GPS, ground-truthing findings, digitising drawn maps, performing spatial analysis, strengthening capacity, sharing results and integrating them into policy or decision-making require much longer timeframes.

How many?

- Workshops work best with small groups (e.g. 7-12 participants). Multi-stakeholder processes may involve more people, by having multiple workshops, using break-out groups, or online platforms. Mapping can also be done with individuals.

Nature of participation

- When used as a consultation exercise, participants share knowledge and views with decision-makers through mapping.
- More participatory applications allow participants to develop, own and use spatial information to advocate for environmental rights, manage resources or to address other social needs.

Pre-requisites

- A good understanding of existing land rights, conflicts, and the social context.
- A permissive political setting: in some places mapping is illegal.
- A cultural setting in which spatial representation is easy to interpret.
- Skilled, trained facilitators

Outputs

- Insight into social-environmental issues.
- Consensus about land or resource management.
- Maps or spatial datasets (in some cases).

Major considerations

- Land resources can be contentious and linked to power, history, culture and identity. Familiarity with context and attention to ethics is important to avoid harmful impacts.
- Find out about any previous mapping activities before asking communities to do something they may have done before.
- Have a clear plan about how mapping will translate into outcomes.

Background

Participatory mapping is a process where a group of people collaboratively make a spatial representation (i.e. map) of a landscape, usually through facilitated discussion, in a single event or during a series of workshops. Often new spatial information is collected or collated as part of the process (e.g. the location of water sources, boundaries, or points of cultural importance). A wide range of issues and themes can be explored, relating to physical, social, cultural, political, experiential and/or environmental attributes. The mapping and discussion process aims to bring to light relationships, structures and patterns, and serve as a basis for action or advocacy. Technologies can range from sketch-mapping on the ground or on base-maps to geographic information systems (GIS), and interactive online platforms.

Participatory mapping techniques have been popular in international development since the 1980's as tools to efficiently gain understanding about local contexts and support community development. Advocacy groups and Indigenous Peoples have also used mapping to advocate for, identify, adjudicate and register land rights, to leverage collective action, improve land management and in land dispute or conflict resolution. Tools such as "Public Participation GIS" (PPGIS) are used to improve democratic processes in public planning. "Volunteered Geographic Information" (spatial data shared by citizens, often through online platforms or apps) is also increasingly used in social research or to inform planning.

In conservation, common applications of participatory mapping relate to the establishment of protected areas, development of resource management plans or community-based conservation and in research to understand values, relationships and conflict across a physical and social environment. Unfortunately, participatory mapping is also commonly done as a "tick-box" exercise, in which outcomes are not used as part of a wider process of creating change and in which participants may not have any genuine influence over decisions.

Good Practices:

Understand	About the social context, especially sensitive issues of conflict or disputed rights.
Focus	Clearly define the purpose and expected timeframes of the exercise. Avoid replicating past mapping exercises.
Symbology	Think about what spatial information should be incorporated, and how contested boundaries or informal resource use rights are depicted.
FPIC	FPIC is essential at all stages in the process. Participants should be given opportunities to review maps or reports, and agree on any public outputs.
Ownership	Participants should have ownership of the whole process. Maps and datasets should remain in their possession and only shared or altered by agreement.
Toponymy	Names should be those of the local languages. The intellectual property rights of participants should be protected.
Fuzziness	Maps can emphasise fixed boundaries, but depicting uncertainty or change can be important to sensitively and faithfully represent landscapes.
Technology	Use appropriate technology to facilitate participation. E.g. mapping can be sketches on the ground, on paper, 3D models or drawn on a digital platform.
Capacity	Wherever possible, participants should conduct all steps of the mapping processes and be trained in any necessary skills such as in GPS use.
Follow-up	Ensure mapping activities are not "tick-box" exercises. Ensure sufficient resources to see the process through.

Steps

First develop familiarity with local context and build relationships with actors. Participation can be applied from step 1, and mapping can be part of an iterative process.

Engage stakeholders and (co-) develop a plan

- Identify the issue you want to address, who the stakeholders are and how they relate to the issue.
- Evaluate the suitability of mapping approaches: e.g. potential risks or harmful consequences, and how the process will lead to tangible outcomes.
- Establish FPIC. FPIC is likely to be a relevant concern at several stages of the process e.g. before sharing maps or data with policy-makers or in reports.
- Bring together participants to collectively define objectives, scope and scale. Be explicit about any non-negotiable objectives you are bringing to the table and manage expectations.
- Plan activities (where, when, how and with whom). Consider how disagreement will be tackled and represented in the map, what technologies to use, if any spatial data needs to be collected and whether any training needs to be conducted.

Prepare, build capacity, facilitate mapping workshops

- Gather, analyse and visualise any necessary spatial data. E.g. construct base-map as a starting point with selected landscape features, or provide satellite- or remote-sensing images.
- Deliver any training to ensure actors can participate as planned.
- Facilitate mapping workshops to discuss, analyse and visually represent relevant issues, information or preferences. Several workshops may be held, e.g. with different actors, or over several sessions. Discussion and analysis might relate to resource-use, social-political relations, cultural values, wellbeing or how situations have changed over time. Mapping may be conducted on the ground, on paper, or digitally.

Feedback, Validation and Application of results

- [If relevant] Geo-reference and/or ground-truth features using GPS or other tools. This should ideally be done by participants, although support from facilitators or external technical experts may be appropriate.
- [If relevant] Integrate the participatory maps with additional spatial datasets to suit specific needs (e.g. to create maps in a format compatible with policy-setting uses).
- Use maps, or the insights that resulted from the discussions, as a basis for action or tangible outputs. This might involve further work e.g., to finalise and agree on a land-use or resource management plan, create a livelihood development plan to be implemented with support from an NGO or engage policy makers to advocate for policy changes.

Variations and adaptations to the approach

Participatory GIS (PGIS)

PGIS uses Geographic Information Systems (GIS) to collate, analyse or store spatial data from participatory mapping. PGIS datasets can be easy to share and interpret across multiple stakeholders, integrated into official policy-making and used in spatial analysis or modelling applications. Online platforms and geospatial technologies can facilitate PGIS. More information is available here.

Public participation GIS (PPGIS)

Participatory mapping can be performed directly within a GIS, e.g. via online platforms where participants manipulate spatial data. This approach can be applied to increase public involvement in planning processes. In some contexts, PGIS or PPGIS might be used in conjunction with spatial decisions support systems (SDSS) to facilitate land-use planning processes.

Participatory Social Mapping

Participatory mapping can be used in the qualitative exploration of research questions, for instance as part of an interview. Mapping using visual methods that are interactive and accessible can be of non-spatial things, such as social networks. An example is here.

Volunteered Geographic Information

This is a term referring to crowd sourced or citizen-science type projects in which members of the public provide geospatial data for a research or policy application. This is often enacted through online platforms, and might utilise geographic positioning technologies such as GPS facilities of smart phones.

More about the approach

Common Applications

Gathering knowledge

- To gather and visually represent local knowledges, experiences, values and preferences.
- To efficiently build an understanding of a locality and explore inter-related topics such as: land and resource use patterns, cultural heritage and values, the governance setting, socio-economic issues, administrative boundaries and social development preferences.
- For co-producing insights into social-ecological systems that can support intervention design and development.
- For ongoing spatial monitoring, e.g. relating to tenure rights, natural resource management, or payment schemes.

Land-use planning

- To support decisions about zoning or prioritising, e.g. in participatory land-use planning, protected area management, community-based natural resource management, watershed or landscape scale management and urban planning.

Conflict resolution, dispute settlement

- To identify areas with potential or actual conflict and establish a dialogue or consensus among stakeholders.

Community Empowerment and advocacy

- To establish or advocate for land- or resource-use rights.
- To document and preserve languages and cultural heritage.

As part of research

- In social or ethnographic research to develop understanding of particular issues or perspectives.
- To provide input for spatial analyses, e.g. to identify land-use, historic patterns, etc.

Results, Analysis and Reporting

Insights from discussions and mapping

Collectively creating and exploring maps can help identify problems and solutions or build consensus. Results in the form of issues, themes or viewpoints may be presented in the form of a narrative report, supported by quotes from participants. If performed in different places or with different groups, analysis might draw comparisons, identify similarities, or involve content analysis on transcripts from discussions.

Maps and spatial outputs

Maps may be converted into fully geo-referenced maps, shared with stakeholders, used as part of a planning or decision-making process or as key documents in rights' advocacy. Maps may provide a medium through which participants' knowledge, values and preferences can be integrated into decision-making. Spatial analyses can involve overlaying maps to identify areas of conflict or synergy, or combining them with other information sources (such as biodiversity surveys, models of flood risk, etc). Results can include the development of land-use scenarios. These may be presented to stakeholders, as a starting point for participatory planning, or provide guidance on where to prioritise conservation interventions in accordance with social and ecological criteria. Simulations and visualisations can also be used to support participatory decision-making processes.

Possible challenges

Expectations

Participatory mapping may generate exaggerated or false expectations, which can later damage relationships or create barriers to the ongoing sustainability of outcomes. Openness, transparency and full consideration of potential barriers are important.

Governance

Decisions that are based on maps are only as powerful as the institutions that uphold them and can be ineffectual in the wrong political setting. Consider how the mapping activity will contribute to ongoing goals, and be transparent and open about the limitations.

Timeframes

The nature of land and resource issues can mean that processes involving mapping demand a flexible timeframe in order to be participatory and to ensure consensus of all relevant stakeholders.

Pre-requisites

Experienced, highly skilled facilitators, particularly if there is contention or conflict over issues of land and resource use.

A political setting in which map creation is legal and socially permissible.

A cultural setting in which map-like representations are meaningful and provide useful interpretation.

Issues of interest usually have some spatial dimension (though not always – see Participatory Social Mapping above)

Organisers have sufficient understanding of the local social-political-cultural context to adequately assess and mitigate any risks.

[In most contexts] Strong pre-existing relationships with stakeholder groups, particularly in settings involving potential or ongoing conflict, disputes, or political sensitivities.

[In some contexts] Technical skills in managing, analysing and representing spatial data in maps, such as with geographic information systems (GIS).

Key Considerations

Ethics and risk of harm

Ethical issues are a major consideration in mapping approaches, due to the inherent political and social sensitivities surrounding land and resource use rights. Rambaldi et al (2006)[5] provide guidance on ethical best practices. Further resources on ethics are included here:5. RIGHTS AND FPIC.

Symbology

Maps can over-emphasise certain types of rights, especially legal ownership, which may not reflect the way resources are used. In addition, different stakeholders may have conflicting views on the elements being mapped. It is therefore important to consider how components will be visually represented to avoid potential inequitable outcomes, or conflict, and agree on this with stakeholders. For instance, it may be appropriate to create 'fuzzy' boundaries or represent views of different stakeholders simultaneously. In addition to this, several maps or symbols may be needed to show changes through time.

Facilitation skills

Expertise in facilitation is essential, especially in cases involving multiple stakeholders with potentially conflicting perspectives. This facilitation guide outlines what is involved.

Stakeholders

To ensure maps contain all the relevant information, it is usually (but not always) necessary to consider all land-users (e.g. with collective or nested rights). Neighbouring communities who share boundaries or resources must also be included to avoid disputes. Participation across all groups in a community, and especially those with least decision-making rights, should be sought (e.g. women, youth, elders, transient migrants). Since participation will never be perfect, it is also important to acknowledge any biases or conflicting perspectives in the resulting maps. Participants should have access to maps, and validation should include neighbouring groups signing off on the validity of borders/common resources. Remember that seasonal or nomadic resource user groups can be particularly hard to bring into the process but are often among the most disadvantaged groups when it comes to land and resource rights. More on this topic in the Forest Peoples Programme Guidelines for mapping.

Fatigue

Participatory mapping has become a massively popular tool of participatory appraisal, and some rural communities have been subjects of repeated mapping activities by different organisations. Before embarking on the approach, ensure you are aware of any past activities and the outcomes, and consider what value the exercise has for participants.

Ethics

Ethical Issues

Risk of harm

Map-making can be viewed as a political act and may bring out issues of conflicts and sensitivities relating to rights and ownership of land and resources. Ethical issues are a major consideration in mapping approaches, and planners should refer to the ethical guidance provided by Rambaldi et al 2006. Any risks of harmful outcomes need to be fully considered and addressed responsibly and ethically before embarking on participatory mapping processes. Risks may include legal, social or political consequences, loss of access or rights for marginalised groups (especially those lacking formalised land tenure rights), conflict or consolidation of power imbalances.

Participation

Forest Peoples Programme (2018) explains the difference between participatory and non-participatory mapping approaches:
"Monitoring and mapping is participatory when data is collected in an inclusive, equitable and non-discriminatory manner, is collected by or in conjunction with community members, remains under the community's ownership and control and is being collected and used for purposes that are defined by the community to serve community desires and interests. It should be noted that a genuinely participatory approach to participatory monitoring and mapping processes ensures that any mapping or monitoring is only done with the free, prior and informed consent of the community or communities involved. Of course, not all mapping that is called "community-based" or "participatory" is in fact done in a participatory way."

Risks

adapted from FPP 2018

Activation of (new or dormant) conflicts with neighbours over land ownership and use.
Conflicts with government over land ownership and control (particularly where local community ownership is not recognised).
Internal community conflicts over ownership and control of resources.
Identification of valuable resources (e.g. minerals and natural resources) that are then targeted by external third parties and/or individuals within the communities.
Incomplete mapping may prejudice broader and more comprehensive claims by a community to territories that were not previously mapped.
Mapping or monitoring may reveal customary activities that contravene national laws and expose community members to prosecution or restriction of their livelihood activities.
Communities may lose control over information published and it may be reproduced and used by others without their knowledge or consent.

Case-studies

Talking Maps[3]

The IFAD Good practices in community mapping guide provides several case-study examples for use of community mapping. One is the 'Talking Maps' which were developed as part of a natural resource management project undertaken in the southern highlands of Peru. Communities developed map layers depicting past, present and envisioned future land-uses. The process highlighted how resource management had been most effective 20-30 years previously, the key resource issues that communities were facing and supported development of strategies to improve resource management. The process also contributed to the resolution of resource conflicts.

Spatial simulation to support local land management processes: Participatory Land-use Planning (PLUP) Fiction[1]

Bourgoin and Castella (2011) used participatory landscape simulation with a role-playing approach termed "PLUP Fiction" to help villages in Lao understand the implications of land zoning for their livelihoods. People drew areas of different land uses on a board made of 100 one-hectare cells and assigned economic and environmental returns (values) to different land-use types. The resulting values helped participants to negotiate land-use conflicts and adapt their plans until consensus was reached.

Ujamaa: participatory land-use planning in Northern Tanzania[2]

Participatory mapping tools such as sketch-maps were used to develop village land-use plans under Tanzania's national planning legislation. Ujamaa Community Resource Team facilitated the process in numerous villages over several years and identified several key lessons from the process. Firstly, PLUP provided the best tool for communities to secure sustainable management of natural resources, establishing rights and by-laws that were enforceable. However, land-use plans were only as good as the institutions that enforced them and community plans could still be overridden by interests at national government level. For example, the authors note: "Because wildlife is owned by the government, and the government increasingly places priority on attracting commercial investments and generating revenue from wildlife, it continues to allocate village lands for hunting concessions". This highlights the importance of the enabling environment for participatory mapping to deliver benefits. More details from this case study can be found here.

PLUMALA: land-use planning and visioning in Madagascar[4]

The PLUMALA project in Madagascar is using participatory land-use planning coupled with visioning approaches to co-develop resource management solutions in the face of intense and conflicting pressures on land. These tools aim to create a shared vision in a setting where the needs of farmers to generate food and income can be in conflict with conservation rules aiming to curb deforestation.

Preferences about carbon-friendly land management[5]

Lestrellin et al (2013) simulated outcomes of different land-use planning configurations, using communities' values of land-uses and potential carbon-market values under REDD+, to explore community preferences across 8 study sites in 4 countries. Participants provided model inputs for estimated values of different land-uses and were given training in carbon budgets, carbon markets, and benefit-sharing mechanisms under REDD+. High opportunity costs and land ownership systems were important factors in relation to preferences around carbon-friendly land management and REDD+ benefit distribution options.

Related resources

This "Good Practices in Participatory Mapping" is an excellent review document from IFAD that provides thorough guidance and several case-studies.

This ethical guidance for participatory mapping[6] and participatory GIS provides a useful checklist to ensure best practices.

The Forest Peoples Programme's (FPP) "Participatory Mapping: some guidelines for communities and the organisations that support them" is a guidance document which contains a thorough introduction to using participatory mapping with local and indigenous communities, especially in the context of land and resource rights. The FPP, founded to support peoples who live in forests and depend on them for their livelihoods, aims to "create political space for them to secure their rights, control their lands and decide their own futures." Their website hosts several relevant resources for conservation settings, involving land and resource governance, especially in tropical forest landscapes: www.forestpeoples.org/resources

The website of the Participatory Mapping Institute, is a network of practitioners and academics concerned with promoting the involvement of marginalised groups in public planning through mapping technologies.

The website of the International Society for Participatory Mapping has a discussion forum and blog, as well as details of projects, meetings and events. Their resources include a 'software and tools' section with links to a large variety of open access tools for mapping and data collection.

CADASTA provide excellent technical tools and services to "empower vulnerable communities to affordably and easily document, map, and secure inclusive land and resource rights at scale for a more sustainable and equitable planet". They provide an online GIS platform, and their website showcases many examples of their work with governments, NGOs and communities from around the world (especially from low and middle income countries). Their training and support centre includes course materials for both trainers and participants, with discussion prompts, activities, resource lists, and step-by-step workflow handouts for using the CADASTA app on topics of: Introduction to CADASTA and land rights, GIS overview and mapping, Technology overview and setups, Data collection, Data analysis and visualisation.

This Participatory Social Mapping Toolkit provides a succinct overview of this research method, related to participatory mapping.

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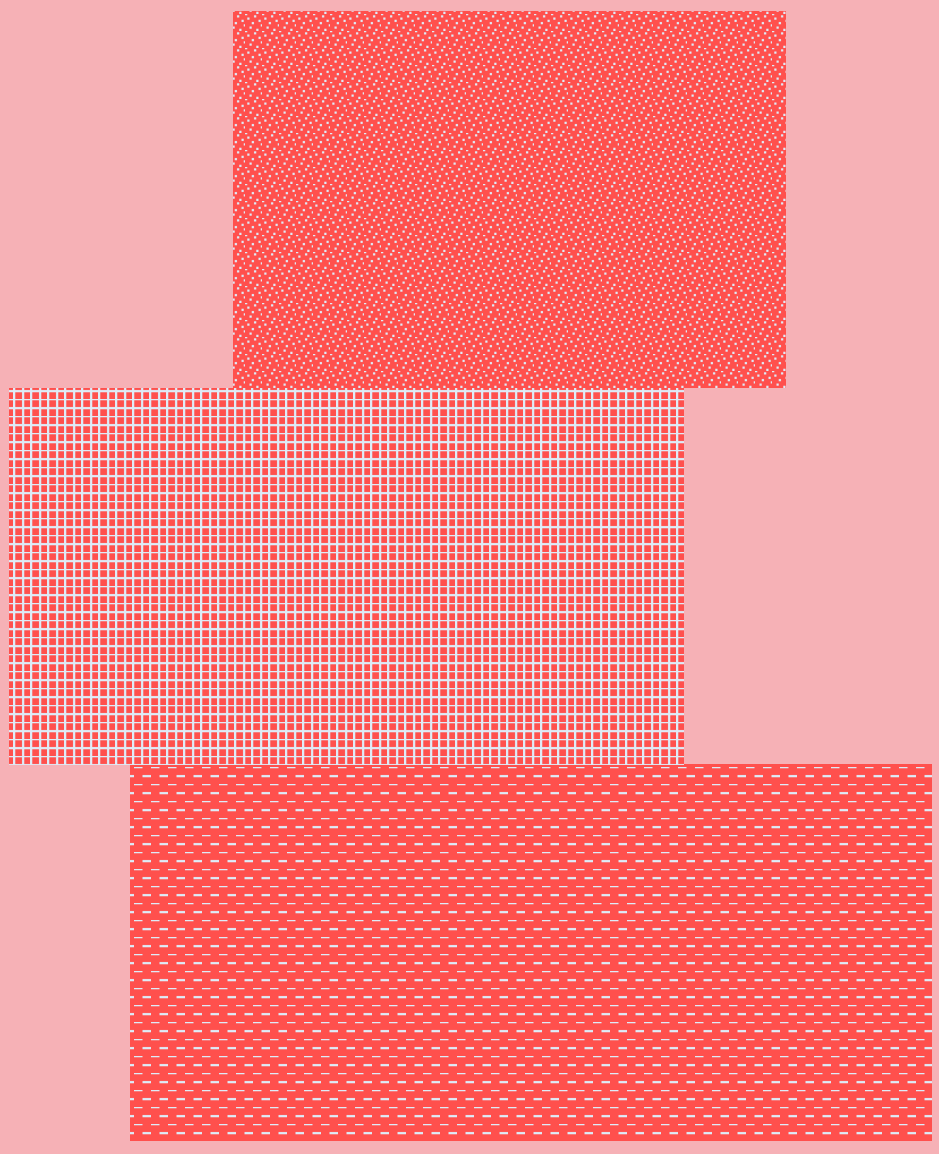
Method

Action Research



Participatory Action Research (PAR)

Co-developing knowledge and taking action

Steps

1. Establish partnerships & working practices
2. Co-create knowledge
3. Support participants to act

Context

- Settings where there is need for strong community engagement to achieve transformative social change on an issue.
- Conditions in which the integration of local knowledge is an important focus.
- Situations where adaptive management is essential: PAR allows for continuous feedback and learning cycles between researchers and communities, so interventions can be adjusted based on local insights and changing circumstances.

Timeframe

- This will depend on the complexity of the issue, level of engagement and evolving priorities of the participants. It can range from weeks to years.
- It is often long-term with cyclic periods of reflection, planning, action and evaluation.

How many?

- Often a diverse range of stakeholders: community members, researchers, practitioners, policy-makers, among others.
- The exact numbers depend on project goals: usually centred on a small group or specific community, but some projects may engage larger networks or multiple communities.

Nature of participation

- Individuals or communities with lived experience of an issue collaborate with researchers throughout all stages of a research process: from problem identification, data collection, analysis to reporting, monitoring and evaluation and decision-making.

Outputs

- Documentation of local knowledge and practices.
- Community-generated solutions.
- Actions plans and interventions providing a roadmap for implementing social change based on shared insights and collaborative decision-making.

Major considerations

- Readiness and willingness of community members to actively participate and support collaborations.
- Resource allocation (time, funding, personnel) should support potentially long-term collaboration with unknown timelines. Needs adequate time for cyclic periods of reflection, planning, action and evaluation interspersed throughout the lifetime of the project.
- It is necessary to acknowledge and address potential influences of researcher's perspectives and biases in the PAR process.
- PAR requires patience, commitment and self-reflection in order to navigate power relations, and sometimes conflicting interests.

Background

Participatory Action Research (PAR) is usually not a research process designed to generate knowledge for scientific purposes but is a process for generating knowledge for action in service of the goals of specific communities. A unique goal of PAR is to address social issues and influence social change by actively engaging those people affected by the issue in the research process and decision-making process. PAR is well suited to address issues around collaboration, empowerment and social justice. The research process is iterative and cyclic, in which teams work together to define a problem, design an action and then observe and gather information on the results, reflect on the action and its impact. These iterative cycles allow space for critical refection, planning, actions and evaluation to inform the next stage of the action cycle.

The term 'action research' was introduced in the 1940's to refer to research involving the active participation of those with lived knowledge of an issue, and exploration of problems that they identify and anticipate [2]. This idea challenged traditional scientific approaches in addressing social problems such as poverty and antisemitism [2]. PAR gained momentum with anti-colonial movements through the 60' and 70's that challenged the dominance of western science and advocated for the integration of knowledge and perspectives of marginalised groups [3]. PAR emerged as an approach that valued inclusion and community engagement, while simultaneously allowing open forums to overcome power, domination and enhanced representation [4]. At this time, the idea of PAR as a way for people to be active participants in knowledge creation, rather than subjects of academic research, took root [5]. PAR projects have since developed in fields such as education, healthcare and community development. Intertwined with social and political activism, PAR has become a tool for marginalised communities to address their own issues and take an active role in research, policy advocacy and transformative change.

Supportive principles for conducting a PAR project:

Experience	Those with experiential knowledge on an issue have authority to own and lead initiatives to change them.
Empower	Empower communities through active participation and shared decision-making processes.
Collaborate	Foster mutual learning and dialogue between researchers and community members.
Culture	Cultural sensitivity and respect are paramount to integrate local contexts in the research approach.
Action	Prioritise tangible actions and solutions that emerge from collaborative efforts.
Flexibility	Adapt research methodologies to changing community needs and insights over time.
Long-term	Commit to sustained engagement to build trust.
Democracy	Knowledge democratisation - sharing research findings and knowledge - to empower communities beyond academic circles.

Steps

PAR is best thought of as a cyclical, iterative process centred on close collaborative relationships usually involving a researcher with formal training, and local researchers whose expertise may derive from their experience and relevant knowledge about their setting.

Foster research partnerships and establish working practices

- Establish the motivation for a PAR project. This may be initiated by a researcher reaching out to a specific community to explore common interests and areas for collaboration, or communities approaching researchers to address a specific issue.
- Identify the research team which may include researchers, community members, stakeholders, and experts with a common motive that best aligns with a specific issue. Diversity within teams is also important to avoid tokenism, particularly in terms of discussing whose perspectives are included within the project and why.
- Focus on building trust and relationships with individuals or communities by establishing open communication channels, understanding local dynamics and involving key stakeholders. This may also entail researchers satisfying community questions to understand their motives, and the benefits of the research for the community which must extend beyond pure knowledge and resource extraction.

Co-create knowledge with participants

- Identify a common issue or problem to address within the research partnership, prioritising community concerns. Identify who else should be involved in helping to identify the problem by drawing upon the team's different skills, capacities and priorities. Problem definitions and researchers' roles may also be refined through iterative stages.
- Collaboratively design approaches to observe and investigate the problem. PAR projects do not have prescriptive methods and typically use qualitative, participatory methods (e.g. storytelling, interviewing, ethnography, problem trees, guided walks, diaries and video) that are accessible, engaging and supported by the skills of the team.

Jointly analyse collected data and generate insights

- Encourage active engagement, discussions and activities to facilitate the exchange of insights combining academic expertise with local knowledge of participants. This may involve facilitation skills to encourage open dialogue, and understandings of the problems at hand and how to address them.
- Analyse the collected data collaboratively, by working with community members through the interpretation process. For example, generated data can be used as a basis for reflection to prompt discussions on common issues, patterns and differences. Creative methods, such as participatory video, enable community members to generate material through workshops and then the research team comes together to critically discuss the meanings of the final products.

Steps

Empower and support participants in taking action for positive change

- Develop actionable recommendations and strategies based upon the research findings, ensuring they address the identified issue. This may involve developing different actions intended for different types of stakeholders and outcomes.
- Theory of change concepts can be useful to demonstrate how to bring about changes through designing an action, and then a mechanism, to produce certain outcomes or outputs. These approaches are well documented in health and development contexts and can help inform the development of an action plan for discussion and elaboration.
- Reflect on the entire PAR process, learn from successes and challenges, and use these insights to refine future participatory research initiatives.

Re-define problem and cycle through the process

- PAR is applied through an iterative cycle of defining the problem or issue to address, collecting knowledge and data, analysing and drawing insights and taking action. Often the data collection and analysis process happen in parallel with taking actions to address the issue. The outcome of those actions can then be observed and learnt from during the process (Fig 2).

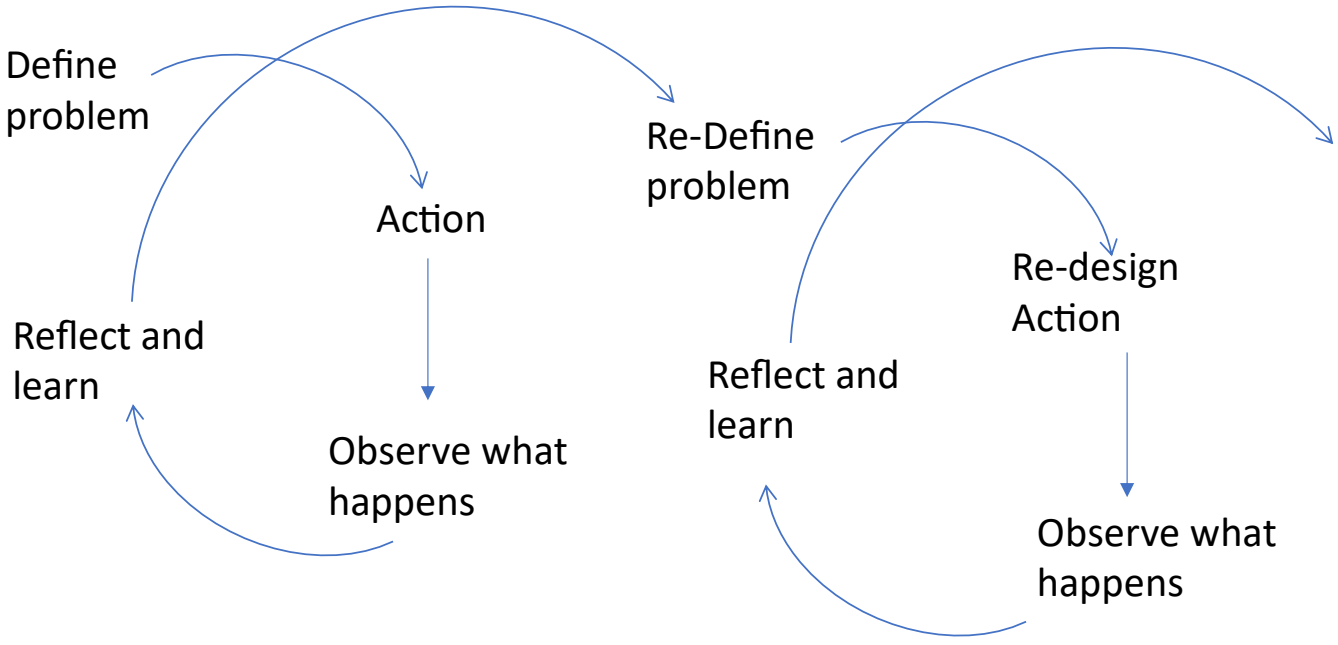


Figure 2: Cyclic research phases of action, observation and reflection that define PAR projects, based on [1]

Variations and adaptations to the approach

Visual PAR, Photovoice

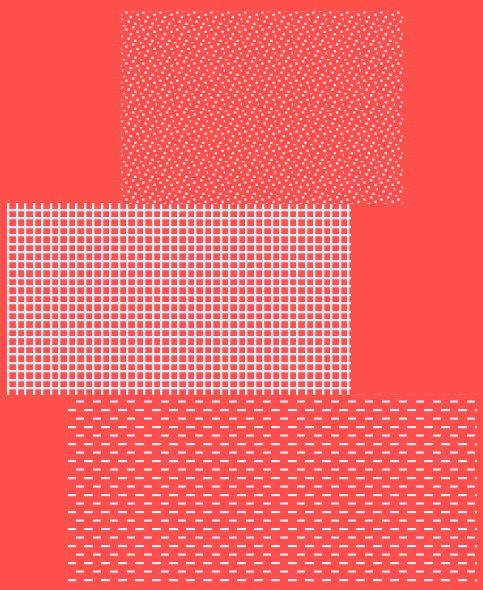
Visual methods such as photography, drawings and mapping can be incorporated into PAR to facilitate communication and expression. This approach is particularly useful when collaborating with communities with low literacy or as means of capturing nuanced experiences. Photovoice is a PAR approach where participants use photography and group discussion to document and reflect upon their own realities. Photovoice has proved popular in engaging youth in sustainability and conservation issues [6].

Digital PAR, online platforms

Using digital technologies and online platforms to engage participants, especially in geographically dispersed communities, can enhance collaboration, data collection, and knowledge sharing. For example, Gupta et al (2020) hosted an online conference to facilitate dialogue on sustainable development and advances in Digitalisation and Artificial Intelligence technologies among experts. Their approach allowed experts to discuss ideas, research findings and proposals to inform research priorities and action agendas [7].

Arts-based PAR, Creative Voice

PAR can also involve uses of creative arts such as music, drama or visual arts as a means of expression and enquiry. Arts-based PAR engages participants in non-traditional ways, fostering creativity, and alternative forms of knowledge production. Creative Voice methods adapt and extend the Photovoice method, allowing participants to integrate creative arts approaches and qualitative research connected to their own individual and cultural contexts [8]. This has been adopted in Mexico to understand the challenges facing the conservation of maize biodiversity through the eyes of indigenous farming communities, and to co-create potential solutions [8].



Ethical Principles

Khanlou and Peter (2005) [9] highlight ethical considerations and principles when undertaking PAR studies

Social or scientific value

Knowledge gained from PAR focuses upon action, not on acquiring scientific knowledge or research alone. The research team and ethical reviewers should consider whether communities have played an active role in the identification of the issue, have an interest in the topic and are committed to the issue being explored.

Scientific validity

Decisions concerning methodology should arise from the particular community context and the skills, knowledge and expertise of the team. In addition to a project's scientific validity, the research process should be evaluated in terms of its social validity including resourcing and the suitability of the approach for the specific cultural context.

Fair subject selection

Ideally PAR beneficiaries should be those who are directly involved in the research. Therefore, all interested members of a community should be given meaningful opportunities to participate, particularly if they have been underrepresented in the past. A protocol should be developed with co-researchers, stating the nature of their participation and the benefits provided from the project.

Favourable risk-benefit ratio

The potential benefits of the project need to be weighed against potential risks. This is of importance since PAR is centred around challenging the status quo and may have unintended consequences that make participants more vulnerable or exposed to negative impacts. Therefore, an awareness of the political and cultural implications of the project is needed and the associated risk-benefit ratio assessed.

Independent review

Independent ethical reviews from individuals who are unaffiliated with the research project help ensure ethical and scientific standards are met. The cyclical process of PAR can present difficulties for those proposing PAR studies and those evaluating them, since the methods used are often not defined before the research begins, as these are co-created with co-researchers. Therefore, the cyclical nature of PAR may require researchers to seek ethics approval through each cycle of the research process and to develop specific guidelines to help ethic review committees deal with the specificities of PAR studies.

Informed consent

The responsibility for obtaining informed consent usually falls to those who initiate the project but might differ from standard ethical research protocols where participants are given information about the purpose, methods, benefits and risks of the research. Often informed consent might be negotiated at different phases of the project, based upon a mutual negotiation with co-researchers who determine the terms and conditions of their efforts.

Key Considerations

Co-option by powerful actors

When PAR studies involve large institutions and government actors, religious groups, charities or business sectors, co-option of the research process is a risk. This can lead to tokenistic participation efforts where communities are engaged without re-addressing power dynamics. Research teams needs to assess who they will engage at what points in the research cycle, identify the risks of engaging different groups and design activities that allow different voices to be represented and heard.

Control

Researchers and practitioners must learn to relinquish control over the process and work in a collaborative manner, in which leadership and roles are shared among co-researchers. This requires flexibility in the research design, with methodologies that can evolve based upon community input and emerging insights, and ensuring the project remains responsive to the dynamic nature of social issues. This also requires a need to adapt to the cultural context of the community to better understand local customs, traditions, and communication styles to foster trust and collaboration within the research team.

Power Dynamics

Power inequalities within the research team - particularly where researchers do not share the identities or life experiences of communities they collaborate with – can lead to tensions. Academics must work hard to consider how their own attributes (e.g. gender, race, life experience) influence their interactions with co-researchers and find ways to redistribute responsibilities, authorities and activities to make these widely accessible. Similarly, power asymmetries exist within communities where individuals have different time and ability to participate. Careful consideration of the types and distribution of benefits will be important, as well as an awareness of who is involved and who is excluded.

Ethics

Navigating ethics can be more difficult in a PAR project due to the co-constructed, flexible and cyclic nature of the research where methodologies are not clearly outlined from the outset. Considerations include all the issues a standard ethical review would address (e.g. avoiding harm, confidentiality, consent, etc).

Case Studies

Envisioning future forested landscapes in Sweden – revealing local-national discrepancies through participatory action research [10]

Background: a PAR approach was designed to link local interests to national policy actions relating to the future of two forested landscapes in Sweden. Local stakeholders from the forestry sector were engaged and worked together to create future visions for two forested landscapes. These were then communicated to national policymakers who were asked to design policy solutions to achieve locally desired visions.

Method applied: workshops and focus groups were conducted with key stakeholders, identified through a snowballing approach, to create a desired vision for a particular forested landscape. Visions were created through three phases: a "Critique Phase", where participants were asked to critic their present situation, followed by a "Utopian Phase" where a desired vision was explored through brainstorming visions for their landscapes. The visions were created to encourage participants to go beyond current barriers, possibilities, power relations and law restrictions. In the final "Realisation Phase", participants were asked to make their visions concrete by discussing actions to achieve their goal. A full-day workshop was held with 15 policy makers from regional and national authorities, agencies, forest companies, NGOs and governmental departments to explore measures and actions to achieve locally derived visions. The research employed questionnaire surveys to evaluate the participatory approach, the objectives of the research and key criteria for participatory planning.

Lessons Learned

Communicating local visions through separate workshops to national policy makers proved deficient as national level stakeholders delegitimised local visions, knowledge and rights over the land. This hindered cooperative efforts.

To foster a sense of common responsibility and cooperation it was suggested that future engagement events should focus on face-to-face meetings among local and national stakeholders to stimulate dialogue, co-learning and encourage stakeholders to develop visions together.

Time and resource considerations were important to bring different stakeholders together face-to face, as well as designing workshop formats and activities that account for power imbalances between different stakeholder groups.

Reference: Wallin, I., J. Carlsson, and H.P. Hansen, Envisioning future forested landscapes in Sweden–Revealing local-national discrepancies through participatory action research. Forest Policy and Economics, 2016. 73: p. 25-40.

Case Studies

Toward food sovereignty: Transformative agroecology and participatory action research with Coffee smallholder Cooperatives in Mexico and Nicaragua [11]

Background: the project explored how livelihood diversification among coffee smallholders can contribute to transformative food sovereignty and to what extent PAR may support related transformative processes for smallholders.

Method applied: after establishing long-term partnerships among cooperatives and universities, researchers and practitioners, community actors, cooperatives, and farmers came together to design a project titled "Assessment of Diversification Strategies in smallholder Coffee Systems of Mesoamerica in southern Mexico and north-western Nicaragua". Research teams worked together to define specific goals, design research tools and share results. The project adopted a mixed-methods approach, including household surveys, interviews, focus group discussions, and participant observation during farmer-to-farmers exchanges, to understand farmer livelihoods and diversification strategies. In parallel to this, throughout the project, capacity building and mutual learning processes were conducted among project researchers, cooperatives and facilitators. The PAR project aimed to contribute towards achieving social change in the agroecology system through **1)** capacity building with community facilitators/ promoters, **2)** the co-creation of questions and knowledge relevant to the strategic planning by coffee cooperatives, **3)** sharing farmer-to-farmer learnings across territories, and **4)** the co-production of popular education material.

Lessons Learned

Investing in capacity building facilitators and educational material (popular education tools, facilitator-led focus groups) helped improve the impact and awareness of the project.

The PAR process generated evidence to acknowledge vulnerability in the food system, and to leverage areas (e.g. using traditional knowledge and practices that support food provisioning during times of hardship) to improve food sovereignty.

Collaborations forged through the PAR process can help capacity building in unexpected ways, e.g. by amplifying farmers' voices in decision-making.

Efforts need to be invested in documenting financial and long-term processes to measure both scholarly and practical outcomes for participants.

Reference: Guzman Luna, A., et al., *Toward food sovereignty: Transformative agroecology and participatory action research with coffee smallholder cooperatives in Mexico and Nicaragua.* Frontiers in Sustainable Food Systems, 2022. **6**: p. 810840.

Case Studies

Case study of participatory action research for wildlife conservation [12]

Background: a PAR approach was developed between researchers and community members to investigate the impacts of crop-raiding on farming livelihoods, and to develop actions to mitigate human-wildlife conflict.

Method applied: the research team developed a community project incorporating cycles of research, reflection and action. The first phase aimed to understand local concerns relating to the costs and benefits of communities living close to the Kibale National Park in Uganda, and proposed changes to mitigate costs. Crop raiding by wildlife coming from the National Park was the most significant issue identified, and several land use changes were suggested to mitigate the problem, including planting garlic as a cash crop, planting tea as a buffer crop, building beehive fences and maintaining a trench around the boundary of the park. During the second phase, communities were asked about their interest in implementing the strategies, and during the third phase, land use changes were implemented with regular maintenance programmes to support farmers. Ongoing research efforts were made to measure the impact of the changes on crop damage and local participation in the programme.

Reference: Milich, K.M., et al., *Case study of participatory action research for wildlife conservation.* Conservation Science and Practice, 2021. **3**(2): p. e347.

Lessons Learned

Participant motivations were improved through regular contact with community members, establishing an in-person connection and communication system. Ongoing monitoring of the programme to measure impact and project success were continually fed back to communities to show progress and sustain participant motivation.

The project facilitated improved communication between community members and park authorities. These parties found new ways to work together and found solutions to the crop raiding issue and improved revenue sharing benefits to reach previously non-participating communities.

Participants engaged voluntarily in the project and had the power to influence decisions about what mitigation strategies to implement and maintain, which improved the long-term motivation and participation in the initiative.

Related resources

Community Forestry and Environmental Research Partnerships: is an online resource developed by Berkley Rausser College of Natural Resources describing key principles of participatory research with downloadable PDFs summarising the history of PAR and an introduction to PAR. The "Questions that won't go away" link allows practitioners to work through a series of question prompts to help identify issues for planning their own PAR project. There is also a link on strategies, tools and methodologies to inspire use of diverse approaches.

Application of participatory action research for climate change adaptation: is a reference guide for practitioners developed by The International Development Research Centre and Center for International Forestry Research, on collaborating with key stakeholders to provide enhanced understanding and insights into climate change adaptation in Africa. It gives detailed methodological insights into steps and tools for developing PAR projects and reflects on common challenges in conducting, designing and executing such projects.

A Participatory Action Research Field Guide: The Healthy Neighbours Study research team developed a toolkit for practitioners on how to setup a PAR project, develop research questions and tools, collect and analyse data, and take research to action. The appendices contain useful templates for establishing research agreements, and numerous training facilitation guides and agendas.

Participatory Action Research Toolkit: Durham University Scholars and the Lune Rivers Trust developed a toolkit that contains some short and useful questions for practitioners to work through during each phase of their research project, with sections focusing on collaboration, knowledge, power, ethics, building theory and taking action.

Child and Youth Friendly Participatory Action Research Toolkit: Child Fund have developed this practical guide on participatory methods targeting children's participation in a PAR initiative. It is designed to help practitioners engage children to participate in the identification and analysis of an issue, and to help plan and implement solutions. The guide is extensive and includes different tools and methods for identifying an issue, to prioritising concerns, to analysing a situation, and a series of planning tools.

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Resource List

1. TOOLKITS FOR PARTICIPATORY APPROACHES

The following websites and downloadable PDF documents provide guidance and background information for using participatory approaches. They also showcase a range of tools and techniques, often with step-by-step guidance and illustrated with examples, as well as links to additional sources of information.

Learning resources and training modules for conservationists

https://snowleopard.org/partners-principles/ The Snow Leopard Trust provide this excellent online toolkit that outlines the guiding principles for participatory engagement of local communities in conservation programmes, or the "PARTNERS" principles.

There are 8 principles, which are introduced and illustrated by 50 videos that include testimonies, case studies and discussion points from conservation practitioners around the world. The content guides users through each of the principles with suggested activities. There is a downloadable book chapter that accompanies each of the principles.

The entire training programme is also available as a podcast, on the "resource centre" page of the toolkit. Further resources provided are: Partners Principles Book a guide for trainers: Training conservation practitioners in local community engagement: A Guide for Trainers a peer-reviewed case-study Building partnerships with communities: a paper on the principles and What makes a good trainer.

In addition, the "PARTNERS principles around the world" section hosts 8 webinar videos in which practitioners discuss how PARTNERS principles have been put into practice in a wide range of conservation settings around the world.

Integrating Rights and Social Issues in Conservation: a trainer's guide is a training resource for best practices when it comes to social aspects of conservation, including participatory engagement. The content is organised into the following modules: Community and social diversity; Gender and conservation; Introduction to governance; Rights-based approaches to conservation; Equity, participation and power ; Conflict management; Livelihoods and wellbeing.

The trainers manual is a downloadable PDF and there are accompanying downloadable PowerPoint slides that include instructions for the trainer. It doesn't go as far into participatory approaches as the PARTNERs modules but provides a good primer on all the basic topics to consider for good practice in stakeholder engagement.

Global Lives of the Orangutan have several resources for Orangutan (and other) conservationists that take an ethnographic approach to foster participatory engagement with communities. There is an Ethnographic approaches toolkit (Chua et al. 2022) that shows how ethnographic methods can build in-depth understanding of complex social sides of land and resource-use issues. A key feature is that researchers spend time in the communities building relationships and understanding of the values, culture, history, environment and other aspects of society. The toolkit is accompanied by a visual summary along with 6 comic-style scenarios. All are in English and Bahasa Indonesia.

Ethnographic approaches (Chua et al. 2022) This handbook for conservationists describes how ethnographic methods can build holistic and in-depth understanding of complex aspects of social-ecological-systems, such as land and resource-use issues. A key feature is that researchers spend time in the communities they are trying to understand, building relationships and developing a nuanced understanding of

the complicated interplay of values, culture, history, environment and other aspects of society.

A Guide to Using Tools for Participatory Approaches Fauna & Flora International's partner hub provides this 3-page guidance document that gives an excellent introductory overview on how to go about using participatory methods, developed for conservationists.

Just Restoration Training Curriculum is learning resource to support reflective learning about social justice issues related to ecological restoration. Learning materials are units of study that can be delivered as a 3-day workshop or adapted as needed, designed for group-learning.

Online Resource Hubs and Libraries

participatorymethods.org is a site from the Institute of Development Studies (UK) who have been at the forefront in developing and promoting Participatory Learning and Action. It covers background and principles of participatory approaches, and offers detailed guidance and resources under each of the following headings: plan, monitor and evaluate; learn and empower; research and analyse; communicate; facilitate. There is also a large repository of resources such as case-studies, guidance documents, books and articles. The resources are generally oriented toward practitioners in the fields of development, social change, or participatory research.

The ConSoSci Partnership seeks to train the next generation of conservation social scientists, providing training resources and a resource library. Training videos are available on their Youtube Channel, and their library contains several journal publications and guidance documents aimed to support conservationists to use social science tools. There is a training manual for KoboCollect and a repository of Survey Forms. There is also a helpful research ethics, and reflections section on the website that guides conservation scientists through social science aspects. Users can contact the partnership to request training resources on a particular topic.

People not Poaching has a huge collection of case-studies by practitioners placing communities at the heart of efforts to address illegal wildlife trade issues. They have produced a guidance document with lesson learned across 12 case-studies: Engaging communities to tackle illegal wildlife trade – lessons from Southeast Asia, South America and sub-Saharan Africa. (2022). Training resources include: an online video series on Communities combating illegal wildlife trade for the East African Community region, and peer-learning resources for Community Conservation in Uganda comprising 8 modules designed for Community Wardens working in protected area management.

Stakeholder Engagement and Conflict Resolution in conservation

An Introduction to Stakeholder Engagement is a learning module developed for conservation practitioners that gives a simple introduction to stakeholder engagement. It has a click-through format and covers topics such as how to identify stakeholders and stakeholder mapping. It uses an engaging interactive approach with activities and clear learning outcomes. The resource is also available in French.

This training course on Conflict Resolution developed by Fauna & Flora International gives an overview of conflict resolution processes in the context of conservation. It uses an engaging interactive approach with activities and clear learning outcomes.

Participatory Approaches for *in situ* conservation of Crop Wild Relatives this book chapter provides a thorough introduction to participatory concepts, the background of participatory methods and their use in conservation settings. It also contains examples of several types of tools and illustrative case-studies from around the world, showing participatory approaches in plant conservation efforts.

Participatory Techniques and Tools: A WFP Guide is a useful guidance document in the form of a downloadable PDF containing 5 booklets, with emphasis on working in partnerships with communities and other stakeholders: concepts of participation and partnership; planning and information management; enhancing participation in partnerships; participatory techniques; working with communities.

The Red Cross Community Engagement and Accountability page offers detailed guidance for engaging with communities effectively and equitably, especially oriented to development practitioners around the world. It includes several case studies from around the world that show how participatory approaches have been applied in the context of international aid and social development, especially within the health sector. The examples are searchable by region.

2. REPOSITORIES OF TECHNIQUES AND METHODS

The following resources include searchable databases, repositories or catalogues, with links to further resources and case-studies relating to a wide range of participatory methods and tools. These can be browsed to help gain ideas or inspiration, or they can be interrogated to find resources relating to a particular approach, or to help find case-studies from a particular region or context.

Searchable repositories

https://participedia.net/ This provides a "global network and crowdsourcing platform for researchers, educators, practitioners, policymakers, activists, and anyone interested in public participation and democratic innovations." There is huge collection of global case-studies, resources and projects, which are searchable by organisation, method or geographic location. There are also 'collections' of resources relating to a similar topic. There is a teaching and learning resource centre with resources designed for graduate-level researchers or practitioners, although currently most are USA-focussed.

https://www.participatorymethods.org/ (described above) also has a searchable resource database.

http://actioncatalogue.eu/search This is a searchable database with filters for different programme objectives (e.g. design, empowerment, research); level of stakeholder involvement (e.g. dialogue, involving, collaborating, empowering, direct decision); geographic scope; type of participants; skills required, practical considerations. This website came out of an EU project aiming to support public participation in research and innovation, "Engage 2020", which has produced a series of resources. Examples tend to be projects that are associated with the European Union.

Policy-powertools.org is a website with easy-to-read information sheets for participatory tools, alongside the full descriptions (downloadable as PDFs), which are available in Spanish, Portuguese, French and English. These resources are organised according to different use contexts: Understanding, Organising, Engaging and Ensuring (accountability). This site also has a large directory of web-pages of organisations around the world (mostly in the development sector) that have useful content for participatory approaches and community engagement. Each directory entry includes a summary of what tools-oriented content is on the web-site and how the resources can be accessed. The tools that are made available through this site cover a huge range of settings from around the world.

Knowledge for development is a database which can be searched based on global sustainable development goals, offering a large collection of "resources and inspiring stories emerging from research for development projects and processes". This platform is funded by the Swiss Agency for Development and Cooperation (SDC) and the Swiss National Science Foundation (SNSF) through its joint Swiss Programme for Research on Global Issues for

Development (r4d programme). The resources are tailored toward the sustainable development community.

Downloadable toolkits

This Engagement Toolkit is a downloadable PDF that includes an inventory of participatory engagement techniques with detailed descriptions on how to implement them. Each technique in the inventory has a summary table which gives details of the general outline, timeframes, pre-requisites, evidence, examples among other links. The toolkit is designed for the context of European users who are concerned with food safety, but the tools are generic and widely applicable.

Participatory Methods Toolkit: A practitioners manual. Prepared by J Slocum, this PDF describes the following methods for participatory engagement in step-by-step detail: Charrette, Citizens Jury, Consensus Conference, Delphi, Expert Panel, Focus group, Participatory Assessment, Monitoring and Evaluation, Planning cell, Scenarios, The World Café. It also lists over 40 other techniques with a brief description of each.

Participatory Techniques for Community Forestry, A Field Manual by Jackson and Ingles gives practical guidance and descriptions for a wide range of techniques from the suite of Participatory Rural Appraisal and Rapid Rural Appraisal approaches, with a focus on community-based forestry contexts.

3. MONITORING, EVALUATION AND LEARNING RESOURCES

The following resources include guidance and ideas of participatory monitoring and evaluation approaches, as well as resources dedicated to specific techniques.

Online resources

https://www.betterevaluation.org/ This website provides a comprehensive resource for evaluating programmes, with detailed and organised materials situated in a framework. The resources capture several participatory approaches, including photovoice, collaborative outcome monitoring and appreciative inquiry. There is a page of resources, and case-study examples.

EvalParticipativa is a research and outreach initiative linked to an evaluation capacity development and networking project in Latin America. Their website hosts many valuable resources for participatory evaluation, with case-study examples, tools and a forum. The resources are available in Spanish and English.

Monitoring and Evaluation Toolkits

Community-Based, Participatory, and Developmental Evaluation Approaches: An Introductory Toolkit. Prepared by Miranda Cobb & Gabrielle Donnelly for the Ecology Action Centre, this toolkit includes a primer on participatory evaluation techniques, with a focus on building foundational skills such as qualitative research techniques. It provides detailed guidance on how to use specific tools, including photovoice, storytelling circles and performance journals. It also provides resources for implementing tools such as forms and plans.

The Participatory Monitoring and Evaluation page from the Sustainable Sanitations and Water Management toolbox describes steps in participatory monitoring, defines key terms, and provides several links to case-studies, training resources, online booklets and other further reading. It is oriented to development practitioners.

The M&E Universe is a free, online resource developed by INTRAC to support development practitioners involved in monitoring and evaluation (M&E). It consists of a series of short papers (2-6 pages) on different subjects related to M&E.

Impact assessment guidance

Guidance on Conducting a Participatory Impact Assessment (FFI). This document provides step-by-step guidance for conservation organisations on how to conduct a participatory impact assessment, involving a discussion session. Participants identify impacts of a project on different aspects of well-being (material, relational and subjective) and these are explored by ranking exercises and probing questions. The aim is to identify impacts of a project on wellbeing, the importance of these and to what extent the project was responsible for them.

Participatory Impact Assessment: A Design Guide offers an 8-stage approach to developing a participatory impact assessment, especially tailored towards understanding the livelihood impacts of a programme. Several key techniques are described that support each stage, including participatory mapping, timelines, impact calendars, radar diagrams and various forms of voting, ranking and scoring exercises. The focus is on producing results that can be clearly communicated in reports, with an emphasis on quantitative (i.e. numerical) summaries. The framework does not demand high levels of participation and is appropriate where the main aim is to gather insights about a programme from the perspectives of the targeted communities, rather than to create a participant-lead process. This resource is particularly useful for evaluating programmes with livelihood support elements or other social development objectives, as it was created for international development practitioners.

Ripple Effects Mapping

Ripple Effects Mapping is described in this overview from participedia.net, with links to further resources.

This video looks at participatory monitoring and evaluation and the technique of Ripple Effects Mapping. It is part of a youtube series from the Institute of Development Studies, which hosts a playlist of webinars about participatory methods that accompany the publication of the SAGE handbook of participatory research and inquiry.

This Ripple Effects Mapping training course is provided by the NIHR Applied Research Collaboration West. The materials are comprised of a series of short videos (in English), which provide step by step guidance and examples. The materials are oriented to healthcare settings.

This academic paper from the health research sector gives a thoroughly described example of Ripple Effects Mapping, in which the results were analysed using the qualitative research method of inductive coding.

Participatory Impact Pathways Analysis

This wiki-style website provides a comprehensive description of Participatory Impact Pathways Analysis (PIPA). This technique allows programmers and stakeholders to jointly describe the theories of action for a project, developing a logical model that describes the impact pathways by which a project's outputs lead to social or environmental changes. The resources include an online manual, with guidance and resources for every step of a PIPA workshop, along with photos, examples and further references. The resource is available in Spanish and English.

This vignette from the steps centre offers a description of an adapted version of Participatory Impact Pathways Analysis with real-world applications.

Most Significant Change

This hub for translations of the Most Significant Change guide provides the guide in several languages. At the time of writing it is available in French, Spanish, Arabic, Hindi, Sinhala, Tamil, Japanese, and translation is underway for Chinese, Italian, Portuguese.

This vignette describes the Most Significant Change method from the better evaluation website.

Empowerment Evaluation

Webinar: Principles of empowerment evaluation . This webinar from SAGE talks "addresses the guiding principles and steps of empowerment evaluation and highlights the role of the evaluator as a coach or facilitator." It demonstrates empowerment evaluation dashboards and discusses how the approach can support real-world outcomes in terms of community development applications.

4. NATURAL RESOURCE MANAGEMENT

CANARI Facilitating Participatory Natural Resource Management: A Toolkit for Caribbean Practitioners. This toolkit provides excellent guidance, resources, examples of tools and case-studies. Although it is specifically oriented to the Caribbean context, the guidance is also useful for those working in other settings.

The Sustainable Forest Management Toolbox is a collection of resources collated by the Food and Agriculture Organisation. It "collates a large number of tools, case studies and other resources, organised in modules. It has been created to provide forest owners, managers and other stakeholders with easy access to those resources for the implementation of SFM." There is an introductory video on how to use the toolbox on the website.

Introduction to Stakeholder Participation is a guidance document prepared by National Oceanographic and Atmospheric Administration as part of their coastal management programme. It provides an excellent overview of relevant issues and processes for stakeholder participation for conservation settings generally, with a special focus on coastal communities.

5. RIGHTS AND FPIC

The following resources include best practice and guidance documents relating to rights-based approaches, rights of indigenous peoples and local communities, as well as how to ensure Free, Prior, Informed Consent is obtained from these.

Key resource

The UN Declaration on the Rights of Indigenous Peoples is "the most comprehensive international instrument on the rights of Indigenous Peoples. It establishes a universal framework of minimum standards for the survival, dignity and well-being of the Indigenous Peoples of the world and it elaborates on existing human rights standards and fundamental freedoms as they apply to the specific situation of Indigenous Peoples." This document is adopted in the Kunmig-Montreal Global Biodiversity Framework.

FPIC

Free, Prior and Informed Consent. Making FPIC work for forests and people (2010) This scoping paper prepared by The Forests Dialogue gives a comprehensive discussion of issues relating to the rights of local communities and indigenous peoples in relation to forest resources.

Guide to Free, Prior and Informed Consent (2010) This guidance developed by Oxfam outlines the principles for FPIC and is currently available in at least 26 different languages (select the folder Free, Prior, Informed Consent Manuals).

Guidelines for Applying Free, Prior and Informed Consent: A Manual for Conservation International provides excellent guidance oriented to conservation practitioners

FPIC and negotiation resources for communities

Indigenous Negotiations Resource Guide (2021), Conservation International. This tool is for all Indigenous, aboriginal and traditional communities that want to know more about effectively negotiating equitable benefit-sharing mechanisms for natural resource-use. It includes a collection of best practices, lessons learned, and case studies spanning all stages of a negotiation. Chapters describe technical

aspects and emphasise communities rights regarding FPIC and decision-making.

Communities in the Driving Seat: A Manual on Free Prior Informed Consent from the Sustainable Development Institute, Liberia, offers a fantastic clearly-written resource for communities. It is especially valuable to communities in Liberia, but the content is also highly relevant to other settings.

Local and Indigenous Rights: Natural Resources, Knowledge, Farmers' rights

These three modules from the Benelex programme at the Strathclyde centre on environmental governance give a comprehensive briefing on the rights issues surrounding: 1) natural resources, 2) local and indigenous knowledge and 3) farmers' rights. They are downloadable documents, which interpret international agreements and frameworks (including human rights laws, the UNDRIP, and CBD frameworks) to clarify their practical consequences. These are aimed at supporting indigenous and local communities and their advocates (including lawyers), and are therefore thorough, but also well written and reader-friendly with examples and important precedents provided in boxes. The modules are available in English, French, Spanish and Greek.

The case for rights-based approach

Rights-based Conservation: Technical Report (Rights and Resources Initiative) "This data-driven report builds evidence for community rights-based conservation; and for the need to forge alliances between conservation actors and Indigenous Peoples, Local Communities, and Afro-Descendants to prevent a biodiversity collapse. It ultimately seeks to inform policy processes at local, national, and global levels, including the CBD COP-15 scheduled in 2021, to provide arguments for an effective, just, and sustainable future for biodiversity conservation."

Land and Resource Rights

The resources page of the Forest Peoples Programme website includes several publications and resources relating to indigenous peoples' and local communities' rights. Many are directed at local communities or advocates (e.g. Indigenous People's Training Manual on the Convention of Biological Diversity, or Indigenous Women's Rights in Africa) but some are also directed at conservation NGOs (including participatory mapping guidelines). Forest Peoples Programme is an organisation that "was founded to support peoples who live in forests and depend on them for their livelihoods." It aims to "create political space for them to secure their rights, control their lands and decide their own futures." Their website hosts several resources that support this aim, and which are very relevant for conservation settings involving land and resource governance, especially in tropical forest landscapes.

Rights and Resources Initiatives Bundle of Rights Methodology provides a useful framework for understanding and evaluating the strength of statutory land and tenure rights of indigenous and local communities.

6. RESOURCES FOR PARTICIPATORY RESEARCH

The following resources are particularly aimed at researchers or research organisations.

Guidance for equitable research practices

The Cape Town Statement on fairness, equity and diversity in research provides a framework and best practice guidance for researchers from wealthier countries seeking to work in economically developing settings.

This academic paper outlines the problems with parachute science in marine conservation and includes recommendations to address the issue.

Community-based Participatory Research

https://engageforequity.org/ A website grounded in Community Based Participatory Research (CBPR), from a partnership that involved health and research institutions in the U.S. The resources are built around a conceptual model and include downloadable best practice guidelines and video testimonies of using CBPR approaches. The guidance document "Promising practices: guide for engaged community research." can be downloaded from the website.

The Centre for Social Justice and Community action by Durham University hosts a website with several toolkits and resources relating to participatory research.

Open Science

https://www.fosteropenscience.eu/resources The FOSTER portal is an e-learning platform developed through an EU-funded project that brings together training resources for "those who need to know more about Open Science, or need to develop strategies and skills for implementing Open Science practices in their daily workflows." It primarily targets researchers or applied scientists and includes an open science training handbook.

Open environmental data is a charity dedicated to 'building spaces to grow the global conversation on environmental data access and use.' Their website showcases collaborative projects, with blog posts and a podcast discussion series relating to participatory engagement and access to data. They have also produced a downloadable 'Opportunity brief' titled Look to the Local: Data and engagement in environmental and climate. This document summarises the ways in which key groups can build greater effectiveness into environmental planning and action through local engagement, with specific insights for: local governments, tribal leaders, state governments, communities and community-based organisations, civil society and academia and philanthropy.

Open-Access Academic Papers on research methods

Urias *et. al.* (2020) A framework for Science Shop processes: Results of a modified Delphi study. This article focuses on how Science Shops can serve as models to translate responsible research and innovation, participatory research and Open Science policies into practice. The authors present a process-based Science Shop approach, developed from three Delphi rounds and one expert panel with science shop practitioners. The paper also contains background information about Science Shops.

Nyumba *et al.* (2018) The use of focus group discussion methodology: Insights from two decades of application in conservation. This article discusses the ways the technique has been used and provides guidelines to improve the standard of reporting.

Young *et al.* (2018) A methodological guide to using and reporting interviews in conservation science research provides a guide to using interviews.

Staddon *et al.* (2021) The Value of Listening and Listening for Values in Conservation, discusses the role of listening in effective relationship building. The authors "provide approaches and ideas which help the reader—academic and practitioner—to both understand and articulate the value of listening in conservation and relational values of nature."

Voinov *et al* (2018) Tools and methods in participatory modeling: selecting the right tool for the job. This open access "position paper" systematically describes tools that can be used in participatory modeling applications: which the authors define as "a purposeful learning process for action that engages the implicit and explicit knowledge of stakeholders to create formalized and shared representations of reality." The

paper also gives practical guidance on how to select and implement these.

7. RESOURCES FOR COMMUNITY ORGANISATIONS AND GRASSROOTS MOVEMENTS

The following resources are particularly oriented toward community organisations, community mobilisers or others seeking social change.

This Community Tool Box is provided by the University of Kansas, and is designed to support community organisations to bring about social development. It is particularly oriented toward community health, but the steps and processes are relevant to any community development context. There are comprehensive training resources in the "Learn a Skill" section, which give step-by-step guidance, examples and PowerPoint slides on topics ranging from community assessment, improving cultural competence, how to communicate to improve participation, grant writing, strategy development and more. There are succinct guidance sheets on 16 core competencies for community work, and the resources are currently available in English, Spanish, Arabic and Farsi.

https://beautifultrouble.org/ This online toolbox is curated by a network of artist-activists and aims to "equip social movements with an ever-growing suite of strategic tools and training to help grassroots movements be more creative, effective, and irresistible." The focus is on non-violent protest and political resistance. The toolbox is associated with the sister publications, Beautiful Trouble and Beautiful Rising, the latter focussing specifically on resistance movements in the global south. The toolbox includes information cards and resources about tactics, theories, principles, methods and strategies for grassroots activists, as well as case-study stories and resources for trainers. The organisation provides training and other forms of support for local movements including a fund to support action.

https://www.citizenshandbook.org/toc.html This website is for community members who are interested in forming or maintaining grassroots organisations. It includes comprehensive guidance and insights into a wide range of topics, such as how to be more effective at mobilising people, community projects that bring people together, tactics for campaigning, media engagement and fundraising. The content is relevant for any grassroots groups, but especially in democratic countries and urban settings.

See also the resources page of the Forest Peoples Programme website (described above).

8. RESOURCES FOR PARTNERSHIP WORKING

The following resources aim to promote effective and equitable partnerships, with examples of specific tools.

The EQUAL Partnership Development Toolkit: A partnership oriented planning, monitoring and evaluation guide for facilitators of EQUAL Development and Transnational Partnerships. This toolkit is a downloadable PDF developed as part of an EU programme seeking to address discrimination. It guides users to manage effective partnership-based projects, using a project cycle framework.

The partnering Initiative archive includes links to several resources related to building partnerships for social development settings.

Talking the Walk is a book that is freely available to download from the Partnering Initiative website. It describes itself as "[...] a toolbook for partnership practitioners from all sectors, to enable them to understand the importance of good communication to their work, and to help them develop techniques to improve their communications – both inside, and beyond, the partnership. This book has contributions in the form of case studies,

think pieces and tools from more than fifteen practitioners and covers communications as a continuum from the very first partnering conversation to a PR blitz of a successful partnership. Topics include: Richer Conversations, Hearing Unheard Voices, Inter-cultural Communications, Use of Images, Communications Planning, Assessing Effectiveness and much more." It was written by Ros Tennyson and Sue McManus.

The Brokering Guidebook: navigating effective sustainable development partnerships is a book freely available from the partnering initiative discussing how to maximise the impacts of brokering relationships between communities and other institutions or bodies to support development processes.

https://tpiglobal.org/ The Partnering Initiative is a group that seeks to promote effective global partnering to support the delivery of the Sustainable Development Goals. The website includes resources for organisations to build partnering capacity, and downloadable guidebooks, including the "The SDG partnership guidebook" which is intended as a "practical resource to help build high impact multi-stakeholder partnerships for the Sustainable Development Goals."

Partnership Reflection Guide from the Catholic Relief Services is a step-by-step manual for facilitators to run a "Partnership Reflection" process, which aims to help maintain and strengthen effective partnerships. The resource has a detailed sample structure for either a 2-day ("Fostering partnership") or 4-day ("Restoring partnership") workshop. Although it has been developed principally for the Catholic Relief Services, the structures offer a good starting point that can be adapted to the specific partners involved.

Successful partnerships, a guide from the OECD LEED group gives an excellent framework for establishing area-based partnerships, examining the underlying concepts and themes, such as roles, communication, legal aspects and funding. There are also case-studies from various countries.

Building Partnerships Toolkit on the Endangered Landscapes and Seascapes Programme The Royal Society for the Protection of Birds (RSPB), and Warwick University, with funding support from the Endangered Landscapes & Seascapes Programme (ELSP) have developed a two-part toolkit for conservation project managers and their teams to help better plan and nurture partnerships on landscape- or seascape-scale conservation projects. The first part focuses on how to identify and develop a collaborative partnership, whilst the second part provides a framework for assessing the collaborative behaviours of teams and individuals against the needs of a collaborative project. Together, this toolkit is packed with ideas and information on collaboration and the behaviours that support it.

9. CONSERVATION TOOLKITS AND GUIDELINES

The following resources have been developed to support people working in conservation or environmental management. They do not specifically focus on participatory approaches, but many include aspects of integrating social dimensions into conservation. They include guidance documents, online resources and learning hubs.

Birdlife's Good Practice Guidelines

Birdlife Good practice guide: building civil society support (Birdlife International) This guidance document was developed for Birdlife International partners seeking to build public support and engagement and was informed by a literature review, 44 interviews with partner staff around the world, and three brainstorming Zoom meetings attended by 75 people. Good practices are organised around four themes: strategise, attract, retain and

maximise. Under each theme, overarching principles are elaborated into good practices, with examples from partners. Participatory approaches are not the specific focus, but there is a lot of guidance on public engagement principles more broadly.

Learning hubs

The learning page of Capacity for Conservation website provides several training resources designed for conservation practitioners. These cover topics from safeguarding, financial management, stakeholder engagement, conflict resolution and much more. The website also has a wide range of resources covering different aspects of organisational development and capacity, which are searchable by theme, as well as case-studies. The page is provided by Birdlife International and Flora and Fauna International and is oriented specifically to conservation organisations.

Fauna and Flora International's conservation partner hub provides many valuable resources for conservation NGOs. Particularly useful is the section "Improving governance, equity and rights" which contains a participatory engagement toolkit and an excellent overview of how participatory approaches can be effectively adopted.

The Earth Conservation Toolbox project reviews available tools (e.g. reports, guidelines, etc) that relate to conservation, and assembles these into a database with links that provide free access to the resource as part of the Conservation Commons initiative. Though many of the resources don't concern participatory methods, there are some that do relate to participatory approaches in conservation practice.

Nature based solutions and climate planning

The JNCC Nature-Based Solutions Toolkit provides key Principles and Implementation Guidance for Nature-based Solution (NbS) projects in countries eligible for overseas development aid, to deliver benefits for biodiversity, climate and people (the "triple win"). It is aimed at programme administrators, project managers or implementation teams and includes 12 case-studies where the principles have been effectively implemented. This resource doesn't detail participatory approaches specifically, but is more broadly about integrating the social dimension into conservation and climate planning.

Protected Area Assessments

The Site-level Assessment of Governance and Equity tool (SAGE) is one of three tools that have been developed by IIED and partners that allows stakeholders and rights-holders to assess social impacts, governance and equity of conservation efforts. The other two tools are Assessing social impacts of protected and conserved areas (SAPA) and Assessing governance at protected and conserved areas (GAPA). The SAGE pages provide guidance on which tools to use, and how to do so, with downloadable data entry forms (in Excel) with examples. The assessment tools build on the best practice guidelines for protected areas that have been developed by the IUCN. They do not focus specifically on participatory approaches.

10. RELATED TOPICS: GENDER, DE-COLONISATION

The following resources touch on specific topics that are related to participatory principles of collaboration, promoting social justice and addressing power imbalances, namely gender issues and decolonisation.

Gender Mainstreaming

The Gender Equality Toolbox from the Bill and Melinda Gates Foundation includes a guide to gender lexicon, a primer on gender mainstreaming, a methods note about measuring empowerment, a summary of participatory monitoring approaches with an overview of basic

quantitative and qualitative techniques and a resource links section.

The CBD Best Practice for Gender and Biodiverstiy has several useful case-studies specific to biodiversity conservation, with reflections on how particular approaches were supportive of gender mainstreaming principles.

Best Practices in Gender and Biodiversity: Sharing Learning for a Sustainable Tomorrow. This webinar from the Convention for Biological Diversity gives an overview of the best practice guidelines document (described above).

Decolonisation

Decolonising convivial conservation: The Convivial Conservation group have produced a policy brief with discussion on aspects of decolonising as a list of "questions to ask yourself". Their website also has links to useful publications that discuss the topic further.

Time to decolonise aid: this report was developed from an online consultation involving 150 practitioners in the aid and development sectors, over 3 days. It includes key recommendations, areas of attention and discussion on a range of issues relating to decolonialising practices. Although some aspects are specific to aid and development sectors, much of the content is applicable to practices in conservation.

Decolonising Consultancy: INTRAC have various resources on this topic for supporting civil society organisations that are working in the development sector. They also run training courses, and have a large section of resources about Monitoring, Evaluation and Learning as a way to shift power structures.

11. SPECIFIC TOOLS, TECHNIQUES AND METHODS

The following resources are a selection of short vignettes, websites, academic guidance papers and webinars dedicated to specific tools, methods or techniques. Note that many of the previous resources also provide guidance on specific approaches, so if you are interested in a particular tool, it is also recommended to search the online toolkits and repositories in the above sections of this list. The following resources are loosely organised under sub-categories, but in general, approaches can often be adapted and used to suit a range of contexts.

Participatory Mapping

Practical ethics for PGIS practitioners, facilitators, technology intermediaries and researchers, prepared by Giacomo Rambaldi and colleagues is available through the CGIAR website and gives excellent guidance on the ethical issues associated with mapping or land-management approaches. It includes a helpful checklist for practitioners.

This "Good Practices for Participatory Mapping" is an excellent review document from IFAD that provides thorough guidance on participatory mapping processes and several case-studies.

Forest Peoples Programme, "Participatory Mapping: some guidelines for communities and the organisations that support them" provides guidance tailored toward forests and indigenous peoples and local communities rights.

The website of the participatory mapping institute is hosted by a network of practitioners and academics concerned with promoting the involvement of marginalised groups in public planning through mapping technologies. They work closely with the International Society for Participatory Mapping (see below).

The International Society for Participatory Mapping website hosts a discussion forum and blog, as well as details of projects, meetings and events. The site also includes a 'software and tools' section which has links to a large variety of open access tools for mapping and data collection.

www.mappingforrights.org/ offers a set of tools and approaches aimed at putting rainforest communities on the map and promoting sustainable, transparent and equitable governance in the Congo Basin. It is an initiative of the Rainforest Foundation UK and its local partners.

Online participatory GIS platform

https://cadasta.org/about-us/ CADASTA provide excellent technical tools and services to "empower vulnerable communities to affordably and easily document, map, and secure inclusive land and resource rights at scale for a more sustainable and equitable planet". They provide an online GIS platform and their website showcases many examples of their work with governments, NGOs and communities from around the world (especially from low and middle income countries). They have a training and support centre that includes complete course materials for both trainers and participants, with discussion prompts, activities, resource lists, and step-by-step workflow handouts for using the CADASTA app for topics of: Introduction to CADASTA and land rights, GIS overview and mapping, Technology overview and setups, Data collection, Data analysis and visualisation.

Scenario planning, Visioning

Participatory scenario planning. Participatory research methods for sustainability – toolkit #3. Part of a series published by Gaia that covers 5 social science research methods in succinct 2-page documents that outline the method, process, requirements, strengths and weaknesses of each method, with the purpose of supporting practitioners in environmental sustainability.

Participatory Evolution approach allows people to contribute to building scenarios or past histories, using an online platform which is available for free (you need to register and be approved as a facilitator) from https://parevo.org/). There is an app participants can use to contribute and the tool also collects information about how people participated, which can be useful to understand the engagement process.

Scenario Workshop Method section from Participedia, which provides guidance on the background of the method and how to use it, along with links to further resources.

Facilitation

This one-page section on facilitation skills from the Citizen's handbook is a nice, brief introduction to this important building block.

Webinar e-learning: Facilitating Workshops for Engaged Environmental Research. The Global Peatlands Initiative hosted this online workshop which has excellent practical advice on workshop facilitation.

Stakeholder Power Analysis

Stakeholder Power Analysis: a two-page information sheet, available in English, French, Spanish, Portuguese. This is a foundational approach for thinking about stakeholders' power relations and is useful to support planning of participatory approaches.

Human-centred Design / Co-design

The DesignKit website showcases a range of case-studies highlighting human-centred co-design practices. There is also a facilitators' guide (free PDF download) and worksheets describing methods e.g. relating to how to conduct an interview, and resources for specific techniques (e.g. 5-why's, card sort).

The report Adroddiad llawn adlewyrchu / Reflecting on the Summit to the Sea co-design phase, provides an example and reflections from a co-design process for landscape conservation in Wales.

Dilemmas Café

Dilemmas Café's: a Guide for Facilitators prepared by Durham University. This technique is often used in participatory research to promote discussion and build

insights by considering different perspectives about a social dilemma or challenge.

Community Voice Method

The Community Voice Method website gives an overview of this approach and outlines the stages of the process, as well as hosting several case-study examples involving natural resource management. This approach seeks to integrate diverse local views and opinions on a topic, using interviews, discussions and activities, as well as tools such as film-making.

Theatre of the oppressed

Theatre of the Oppressed, described on the Imagine Action webpage. This approach is a participative art-form, which encourages participants to represent and explore realities and take part in analysing issues, using games and techniques from dramatic arts.

Citizens Assembly

Citizens' Assembly factsheet description from Participedia. This approach is often used to promote public engagement in policy and planning. It involves democratic participation and can also bring in expert knowledge.

Community Voice

The Community Voice Method used by the Marine Conservation Society is described briefly on their website, with a short video.

Participatory Video

Insight Share is an organisation focussing on Participatory Media as a community engagement, accountability and people-led development tool. Their website includes case-studies, resources and links to training, for instance the following resources are available in various languages: "Insight-Share Participatory Video: a Handbook for the Field" and "Insight-Share Participatory Video – The most significant change". There is also a resource about using rights-based approaches: "A rights-based approach to participatory video: toolkit". The content includes what rights-based approach means; detailed guidance through all the stages of participatory video using rights-based approaches; case-study examples from the field of development and advocacy; a long list of tools and activities with descriptions of how they are used; and links to further resources.

Participatory Video Case-study: female-headed household sanitation needs tasikmalaya. This report gives a helpful and detailed account of using participatory video as part of a sanitation and health project

The Insightshare youtube channel hosts several resources about using participatory video in monitoring and evaluation, through Most Significant Change methods.

https://www.capcut.com/ This website provides a free platform for editing videos.

Participatory Modelling

https://participatorymodeling.org/ A website for the participatory modeling community, the site "contains information about the process, the products, and the outcomes associated with different participatory modeling approaches." Participatory modeling involves building representations of reality (using tools and techniques from modelling and systems-based thinking) that can be jointly explored and analysed.

https://m-tool.org/ Is a free, online tool for making mental models about complex systems. It can be used without the need for participants to read and write. This tool can be useful wherever you wish to map out people's perceptions of a system, involving different inter-related components. It allows people to make "visual influence diagrams by organizing relevant factors and linking them. For example, one can draw the processes that

cause climate change, influence the fluctuation of (fish) stock, or the functioning of an economy."

Participative Narrative Inquiry

https://www.workingwithstories.org/ This is a webpage associated with a book by Cynthia F. Kurtz, that gives a good insight into participative narrative enquiry approaches. There are clear illustrated excerpts that offer a quick overview of different aspects of narrative inquiry, and the book is available to download as a PDF (the author requests a donation by those who can afford to).

Focus Group Discussion

How to … Conduct a Focus Group Discussion (FGD) a Methodological Manual by Peter van Eeuwijk and Zuzanna Angehrn. This guide provides a comprehensive overview of focus group discussions, including important steps to run a FGD, how to record and analyse results, and considerations such as multi-cultural groups and sharing findings. It is written for an organisation in the tropical health sector, so specific examples relate to health, but contains relevant information.

The Toolkit for Conducting Focus Groups from the Community Tool Box provided by the University of Kansas, is an excellent and thorough resource for anyone interested in using this method.

Interviews

Young *et al* (2018) "A methodological guide to using and reporting on interviews in conservation science research", this is an academic paper with a literature review and checklist for conservation scientists using interviews in their research.

Guide to using Interviews in participatory monitoring. This guide is a good starting point, particularly for using interviews as a monitoring tool.

Situational Analysis

Guidance to conduct a situational analysis in the context of planning public health interventions. Although it is written for health practitioners, this document gives a basic structure and process that is also useful and adaptable to conservation issues. Depending on the setting, it is likely that the structure suggested in this document can be extended, for instance, by placing more emphasis on interviews with key informants.

Photovoice

A Photovoice Factsheet that covers the basic principles and approach of this method, with illustrations from health research. Photovoice is often used in participatory research or to build understanding of a particular issue.

Participatory Social Mapping

This Participatory Social Mapping Toolkit provides a succinct overview of this research method.

Time-sequencing method

Time-sequencing method**.** This 2-page guide describes the time-sequencing approach, where participants take photos of a location over a period of time to visually document what is happening. This technique might be appropriate to create visual records of the different ways an area is used over a given period of time.

Information communication technology for social development

The Information Communication Technology for Development Collective provides several briefing papers and details of research programmes relating to leveraging technological advances for development work.

12. CASE-STUDIES

The following webpages and documents illustrate aspects of participatory approaches and tools with examples. Note

however, that many of the previous resources listed also include case-studies.

Case-Studies and Toolkit: Community Conserved Areas

A Toolkit to Support Conservation by Indigenous Peoples and Local Communities (2013): Building Capacity and Sharing Knowledge for Indigenous People's and Community Conservated Territories and Areas (ICCAs). This toolkit from UNEP guides users through 12 case-studies from around the world, with descriptions of techniques and links to related resources.

Case-study: Participatory processes to design protected areas

British Virgin Islands – MPA Design | Reef Resilience A case-study from the Nature Conservancy and partners, that describes a participatory stakeholder engagement to design Marine Protected Areas. Workshops with stakeholders used a participatory mapping approach and the case-study lists a number of valuable lessons.

Case-study: community land-use planning in Northern Tanzania

This case-study describes the Ujamaa community land-use planning work conducted in Northern Tanzania.

Case-study: Toolkit for establishing a Social Territorial Agreement in a Transboundary Zone

Toolkit for the application of participatory and negotiated territorial development in transborder zone, developed by the FAO, gives detailed guidance on the foundational principles, steps and specific tools, in the context of a case-study concerned with the border between Ghana and Burkina Faso. The process aims to open dialogue for establishing a Social Territorial Agreement. Tools such as interviews and community mapping are described in detail, along with lessons learned and contextual information.

Case-study: Photovoice

Case-study examples from photovoice.org include participatory photography and photovoice projects around the world, covering topics including gender issues, livelihoods and climate change.

Case-study: applying participatory principles for effective community development

This case-study from the echo community website illustrates a process of applying participatory principles for supporting community development that is more effective and tailored to local setting. The example is from the Philippines.

Case-studies: Participatory Research in Natural Resource Management

Insitutionalising participation and people-centred processes in natural resource management. This report presents the background and rationale for the IIED-IDS action research project on institutionalising participatory approaches and people-centered processes in natural resource management: a collaborative research programme that involved several case-studies. The document provides methods, highlights, summaries and links to reports for the following case-studies:

- People-oriented conservation and an ethnography of The World Wide Fund for Nature (WWF);
- Institutionalising community integrated pest management in Indonesia;
- Mainstreaming participation in the Gestion des terroirs approach in Senegal;
- Institutionalising participation in the Mexican regional sustainable development programme;
- Participatory watershed management in India.

Case-studies: human-centred design principles to support community development

Design for Change is an organisation using human-centred design principles to empower children with design skills to build

a more sustainable future. They have developed a framework for co-design that is described on their website.

Case-study: Fuzzy cognitive mapping to understand hunting issues

This case-study of participatory modeling uses fuzzy cognitive mapping in a conservation setting in Tanzania to understand hunting.

Case-study: Action Research

Participatory Approaches and Community Accountability Part 1: a seminar about action research, with case-studies from Colombia. Speakers discuss their experiences, and key lessons such as provisioning for local researchers in the research budget and scope.

Case-study: a large-scale collaborative project in Tanzania

http://www.trans-sec.org/ Case-study of a large collaborative agricultural development project implemented with farmers in Tanzania that emphasised participatory approaches, including participatory action research, integrating local knowledge to avoid reinventing the wheel and a participatory approach to project evaluations. They also established conflict management processes to facilitate close collaboration across a large number of partners, including European research institutions, Tanzanian institution and international development organisations.

Case-study: Biodiversity Conservation and Local Communities: examples from Birdlife International Partners in the Americas

This Biodiversity Conservation and Local Communities report is from a workshop with Birdlife International Partners in the Americas held in Quito in 2009. It provides several case-studies of partnerships with local communities that have supported effective conservation. Also available in Spanish here.

Case-study: Participatory Action Research for Co-designing Conservation Interventions, Himalaya

Khanyari *et al* (2023) Co-designing conservation interventions through participatory action research in the Indian Trans-Himalaya. This research publication describes the use of participatory principles (PARTNERS) in a trans-border zone in Himalaya. The authors worked in partnership with Changpas communities, to identify key wildlife issues, develop monitoring led by herders and design novel solutions.

Case-study: Participatory Spatial Planning for protected areas and restoration sites

Tourinho *et al* (2023) A Participatory Approach to Map Strategic Areas for Conservation or Restoration is an academic paper describing a case-study from Brazil in which stakeholders were brought together in a participatory process to define priorities and criteria relating to where protected areas or restoration programmes should be situated. This input was then incorporated into a GIS tool for identifying priority areas in a landscape.

13. E-LEARNING, WEBINARS

The following section offers a brief selection of tutorials, online courses and webinars relating to participatory approaches. See also the

Community-based Research: E-learning course

Community-Based Research: Getting Started. This MOOC (massive open online course) is 3 hours per week for 3 weeks, and gives an introduction to community-based research based around citizen science methodology of the RELEIF Centre in Lebanon. The materials can be accessed for free when you enroll but access will expire after 3 weeks. The course is delivered by researchers from UCL and is for "community members who want to find new solutions for community problems. It's

also suitable for community researchers recruited by NGOs, teachers who want to investigate relationships between school and the community, academic researchers in Lebanon and elsewhere, students wanting to carry out community research, leaders of community research, trainers of researchers in NGOs or on academic projects, and even entrepreneurs who wish to investigate the community demand for their products or find out what the community needs."

Webinar: facilitating workshops with communities for engaged environmental research

Facilitating Workshops for Engaged Research Global Peatlands Initiative hosted this online seminar about facilitating workshops with communities for engaged environmental research.

E-learning modules: participatory methods in environmental management

GAtES program e-learning modules: This is an e-learning resource presented as a series of 1-hour lectures, which include structured learning activities and links to further resources. It was released in 2021 by the German-Armenian Network on the Advancement of Public Participation GIS for Ecosystem Services as a Means for Biodiversity Conservation and Sustainable Development (GAtES – ace.aua.am/gates).

The first two modules cover a range of participatory approaches, with case-study examples from around the world. Learning objectives are: 1) to get acquainted with the evolution and use-cases for participatory approaches, to learn about implementation challenges; 2) understand specifics of selected participatory methods and explore their application with hands-on examples – methods include open data initiatives, hackathons and gaming, collective ideation and co-creation; 3) to explore how participation tools are used in combination with specific objectives. To see what results can be achieved.

Module 2: A Deep Dive Into Few Public Participation Methods. Learning objectives are: 1) to become familiar with participatory methods for recognising key actors and their relationships to a given sustainability challenge. 2) To gain insights into approaches for eliciting how people value nature and their local environment. 3) learn how to capture spatial relationships between a community and their local environment to identify potential land-use conflict and support informed land planning decisions. 4) to become aware of different means of expression to allow participants to communicate through visual images in an impactful way and increase deliberation and empowerment in the process.

There is also a module on public participation in forest management (Public Participation in Forest Landscape Management - YouTube). The lecture series are all available from the American University of Armenia youtube channel, which has a number of additional videos relating to public participation in resource management.

Webinars about participatory evaluation approaches

Introduction to Participatory Evaluation Tools and Tips. This 1-hour webinar is oriented toward the healthcare sector, but provides a good introduction to evaluation, in a clear step-by-step format and is a good starting point for those who are not familiar with evaluation or the basic processes of stakeholder engagement (such as workshops, or online approaches). The first 4 minutes can be skipped.

Looking Inward, Moving Forward. This webinar from the Sri Lanka Evaluation Association gives insights into the opportunities and issues for Indigenous Peoples in the context of evaluation. It reports on work from South East Asia (especially Sri Lanka and the Philippines). It is part of a seminar series that also covers a rich range of participatory evaluation topics and case-studies.

The ConSoSci youtube channel covers topics including ethics and social science capacity-building. There are specific training videos for using KoboCollect for social data collection available in Spanish, French and English.