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Governance dimensions of climate change adaptation: Methodology for landscape-level institutional assessments

Governance dimensions of climate change adaptation: Methodology for landscape-level institutional assessments

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Who should use this guide

This guide describes a methodology for conducting an assessment of the institutional and governance dimensions of adaptation to climate change. The purpose of the assessments is to assist local and other stakeholders in their efforts towards transformative institutional innovations and increased capacity for adaptation to climate change and other changes that they are facing. They do this by helping these stakeholders to appraise their institutional environment and identify opportunities for improvement.

The assessment would normally be facilitated by a team that directs the overall process. These facilitators may be local stakeholders or they could be external parties such as researchers, or both. Even when the facilitators of the assessment are researchers or some other external stakeholder, the assessment should be conducted with thorough consultation from local stakeholders. It is assumed that the facilitators should have some prior knowledge of the local context.

Introduction: Climate change adaptation and local governance

In recent years, in diverse arenas such as conservation, development, and climate change science, issues such as accountability, legitimacy, participation, decision-making, institutions and policymaking have increasingly been considered together under the over-arching umbrella of *governance*. In all of these fields, it has gradually become clear that matters of who decides and how they decide are fundamental determinants of capacity and of the effectiveness of actions taken. This is certainly true of climate change adaptation. Governance helps to determine access to, and the distribution of, financial resources, natural resources and information. It serves as a framework for enhancing, or for limiting, social learning. And it helps to determine what kinds of adaptations are on and off the table.

While there are a multitude of definitions of governance, in recent scholarship there has been a degree of convergence on core concepts. Virtually all literature on environmental governance over the past decade makes a clear and deliberate distinction between government and governance. Governments can be described in this way:

Organizations—complex material entities possessing offices, personnel, equipment, budgets, and legal personality and often professing political ideologies—that we commonly take for granted as vehicles for the provision of governance because we are so accustomed to their efforts to perform this role in domestic societies. (Young 1996: 2)

Governance, on the other hand, can be thought of as a set of social functions (Robinson et al 2012a; Robinson and Makupa 2015). These social functions are concerned with ‘how power and responsibilities are exercised, how decisions are taken, and how citizens or other stakeholders have their say’ (Graham 2003: 2-3). To describe the governance-government distinction another way, governance may be ‘delivered’ by governments (although often they fail at this), but also by other kinds of mechanisms, such as networks, customary tenure systems, community groups and rules, and even traditions and norms. Informal social networks, for instance, can become channels for transmission of ideas, norms, resources and legitimacy, all of which play an important role in determining the actions that people can take and therefore their capacity for adaptation to climate change. And importantly, these things sometimes do so much more effectively than formal government channels. Traditions and norms often determine behaviors much more deeply than government policies and formal systems of rules, enforcement, and incentives, and can direct people to favor certain kinds of adaptations, reject others, and fail to even consider yet others.

It is important to recognize that for any particular issue, there may be various types of governance mechanisms that are relevant. *Governance mechanisms* are the organizations, institutions and processes which deliver governance. (Table I)

Table 1: Governance mechanisms

Type of mechanism	Explanation	Examples
Organizations	Can include both government and non-governmental actors.	Government agencies Non-governmental organisations Community-based organisations Customary decision-making bodies such as clan councils
Institutions	Policies, established norms, and rules which serve to guide or mandate action and conduct.*	Legislation District or community bylaws Customary rules Government policies and regulations Land tenure systems (national state-based systems or customary systems) Management plans
Processes	Established practices or procedures that guide decision-making, resource use and relationships among stakeholders	Environmental impact assessment procedures Customary meetings Procedures for accessing resources Decision-making procedures

(Adapted from IUCN 2011)

Another concept that is important here is *governance systems*. Governance is seldom, if ever, delivered by a single organization; rather, there are typically quite a number of *governance mechanisms*—organizations, institutions and procedures—as well as values, networks, and power relationships functioning together in a system. Some parts of that system and the relationships among them may be consciously designed; other parts of the systems will be the result of historical accident. Both individual governance mechanisms and the overall governance system are important for climate change adaptation. Past research on adaptation has identified factors, such as social learning and institutional diversity, as being important components of capacity for adaptation (Gupta et al. 2010; Pahl-Wostl 2009)—these are characteristics of governance systems rather than of the individual mechanisms that make up those systems. Particular governance mechanisms—distinguished by characteristics such as effectiveness, providing clear direction, and accountability—are also important for carrying out functions that contribute to adaptation, whether those functions relate to sharing knowledge, distributing resources, or deciding on tradeoffs. For these reasons, the tasks of understanding how governance is working and of devising strategies to improve governance requires an understanding *both* of particular governance mechanisms *and* of the governance system of which they are a part.

Tip

In some communities, the word **governance** is associated primarily with issues around transparency and corruption. Having researchers come to ‘assess governance’ in such situations can make some people nervous and uncomfortable, and not want to cooperate with the study.

Transparency and corruption are certainly relevant, but as our concern is much broader than this, we often choose to simply avoid the word ‘governance’ and to use terms such as ‘institutional assessment’ instead of ‘governance assessment’, ‘institutional system’ instead of ‘governance system’, and so on.

As government organizations, bilateral donor agencies, non-governmental organizations (NGO) and others take actions to promote adaptation to climate change, attention will need to be paid to the role that institutions and governance play in adaptation. This manual describes a methodology for governance assessment in relation to capacity for climate change adaptation, which can be used by researchers, government agencies, local stakeholders and others to gain a systematic understanding of the governance environment at a landscape level and ways in which it could

*One way of describing the distinction between organizations and institutions is that institutions are like the rules of a game are the players in the game (North 1990).

be expected to facilitate or undermine adaptation to climate change. It has been developed and refined through application to case studies in three different African countries.

Purpose of the institutional assessments:

To assist local and other stakeholders in their efforts towards transformative institutional innovations and increased capacity for adaptation to climate change and other changes that they are facing.

The assessments do this by helping these stakeholders to appraise their institutional environment and identify opportunities for improvement.

It is assumed that the facilitators leading the assessment should have some prior knowledge of the local context. The methodology includes methods for identifying key change adaptation issues and the governance mechanisms most important for those issues, and describes an approach to produce an assessment both of key governance mechanisms and of the overall governance system. The intention is that an assessment carried out using this methodology will yield insights and recommendations useful to researchers, policymakers, and other governmental and non-governmental stakeholders interested in understanding the governance dimensions of climate change adaptations and creating a governance environment conducive to climate change adaptation. The next section gives an overview of the methodology. This is followed by a description of four main tasks of which the methodology is comprised. As some of the tasks may be carried out across more than one activity, and may also be done in an iterative way, we also describe a suggested chronological flow of activities. The final section gives suggestions for presentation of findings. A number of annexes provide instruments and detailed guidance on particular activities that may be carried out for the assessment.

The focus of the institutional assessments

The institutional assessments focus on institutions and governance at two different levels:	The overall governance system	... assessed according to...	Resources Institutional linkages Fair governance Variety Effective decision-making Learning capacity Leadership
	Particular governance mechanisms that are critical for climate change adaptation		Legitimacy Direction Performance Accountability Fairness

Why ‘landscape level’?

Institutions and governance are key aspects of climate change adaptation at every level from the community up to the global level. The landscape level, however, where individual farmers and farm families, communities and ecosystems all interact is an ideal level at which to do climate change adaptation planning in rural settings.

Our definition of what constitutes a ‘landscape’ is left deliberately vague, but can be understood as a level of analysis and interaction that is meaningful to local stakeholders and for which ecosystem or other biophysical boundaries are key considerations. Typically, it is larger than community level but smaller than an entire district. A landscape can be thought of as a ‘problemshed’—a geographic area affected by some particular problems. In some cases the landscape-level problemshed may correspond to an administrative jurisdiction, in other cases to an ecosystem, a watershed or a traditional indigenous territory, or in many cases to geographic area whose boundaries are determined by a mix of these considerations.

Some terminology

Governance—a set of social functions relating to collective decision-making, the resolution of tradeoffs, shaping how power can be exercised, setting collective direction within a community or society, and building community.

Governance mechanisms—the organizations, institutions and processes which deliver governance.

Governance system—a set of governance mechanisms that function together, along with values, networks, and power relationships, within a social environment. Some aspects of governance systems may be consciously designed, but often much of any governance system is emergent.

Government—a system of organizations which, along with institutions, networks, systems of traditions, norms and values, as well other types of organizations, help to deliver governance.

Institutions—policies, established norms, and rules which serve to guide or mandate action and conduct.

Organizations—collective actors. Can include formal and informal, governmental and non-governmental. In any governance environment, institutions can be thought of as the ‘rules’ of a game and ‘organizations’ as the players.

Processes—established practices or procedures that guide decision-making, resource use and relationships among stakeholders

Overview of the methodology

The nature of the governance assessment

While governance at a village or community level and governance at the national level are certainly relevant, the focus of this assessment is at an intermediate level, such as a watershed, landscape ecosystem or traditional authority. Ideally, this governance assessment methodology should be incorporated into a larger process of stakeholder engagement. For example, the assessments can be treated as an early stage within a process of adaptation planning by local stakeholders, providing them with important information that they will need in order to ensure that their local institutional arrangements foster suitable adaptation. The main outputs are (a) an assessment of one or more specific governance mechanisms (e.g. land and resource tenure rules, management plans, environmental impact assessment procedures, particular legislation, customary decision-making bodies, elected local government body, etc.), and (b) an assessment of the overall governance system.

Preliminary and accompanying steps

There are a few steps that must precede or accompany the governance assessment itself. If the governance assessment is embedded within a larger process of stakeholder engagement around adaptation planning, then some of those preliminary steps may have already been carried out. If not, they will need to be carried out before the main activities begin. Here we mention two main preliminary or accompanying steps; selection of case study site(s) and assessments of adaptive capacity and adaptations/mal-adaptations.

Selection of case study site(s)

Given that the aim is to carry out assessments at a number of sites, it is advisable to select them based on criteria such as having gone through particular adaptations/transformations (good practices) or mal-adaptations/undermined adaptive capacity (bad practices), or having particular policies or interventions operating in the area that are relevant to climate change adaptation. In this way, the governance assessment can contribute to exploration of the role of governance factors in these good and bad practices, policies and interventions.

It can also be useful to conduct the governance assessment at a site where a general assessment of adaptive capacity is being carried out (see below), so that the governance assessment can delve more deeply into the governance dimensions of adaptation.

What is more important, however, is having one or more committed partner organizations and buy-in from local stakeholders so that the assessment can contribute to broader stakeholder planning. The ideal conditions for this assessment would be a location where local stakeholders, including both government agencies and non-government actors, are actively engaged in planning and action for climate change adaptation. The governance assessment can be used as one tool in their planning process, aimed at helping them to plan for improvements and innovations for

their governance system so that they can create an enabling environment for adaptation. Often this is at a landscape ecosystem level or at the level of some common natural resource that is shared by more than one community.

To summarize, important criteria include:

- The site has gone through particular adaptations or mal-adaptations or has been experiencing some particular policies or inventions that are relevant to adaptation;
- A general assessment of adaptive capacity has been or is being carried out; especially,
- A committed partner organizations and buy-in from key stakeholders; and
- A common natural resource, ecosystem or landscape

Assessment of adaptive capacity and case studies of adaptations and mal-adaptations

Another activity which would complement the governance assessment would be an analysis of adaptive capacity and of actual adaptations and mal-adaptations at the site. This might include an in-depth analysis of successful and unsuccessful households and key factors in their adaptation or lack thereof. Various approaches and frameworks for indicators and indexes of adaptive capacity and social vulnerability have been suggested (e.g. Adger et al. 2004; Vincent and Cull 2010). Combining the kind of governance assessment described in this manual with adaptive capacity assessments would allow for a far more complete understanding of adaptation.

Methodology—main tasks

The governance assessment methodology itself is described below as a set of tasks which are summarized in Table 2 and then described in greater detail in the next section. In some cases, particularly when the governance assessment is being incorporated into a larger suite of climate change adaptation actions at the site, plans may already be in place that correspond to one or more of the steps described here. For instance, identification of issues related to adaptation to change (Task 1C) may have already taken place through related research on climate change adaptation at the site or through other stakeholder planning processes. While we have listed these tasks in an order that is roughly chronological, it should be noted that there will normally be a great deal of iteration among the tasks. Also, some of the tasks may take place across more than one research activity, and some tasks may be carried out concurrently with others.

The main tasks are initial system analysis including “identifying the adaptation landscape, stakeholder analysis, and identification and prioritization of issues related to adaptation to change at the study site (Task 1); identification of the underlying governance issues and mechanisms for the top priority adaptation issues (Task 2), and then the assessment itself. The governance assessment has two main parts: Task 3 is to assess the overall governance system, and Task 4 is to assess the particular governance mechanisms that have been identified in Task 2.

Table 2: Main tasks in the assessment

Tasks		Main outputs	Example 1	Example 2
			A pastoralist system which is showing clear signs of adaptation, for example switching from cattle to camels	A location affected by an investment program into irrigation
Task 1: Initial system analysis	I A) Identifying the adaptation landscape	A brief description of the social (or social-ecological) unit of interest, including its extent. May include a map	The territory which corresponds to a traditional clan institution	A land use planning zone within a district
	I B) Stakeholder analysis	List of stakeholder groups List of participants for subsequent activities	Traditional pastoral institutions NGOs Land use planning authority	Water authority Private sector partner Pastoralists Agriculturalists Landless poor
	I C) Identification and prioritization of issues related to adaptation to change	Prioritized list of challenges and issues related to climate and other changes at the site	Changing (drying) rainfall patterns Markets and gov't interventions don't facilitate switch to camels Pastures appropriate for cattle are being enclosed	More frequent and severe droughts Many people driven out of pastoralist economy into destitution Adaptation by those given access to irrigation undermines resilience of those who need water for livestock
Task 2: Identification of the underlying governance issues and mechanisms of the top priority adaptation issues	List of governance issues Narrative descriptions of how they relate to the adaptation issues List of governance mechanisms for each governance issue	Governance aspects and issues: Land and resource ownership Gov't priorities that favour first agriculture, second cattle, and not at all camels Governance mechanisms: Woreda councils Land board Customary rules and land access Procedures for privatizing commons	Governance aspects and issues: Environmental impacts assessments (EIAs) subverted or ignored Landscape-level land-use planning Representation and voice for pastoralists and the poorest Governance mechanisms: District councils Procedures for EIAs	
Task 3: Assessment of the governance system	Structured assessment and scoring of the governance system	Assessment of the governance system (See Task 3, below)	Assessment of the governance system (See Task 3, below)	
Task 4: Assessment of the identified governance mechanisms	Structured assessment and scoring of governance mechanisms	Assessment of above governance mechanisms (See Task 4, below)	Assessment of above governance mechanisms (See Task 4, below)	

In carrying out these tasks, there can be some degree of flexibility in the actual research and assessment methods that are used, but these will usually include workshops, focus groups, and semi-structured interviews.

Task I: Initial system analysis

The aim of the first task is to gain a sufficient initial understanding and description of the communities, landscape, and social-ecological system that bound and give focus to the assessment. It is made up of three sub-tasks which are carried out iteratively. This task also involves a process of dialogue and negotiation amongst the facilitators of the assessment and other stakeholders and partners who are involved.

I A) Identifying the adaptation landscape

Purpose: To determine primarily at what level and across what geographic space governance and institutions are to be assessed.

What is the problemshed in relation to climate change adaptation? Is the assessment concerned with adaptation and related governance factors at the level of a district or county? At the level of an indigenous traditional territory? At the level of a catchment? At the level of a landscape ecosystem? The answer to this question helps to bound the study and set its scope. An important consideration is to work at a level that pertains to a social system for which adaptation planning and action can take place. In some cases, delineating the study area according to political boundaries—e.g. a district—may be appropriate. In other cases, however, traditional institutions might be expected to be the most critical ‘players’ in adaptation, and therefore defining the study area according to traditional territories may be more appropriate.

The appropriate level of analysis will also be influenced by an understanding of who are stakeholders and what are the most pressing issues and challenges around adaptation. For this reason, identifying the adaptation landscape (the level of analysis), stakeholder analysis, and identification and prioritization of issues/challenges (Tasks IA, IB, and IC) all take place together in an iterative way.

The output of this task will be a brief description of the social (or social-ecological) unit of interest, including its extent. Using maps to guide discussions with stakeholders will also be very useful.

I B) Stakeholder analysis

Purpose: To understand how different types of stakeholder groups are affected by challenges related to adaptation to change, and to identify categories of stakeholder groups to be included in subsequent activities in the assessment.

In order to ensure the broadest range of perspectives possible is incorporated into the assessment, it will be necessary to go through a careful process of identifying stakeholder groups. The facilitators of the assessment, with appropriate involvement of local partners, need to identify relevant stakeholder groups. Participation in some of the subsequent activities will be structured according to stakeholder groups, and therefore, identifying stakeholder groups to be represented is very important. This means that at some point after initial discussions have taken place and issues tentatively identified, a structured stakeholder analysis should be carried out.

Typically, the stakeholder identification will be done through interviews and informal meetings, although more structured techniques in focus groups or workshops can also be considered. At this stage it can be very useful to have a map of the area to refer to during interviews and meetings.

Stakeholder groups will be identified by the nature and strength of their connection to the issue. For example, different segments of the population may be affected by an increase in the frequency of droughts in different ways

and to different degrees: e.g. pastoralists, agro-pastoralists, and agriculturalists. Stakeholders also differ according to the type of stake that they have in an issue, and for this, we identify three main categories. Those whose lives are affected by an issue are sometimes referred to as moral stakeholders. These may be groups identified, for example, according to livelihood, gender, age or where they live. A second category of stake is those who have rights related to an issue—rights holders. There will often be significant overlap between moral stakeholders and rights holders. It is important, however, to note the difference. For instance, one community may be affected by changes in the flow of a river but have no formal rights over the upstream catchment land which feeds that river, whereas another community may have rights over the catchment land but not be noticeably affected by changes in river flow. The third category is strategic stakeholders: other stakeholders who are not rights holders and who are not affected themselves by the issue but who have influence over the issue. This category may include government agencies with a mandate related to the issue, elected officials, other influential leaders, and people who hold important knowledge related to the issue.

Table 3: Types of stakeholders

Strength of connection	Type of stake		
	Moral stakeholders	Rights holders	Strategic stakeholders
Strong	1. Groups that are strongly affected by the issue	3. Groups that have rights directly related to an issue	5. Groups that have a direct influence over the issue
Moderate	2. Groups that are moderately affected by the issue	4. Groups that have rights indirectly related to an issue	6. Groups that have an indirect or latent influence over the issue
Weak to none		7. Non-stakeholders	

Considering these two dimensions—strength of connection to the issue and type of stake—our typology is a matrix with seven types of stakeholders: (1) groups that are strongly affected by the issue, (2) groups that are moderately affected by the issue, (3) groups that have rights directly related to an issue, (4) groups that have rights indirectly related to an issue, (5) groups that have a direct influence over the issue, (6) groups that have an indirect or latent influence over the issue, and (7) non-stakeholders. (Table 3)

Are researchers stakeholders?

If a truly participatory approach is being used, then the process, including identification and analysis of problems and potential solutions, should be controlled by the people whose lives are directly affected. In trying to achieve this ideal, researchers and other facilitators may see themselves as playing a neutral role and attempting to ensure that the process is truly controlled by local stakeholders.

We suggest, however, that a more honest approach, and one that is more likely to contribute to empowerment, is to accept that researchers are another type of strategic stakeholder, with their own interests in the governance assessment process.

The facilitators of the assessment, in consultation first with partner organizations and eventually with representatives of the various stakeholders, will finalize a list of stakeholder groups belonging to categories 1 to 6. This categorized list of stakeholders is used to identify participants and strategic stakeholders (resource persons) in the activities which follow. While partners and stakeholders themselves should have input into the final list, if external researchers or consultants are involved in or are the ones facilitating the assessment, they also have an important role to play especially in ensuring that the most vulnerable and powerless rights holders and moral stakeholders are not overlooked. Stakeholders in categories 1 and 3 should be included as participants. However, some of the people who are most knowledgeable on governance or whose organizations are most influential are likely to be in categories 5 and 6. Such people should be included as resource persons in interviews, work-shops and focus groups as necessary. Whether to include stakeholders in categories 2 and 4 as participants will be based on practicality: how much time is to be spent on the assessment, manageability of workshops, their level of interest, etc.

It should also be noted that as the assessment progresses, more and more will be understood about the variety of interests that exist. During the course of the assessment, the stakeholder analysis should be revisited from time to time to see if any groups have been overlooked and should be explicitly brought into the assessment as participants.

Prioritizing issues around climate change adaptation

Researchers or other change agents wishing to use this methodology may have a specific interest in climate change adaptation. In fact, this was our motivation in writing this manual. However, we suggest that participants, in prioritizing issues, should not be limited to selecting climate change adaptation issues, at least not at first as this would be likely to artificially and unnecessarily constrain discussions. In any case, in rural developing country setting, it is unlikely that none of the issues identified would relate to climate change in some way.

However, the step of selecting just one issue to focus on for the governance assessment, or perhaps two or at most three, may need to be a process of negotiation. In some cases, funding for the process may be restricted to one particular sector or type of issue. Also, the issue which participants consider the most pressing may not be the issue for which the governance assessment and strategic action around institutional innovation is most timely. The final selection of one to three issues to focus on should be a strategic, negotiated choice amongst stakeholders.

1C) Identification and prioritization of issues related to adaptation to change

Purpose: To develop, based on the priorities of stakeholder groups, a short-list of challenges and issues around adaptation to change.

Any study of governance has the potential to become very broad—possibly unmanageably broad. One of the underlying aims of this activity therefore is scoping. The number of challenges/issues on the short-list will depend upon how much effort can be put into the subsequent activities in the governance assessment. However, we suggest that the aim should be to develop a list of no more than three priority issues.

If, through other activities and projects at the site, a list of pressing issues around adaptation to climate and other kinds of changes has already been developed, and if this was done in an inclusive way with meaningful participation of all stakeholder groups and vulnerable populations, then by all means this list of issues should be used. But if this has not been done, then the approach described here can be used.

Typically, this task will be conducted in three phases. First, as mentioned above, preliminary identification of issues is carried out at the same time as the preliminary identification of stakeholders. This is done through interviews and informal meetings with partners and key informants. Second, once Task 1B is complete and the list of stakeholder groups has been drawn up, each participating stakeholder group in a focus group or small workshop will identify and prioritize what they see as the key issues around adaptation to change (Annex 1).

Third, after these activities for each stakeholder group have been carried out, a workshop would be held bringing together representatives from all the stakeholder groups—participants and resource persons. The prioritized lists of adaptation issues of all the stakeholder groups would be compared and combined. Participants then need to agree on which issue or issues will be the focus of the governance assessment.

Task 2: Identification of the underlying governance issues and mechanisms

Purpose: To identify the important governance dimensions of the prioritized change adaptation challenges/issues.

This task also has an underlying aim of scoping. It will be initiated in the same multi-stakeholder workshop referred to above, and then continued by researchers. In the workshop, for each of the prioritized short-list of adaptation issues, participants and resource persons will identify critical aspects of that issue related to institutions, decision-making and governance. They will also begin to identify the most important governance mechanisms: i.e., the organizations, institutions, and processes which 'deliver' governance. Table 1, above provides examples of governance mechanisms. Documentation of the workshop should attempt to capture participants' and resource persons explanations of the governance dimensions of the adaptation issues including how these governance dimensions relate to the issue(s) and to each other.

After the workshop, researchers will review policies, plans and other documentation in order to further develop the list governance dimensions and mechanisms.

Task 3: Assessment of the governance system

Purpose: To carry out a structured assessment of the overall governance system that pertains to the top priority change adaptation issues.

There are certain aspects of governance that are very relevant for adaptive capacity which relate not so much to particular organizations, institutions or other mechanisms as to the relationships among them and how they work together as an overall governance system. Therefore, this task involves an assessment of the overall governance system.

Before making an assessment of the governance system, it will be necessary to identify and delineate just what is the governance system that is being assessed. This will depend upon the results of Task 1. In Task 1A, those conducting the assessment decide on the level of analysis and on the social-ecological unit of interest. That unit of interest can be thought of as a landscape or problemshed of some sort, whether a watershed, a traditional territory, or a landscape bounded by some other criteria. Task 1C is to identify and prioritize the adaptation issues and challenges of concern. Normally, the governance system to be assessed will be the 'system' of organizations, institutions and linkages among them that are relevant to that social-ecological unit of interest and the prioritized challenges. It may be informative to produce a diagram that shows the most important organizations and institutions for making decisions, setting rules, allocating resources, and resolving tradeoffs related to the most important challenges in the landscape, along with the connections among these organizations and institutions. This description may also include a description of what the competing interests are and the tradeoffs which the governance system must address and how it addresses those. It should include some description of how and where coordination takes place within the governance system (if at all), how key decisions are taken within the governance system, and how the governance is or is not connected to key decisions made at other levels.

The governance system is assessed according to seven main dimensions, each with one or more criteria (Table 4). In identifying the dimensions of governance for inclusion in the framework, we draw on the work of Gupta and co-authors (2010) around assessing the institutional dimensions of adaptive capacity and of Robinson and co-authors (2012b) related to landscape level governance systems*.

Typically, the data for the assessment of the system will be primarily interviews with stakeholder representatives and other key informants and review of documentation such as policies, by-laws, and management plans. Focus-group discussions can also be considered. The facilitators of the assessment analyse this data against the dimensions and criteria listed in Table 4, and individually score each of these criteria as follows:

- 2 Governance system has a negative effect on adaptive capacity
- 1 Governance system has a slightly negative effect on adaptive capacity
- 0 Governance system is neutral or has no effect on adaptive capacity
- + 1 Governance system has a slightly positive effect on adaptive capacity
- + 2 Governance system has positive effect on adaptive capacity

Ideally, the scoring should be done independently by at least two researchers/facilitators, who then compare their scores and the reasons given for each score. (Annex 4)

* See the cited publications for more detailed discussion of the elements included in the framework and their relation to governance and to adaptive capacity.

Table 4: Dimensions and criteria for assessment of the governance system

Dimension	Criteria	Explanation
Resources	Authority	Provision of accepted or legitimate forms of power that provides the governance system with authority to act. Whether the governance system gives actors scope for experimentation. Includes “political resources”: support for the governance system from the political realm.
	Human resources	The governance system is able to mobilize expertise, knowledge and human labour
	Financial resources	The governance system is able to mobilize financial resources to support policy measures and financial incentives
Institutional linkages	The presence of appropriate linkages among organizations and institutions	Linkages facilitate the flow of information, the generation of knowledge and the appropriate sharing of resources. Coordination is achieved without stifling autonomous action. The parts of the governance system where fair governance criteria are strongest are not peripheral in the governance system. Includes both horizontal linkages and vertical linkages.
Fair governance	Legitimacy	Whether there is public support for the governance system
	Equity	Whether or not institutional rules in the governance system are fair
	Responsiveness	Whether or not institutional patterns show response to society
	Accountability	Whether or not institutional patterns provide accountability procedures
Variety	Diversity of problem frames and solutions	The governance system allows for, and even promotes, challenges being understood and addressed from a variety of frames of reference, and allows for a diversity of solutions to be tried. It deliberately promotes the involvement of diverse actors, sectors and levels.
	Use of knowledge	The extent to which the governance system makes use of various types and sources of knowledge.
	Redundancy (duplication)	The governance system is tolerant of institutional redundancy, even though this may not appear cost-effective. There are overlapping measures and back-up systems.
Effective decision-making	The efficiency and effectiveness of decision-making processes themselves	The governance system sets clear scope, goals and objectives for actors, is efficient (does not spend disproportionate time and resources producing decisions), and fits the social-ecological system (is adapted to spatial, temporal and other characteristics of the social and ecological environment).
Learning capacity	Trust	Presence of institutional patterns that promote mutual respect and trust
	Deliberation	Whether the governance allow adequate space for dialogue, deliberation and analysis
	Institutional memory	Institutional provision of monitoring and evaluation processes of policy experiences
Leadership	Room for different types of leadership	The governance system fosters the emergence of leaders and champions, of different types, within its various communities, sectors and stakeholder groups

Task 4: Assessment of governance mechanisms

Purpose: To carry out a structured assessment of the main governance mechanisms that have been identified as being relevant to the top priority change adaptation issues.

The most important governance mechanisms as identified in Task 2 will be assessed using the five principles of good governance identified by the IUCN: legitimacy, direction, performance, accountability and fairness (Graham et al. 2003). This task could be carried out primarily through key informant interviews and focus groups, with an Assessment Form such as shown in Annex 5 used as a checklist or questionnaire. However, the scoring might also be done in a workshop setting. Regardless, it is suggested that scores be determined by each stakeholder group independently before being combined into overall scores. It is suggested that the scoring range from -2 to +2, although if doing the scoring in a participatory way like this, then rather than use numbers for scoring descriptors,

such as *very weak*, *weak*, *neutral*, *strong*, *very strong* might be used, or symbols such as happy/sad faces. Any reports that are written should not only report the average scores but also highlight where there were differences of opinion among various stakeholder groups.

Methodology—activities

Some of the tasks described above will be carried out across more than one activity, and may also be carried out iteratively. This section, therefore, summarizes a suggested chronological flow of activities, which must be adapted to particular circumstances.

A) Initial meetings and key-informant interviews

- Stakeholder analysis to identify participants and strategic stakeholders
- Initial identification of change adaptation issues
- Initial identification of underlying governance issues and mechanisms

B) Focus-group discussions with separate participating stakeholder groups

- Identification and prioritization of change adaptation issues
- Initial identification and discussion of underlying governance issues and mechanisms

C) Multi-stakeholder workshop

- Presentation of change adaptation issues identified by the focus groups
- Discussion seeking consensus on prioritization of change adaptation issues
- Institutional mapping
- Initial identification of the underlying governance issues and mechanisms
- Discussion of strengths and weaknesses of the various mechanisms

D) Initial analysis

- Deciding on which governance mechanisms to assess

E) Data gathering for assessment of the governance system

- Key informant interviews
- Focus groups
- Document analysis

F) Analysis of the governance system

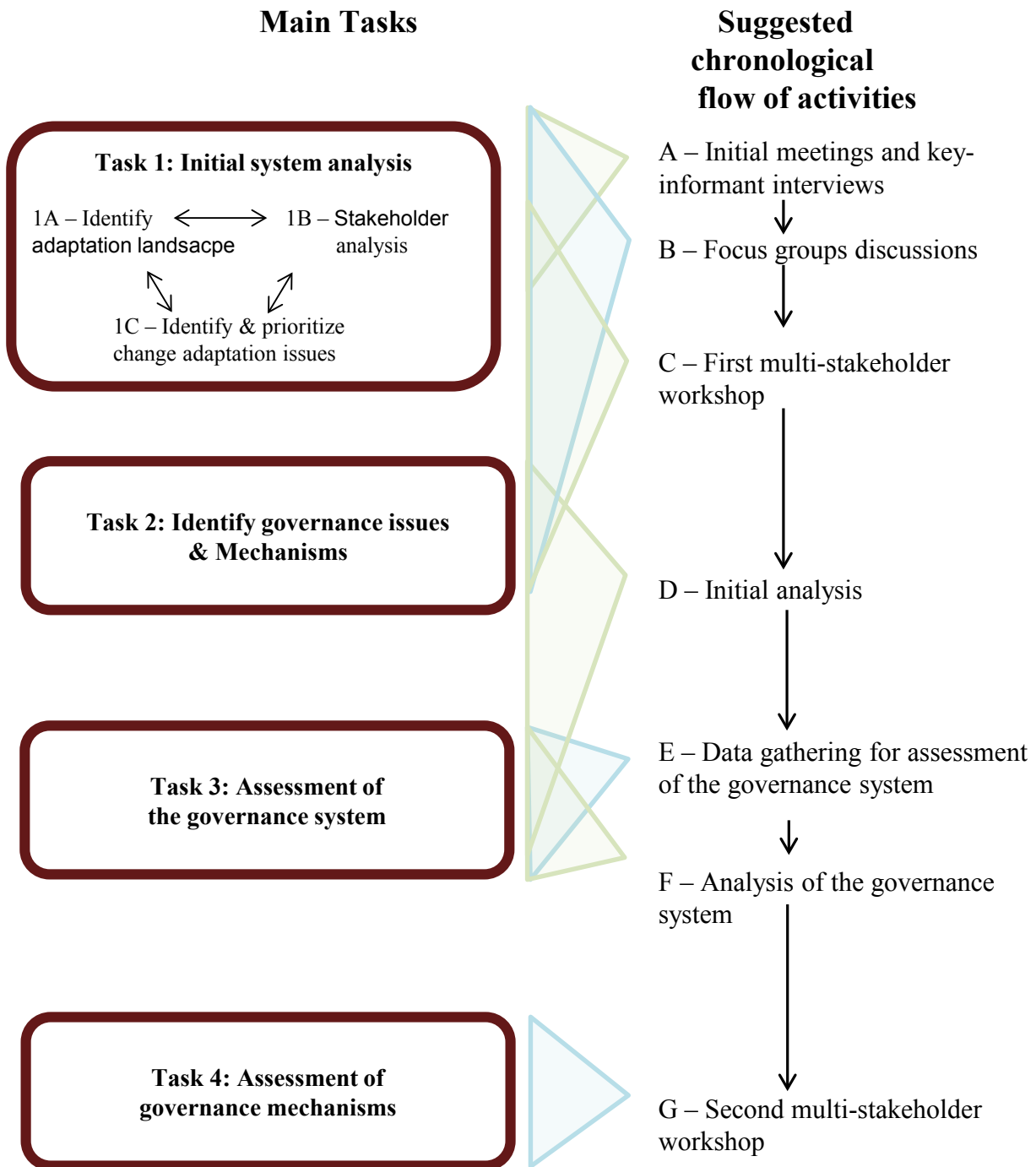
- Facilitators/researchers individually analyse interview and documentary data, and score the governance system
- Facilitators/researchers meet to compare their scoring

G) Second workshop

- Assessment of specific governance mechanisms in stakeholder breakout groups
- Presentations by breakout groups to the plenary
- Facilitators/researchers present findings from assessment of the governance system
- Planning of the way forward

Tip:
Have one or more maps of the area with you as you conduct interviews and group discussions.

Figure 1: Main tasks in the assessment and a suggested set of activities



Presentation of findings

A suggested outline for an assessment report is provided in the text box. For the assessments both of particular governance mechanisms and of the overall governance system, it must be remembered that qualitative and textual data is at least as important as the scores. Nevertheless, graphic presentation of assessment scores can be instructive.

Results may be presented both in tabular format and graphically. Figure 2 gives an example of the assessment of a particular governance mechanism, showing the range of scores given by different respondents or stakeholder groups. Figure 3 shows a colour coding format for displaying the results of the assessment of the overall governance system.

Suggested report outline:

- Executive summary
- Acronyms/glossary
- Introduction
- Methodology
- Description of the study area
- Climate change adaptation and governance issues in the study area
- Assessment of the governance system
 - Description of the governance system
 - Resources
 - Institutional linkages
 - Fair governance
 - Variety
 - Effective decision-making
 - Learning capacity
 - Leadership
- Assessment of selected governance mechanisms
- Discussion and conclusions
- References

Figure 2: Example of assessment of a governance mechanism – Range of scores given

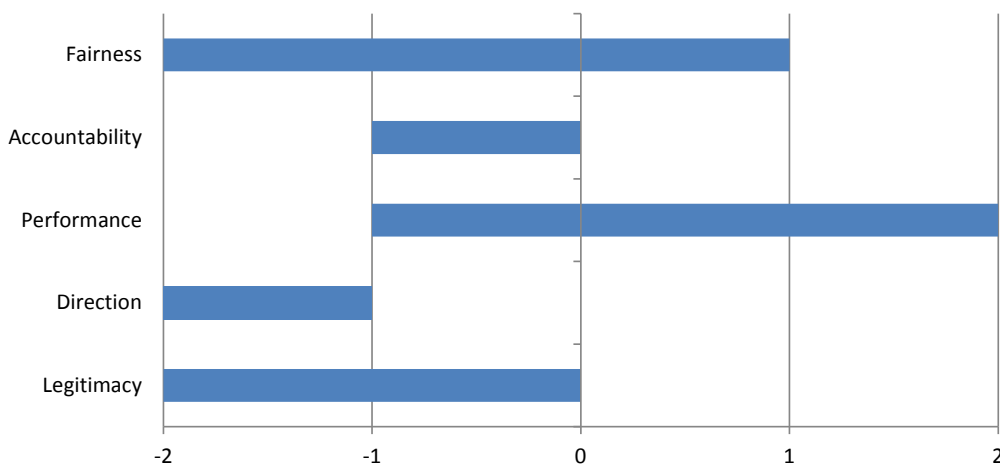
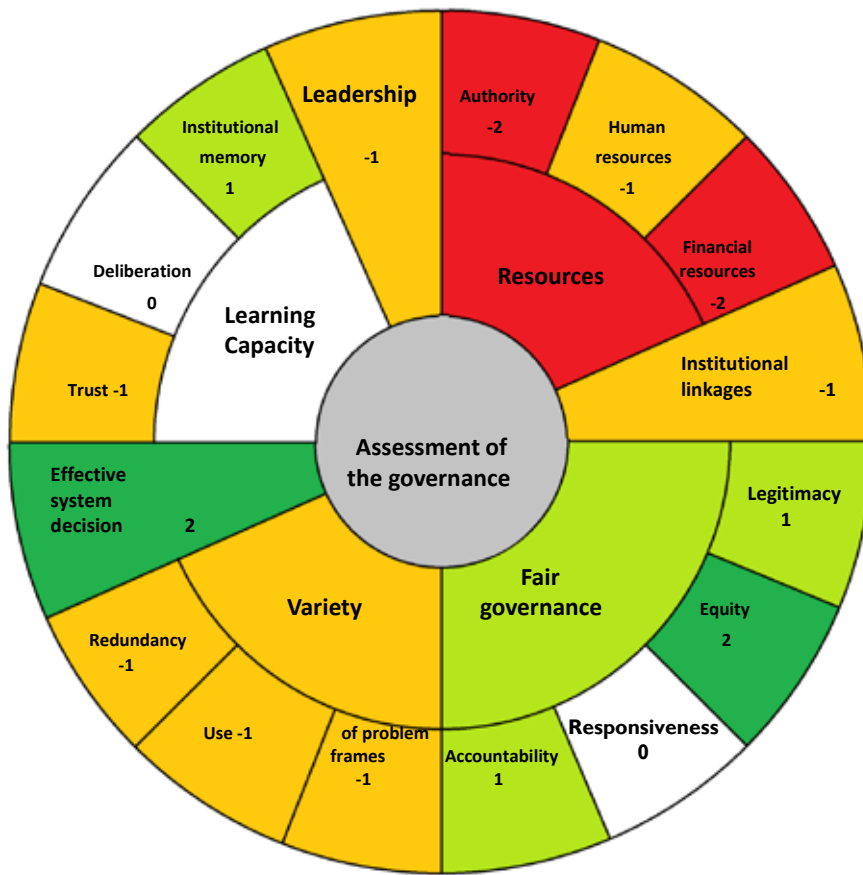


Figure 3: Sample graphic presentation of governance system assessment



Annex I Suggested procedure for activity B, stakeholder focus groups

Once stakeholder groups have been identified, it is suggested that change adaptation issues be identified first by each stakeholder group separately. If a stakeholder group has an organization associated with it which can be assumed to legitimately represent the members of the group (e.g. a farmers' association) then that organization can be asked to select participants and mobilize. These could be either formal *representatives* such as members of the executive, or simply a sample of members. If, however, the stakeholder group has no formal organization representing it—*poor women*, for example—then the facilitators will need to select participants. In this case, it will be important to ensure that the participants selected for the focus group are truly representative of the stakeholder group.

Each focus-group session might have the following steps:

- Brainstorm on the challenges being faced for coping, innovation, adaptation to major changes, including climate change
- Clustering the challenges (some of those identified may be different aspects of the same challenge)
- Influence diagrams for analysis of some of these groups clusters of challenges
- Participants identify criteria for assessing the importance/severity of the issues and challenges
- Matrix scoring of the challenges based on these criteria, also taking note of the justification for each score
- Participants discuss to agree on what they see as their top priority issue or challenge related to adaptation to change
- Initial identification and discussion of underlying governance issues and mechanisms
- Participants choose a two persons to represent them at a multi-stakeholder workshop

Annex 2 Suggest procedure for activity C, first workshop

After stakeholder groups have each identified and prioritized their change adaptation issues and challenges in separate focus groups (Activity B), they can be brought together in a workshop. At the workshop each group presents its list of issues. The main parts of the workshop might include the following:

Introduction to the project

- Presentations by each stakeholder group of their list of top priority change adaptation issues and challenges, including their reasons for prioritizing the issues they did.
- Consolidation of all the identified challenges into a single list.
- Participatory diagramming of the issues and challenges and the connections between them (e.g. using influence diagrams).
- Weighted voting exercise to provisionally identify agreed-upon top priority issues. For example, each participant distributes five votes among the consolidated list of issues.
- Analysis of the issues including identification of the governance dimensions of each challenge and the feasibility of making improvements to those aspects of governance,
- Negotiation among stakeholders, including any researchers, consultants or other external facilitators involved, to choose one to three issues to focus on.

Annex 3 Sample interview guide for activity E, interviews for assessment of governance system

The interview guide below provides examples of the kinds of questions that might be asked for assessment of the governance system. In the example, some of the details in some of the questions refer specifically to watershed issues; depending on the nature of the particular case being investigated. The column on the right indicates the particular dimension and criteria of governance which the question primarily addresses. Some questions may evoke answers addressing different and sometimes more than one dimensions of governance. Also note that in the example the phrase ‘institutional system’ is substituted for ‘governance system’ as in some settings the word ‘governance’ has connotations that may make some respondents defensive. What is key is adapting the questions to the social, institutional, political and cultural setting of the research.

Question	Dimension of governance addressed
Introduction	
[Questions about the respondent’s organization, stakeholder group or community, and his/her role]	
<p>[Description of the institutional system that is being referred to. For example:]</p> <p>Our interest is in looking at a level that corresponds to the kind of level that KAMUKIMA CFA operates at, or that Ngutwa Ndue Nguu WRUA operates at: so, institutions, coordination and decision-making mostly at a level that is higher than village level but smaller than the level of the whole county. Our study area corresponds to <i>part</i> of the Kaiti watershed—those catchments and watersheds in this area around luani that drain into the Kaiti River – roughly corresponding to KAMUKIMA CFA’s area of operation. And our focus is on what we’re calling the <i>institutional system</i> that is relevant at this level. So, key organizations in this institutional system include the CFA of course, and the Ngutwa Ndue Nguu WRUA, but also include things like the Provincial Administration, the county, and clan elders. So when I refer to the ‘institutional system’, I’m referring to all of these key decisions-makers and aspects of governance – the <i>whole system</i>.</p>	<p>Note: This kind of introductory explanation is necessary so that the respondent is clear on what is being referred to when in the rest of the interview he/she is asked about the institutional system.</p>
Description of the institutional system	
<p>I’ve mentioned the [Organization A] and the [Organization B]. What other organizations or institutions play prominent roles in how land and resources are managed?</p> <p>[For each one mentioned...] What is its role?</p>	<p>Description of governance system</p>
<p>Among these decision-makers and organizations we’ve mentioned is there overlap or duplication among some of them? In what way?</p>	<p>Variety— redundancy</p>

Question	Dimension of governance addressed
For decisions at the level I've been talking about, e.g. watershed management in the watershed, has there been anything happening in a coordinated way? For instance, watershed level planning, or planning for land use at community level or sub-location, or location or watershed level? Or generally, coordinated action for dealing with climate change?	Institutional linkages. Effective decision-making
What about mechanisms for sharing of information and coordination among these various stakeholders that we've mentioned? At what level?	
Are there any networks or forums where they come together?	Institutional linkages
What is the main role of these forums? Is it sharing information? Do they actively plan together? Plan what?	Institutional linkages
How would you assess the overall level of communication between the _____ and the district council? Including elected councillors? Through whom?	Institutional linkages
How would you assess the overall level of communication or coordination between the main forums or coordination committees and your organization/your constituency?	Institutional linkages
What about your organization/constituency and other parts of the institutional system?	Institutional linkages
Do you ever find yourselves working at cross purposes with other stakeholders?	Institutional linkages. Variety. Effective decision-making.
Assessing the institutional system	
So these kinds of organizations and institutions, as well as forums and committees for coordination and information-sharing, taken all together, are what I'm referring to when I refer to the <i>institutional system</i> . So now I've some questions on how that system has been working.	
Collective decision-making	
How easy or hard is it for the institutional system to actually reach decisions?	Effective decision-making.
Is the amount of time and resources which the various organizations in the system spend in reaching decisions appropriate for the importance of the particular decision? For example, looking at the system a whole, does it sometimes seem that excessive time or resources for straightforward decisions.	Effective decision-making.
Resources	
Do you understand in fair details what financial resources you need and for what exact purpose?	Resources—financial
Is the institutional system able to raise enough of those financial resources?	Resources—financial
Is the institutional system able to mobilize adequate human resources (expertise, knowledge and labour)?	Resources—human
Does the institutional system have the political resources – things like political support and political will – that it needs to function well?	Resources—authority
Do the main actors have the authority they need to make the decisions that they need to make?	Resources—authority
Is decision-making authority given to the appropriate level of decision-makers in the system?	Resources—authority

Question	Dimension of governance addressed
<p>Does the institutional system give communities and organizations room for trying their solutions and innovations? Does it give them scope for experimentation?</p> <p>Can you give an example?</p> <p>For example, sometimes [Organization A] or [Organization B] come up with management plans that seem very similar to management plans done by other equivalent organizations elsewhere. Do the local organizations here like [Organization A] and [Organization B] have enough authority and freedom to tailor decisions to their own needs and situation? For instance, would [Government Department A] have problems with the [Organization A] trying new innovations or doing things a different way?</p> <p>Can you give an example?</p>	<p>Resources—authority. Variety.</p>
<p>Although the system is new, based on your own assessment, do you think the system has the capacity to carry out its mandate?</p>	<p>Resources</p>
<p>Learning and variety</p>	
<p>In the event there is a new idea or problem, how does the community go around solving it?</p> <p>Do stakeholders have opportunities to really dialogue and analyse issues together, to debate different solutions, and so on? Where (in what venues or decision-making processes) does this dialogue, deliberation and analysis happen?</p>	<p>Learning Learning—deliberation</p>
<p>Within the institutional system, do various communities and stakeholder groups share ideas, resources without suspicions and mistrust amongst themselves?</p> <p>Can you give an example?</p>	<p>Learning—trust</p>
<p>Within the institutional system, where and how do different types of knowledge enter into decision-making?</p>	<p>Learning. Variety—use of knowledge.</p>
<p>Does the system make use of technical knowledge? Scientific knowledge? Community and traditional knowledge? For example.....</p> <p>How?</p>	
<p>Is the institutional system improving over time? On the whole, is it learning from past experiences?</p> <p>Can you think of any examples of very different perspectives within this institutional system? For example, one organization or stakeholders understanding some issue one way and another a very different way?</p>	<p>Learning Variety—Diversity of perspectives</p>
<p>How have those differences been handled?</p>	
<p>Does the institutional system allow for a variety of opinions and a variety of understandings of problems to co-exist?</p>	
<p>Does the institutional system actively involve different kinds of actors, levels and sectors in governance processes?</p>	
<p>Does the institutional system allow for a wide range of different options to be tried? Can you give some examples?</p>	
<p>Leadership</p>	
<p>Can you think of examples of any leaders that have emerged from the communities – not necessarily leaders in the formal or political sense, but community activists in _____ that have come up and who are dealing with the kinds of issues that we've been talking about?</p>	<p>Leadership</p>
<p>Are there people previously thought of as voiceless, poor in ideas etc. now leading any group or sector of the community?</p>	
<p>Has the institutional system had a role in supporting this kind of grassroots leadership? Or maybe in hindering it?</p>	

Question	Dimension of governance addressed
Fair governance	
Do people generally feel that there is place in the institutional system where they can take their issues and concerns and where they are listened to?	Fair governance—responsiveness
Overall, is there public support for the various components of the institutional system?	Fair governance—legitimacy
Are institutional rules within the institutional system fair? In what way?	Fair governance—equity
Do the various components of the institutional system respond to the concerns, needs, and aspirations of society?	Fair governance—responsiveness
Do they reflect the needs of the poorest and most vulnerable people in these communities? Please explain why you say that.	Fair governance, equity
Are there any communities or sub-populations or stakeholder groups whose concerns are not represented in the institutional system? Groups whose concerns don't make it onto the table? [If yes, then explore which groups and in what way not represented.]	Fair governance—equity
Are there any groups or communities or stakeholders that you wish were more involved and engaged?	Fair governance—equity
Are there effective accountability procedures within the institutional system? Are community members able to hold key people and the key decision-makers in the system to account? How?	Fair governance—accountability
Overall assessment of the institutional system	
What in your view are the strengths and successes of the institutional system?	General
What are its weaknesses?	General
What has been the most important accomplishment of institutional system?	General
What would you like to change in this institutional and decision-making system?	General
Do you have any questions for me?	General

Annex 4 Governance system assessment form

This is an example of a form to be used by the facilitators of the assessment to score various dimensions of the overall governance system. Ideally, more than one researcher/facilitator should do the scoring independently, and then the results compared and discussed.

Please note: This form is not meant to be a questionnaire or interview guide, but rather is for assessment and analysis. In constructing interview guides (see Annex 3, above), appropriate questions need to be identified, answers to which will shed light on the criteria.

Criteria		Assessment	
		Score (-2 to 2)	Comments
Resources	Is the GSI provided with authority to act?		
	Is the GS able to mobilize adequate human resources (expertise, knowledge and labour)?		
	Is the GS able to raise adequate financial resources?		
Institutional Linkages	Does the GS have appropriate linkages among its organizations and institutions?		
Fair governance	Overall, is there public support for the various components of the GS?		
	Are institutional rules within the GS fair?		
	Do the various components of the GS respond to the concerns, needs, and aspirations of society?		
	Are there effective accountability procedures within the GS?		
Variety	Does the GS governance system facilitate the involvement of diverse perspectives and the pursuit of diverse solutions?		
	Does the GS make use of diverse types and sources of knowledge?		
	Is the GS tolerant of institutional redundancy, even though this may not appear cost-effective?		
Effective Decision-Making	Is the GS effective at producing quality decisions?		

Annex 5 Governance mechanism assessment form

Criteria		Assessment	
		Score (-2 to 2)	Comments
Legitimacy	1. Is the mechanism widely understood and accepted by stakeholders?		
	2. Is the mechanism relevant to stakeholder needs and appropriate to local cultural norms and practices?		
	3. Does the mechanism facilitate participation in decision-making by all stakeholders?		
	4. Does the mechanism have a clearly defined and appropriate legal foundation?		
	5. How could the legitimacy of the mechanism be improved?	X	
Direction	6. Are the roles and functions of the mechanism in supporting climate change adaptation and building adaptive capacity clear?		
	7. Does the mechanism provide useful guidance in the day-to-day decision-making of relevant stakeholders?		
	8. What can be done to improve the direction-setting role of the mechanism?	X	
Performance	9. Is the mechanism effective? Does it achieve its objectives?		
	10. Is the mechanism efficient? Does it achieve those objectives in a cost-effective and timely way?		
	11. Is the mechanism responsive to stakeholder needs and opinions?		
	12. What can be done to improve the performance of the mechanism?	X	

Criteria		Assessment	
		Score (-2 to 2)	Comments
Accountability	13. Are roles, responsibilities and lines of accountability clearly defined in relation to the mechanism?		
	14. Does the mechanism function in a way that is transparent to stakeholders?		
	15. Do stakeholders understand their rights with regard the mechanism, and are they empowered to assert those rights?		
	16. What can be done to improve the accountability of the mechanism?	X	
Fairness	17. Is the mechanism implemented impartially?		
	18. Does the mechanism contribute to benefits and costs being equitably shared ?		
	19. What can be done to improve the fairness of the mechanism?	X	
Summary	20. Overall, does this mechanism play a valuable role in promoting climate change adaptation?		

Note: The questions listed above are very general and are meant as examples only. Specific questions, tailored to the particular study and the particular governance mechanism being assessed need to be devised. The number of questions used for each of the five dimensions may also change, although care should be taken to ensure that the various aspects of each dimension are addressed.

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