

# Policy Discussion Note



## Monitoring for Good Forest Governance: ***Creating Effective Micro-Macro Linkages in Community Forestry in Nepal<sup>1</sup>***

*Hemant Ojha, Bharat Pokharel, Cynthia McDougall and Krishna Paudel*

### Understanding Links between Monitoring and Governance

This note outlines some insights on improving monitoring-related processes in the different layers of forest governance in Nepal, with a focus on effectively linking micro (local) and macro (national) levels of decision-making in community forestry. The lessons and ideas outlined in this brief are relevant to actors in the forestry sector who engage in or support policy development or implementation with an interest in good forest governance in community forestry in Nepal. These lessons are drawn from the Adaptive and Collaborative Management Research Project of the Centre for International Forestry Research (CIFOR) and Nepal Ministry of Forest and Soil Conservation (MOFSC), which was implemented in partnership with ForestAction.

Forest governance is now recognized as the critical factor for effective resource management, and enhancing livelihood outcomes. The term ‘governance’ basically refers to how people, groups and institutions relate to each other in terms of sharing power and responsibility. Specifically, many people refer to governance as including several key factors such as transparency of organizational procedures, democratic decision making systems, and accountability. We suggest that governance needs to have a clear ‘learning’ element to it, i.e. where stakeholders do not only participate in joint processes, but jointly learn together to improve various facets of governance from their experiences.

Clearly, governance shapes operational decisions relating to resource management, utilization, and benefit sharing. In the context of community forestry in Nepal, the current policy and legislative framework has spelled out roles, rights and responsibilities of the institutions at different layers of governance. Forest User Groups (FUGs) as well as different layers of Ministry of Forest and Soil Conservation (MOFSC) share the primary rights, roles and responsibility of forest management: FUGs are entrusted with rights

---

<sup>1</sup> This note is prepared as part of the Adaptive Collaborative Management Research Project of the Centre for International Forestry Research (CIFOR) and Nepal Ministry of Forest and Soil Conservation (MOFSC), which is funded by the Asian Development Bank (RETA 5812).

to use and manage community forests; District Forest Offices (DFOs) are mandated with forming and supporting user groups, and handing over national forests to FUGs. Local government has also come into the scene more prominently than ever before through recently enforced local self-governance legislations; they will likely be a key player in resource governance in the future. Besides these, a number of civil society and private sector institutions, including networks, are emerging to influence priorities, processes, and power balances of stakeholders engaged in governing the forest resources. Ultimately, this governance context determines the ways forests are managed, for whom, and with what social and environmental effects.

These stakeholders, from micro to meso levels, need to engage in on-going communication, negotiation and collaboration so that they can craft effective governance. In particular, there need to be linkages between the FUG, district, and national levels so that the higher levels of governance can respond to issues, concerns and opportunities emerging at the local level, and so that local levels are well-informed of, and can respond to, policy developments and opportunities from the higher levels. However, experiences indicate that, despite breakthroughs of participatory policies, approaches and practices in community forestry, this communication, negotiation and information flow is still not adequate nor effective within, and especially across these various levels of stakeholders. It appears increasingly likely that a number of challenges in community Forestry (CF), that are primarily related to weak outcomes in areas of livelihoods, equity and productivity of community-managed forest areas<sup>1</sup>, are rooted in part in this weaker governance, and the corresponding lack of responsiveness of decision makers at different layers of forest governance, including FUGs and MOFSC. The extent to which relevant information flows across the levels in both the directions is a crucial factor in determining the effectiveness of decision makers' responses to these challenges. While other factors, such as attitude, commitment, and capacity are also fundamental to positive policy response, access to relevant, timely, reliable and optimal levels of information is the hub of effective planning and decision-making, especially in complex and dynamic contexts such as community forests. This implies not only that the information must exist and/or be generated, but also - since forest governance is shaped by actors at micro, meso and macro levels - that appropriate and effective communication is central to 'vertical' (ie between local, district and national levels) collaboration<sup>2</sup> and to creating enabling conditions for effective forest management at the local level.

The above points suggest the need for effective monitoring within and across scales (and stakeholders) in CF. We use the term 'monitoring' to refer to a process of collecting and analyzing information relating to an activity (for example of a policy and its implementation) and its outcomes with a goal of comparing 'actuality' against the 'anticipation' so that corrective adjustments can be identified<sup>3</sup>. Underlying monitoring is the notion that since human understanding of natural ecosystems is imperfect, human interactions with nature should be understood as 'experimental'<sup>4</sup> (ie opportunities to learn about the ecosystems, and about the outcomes of our management policies and activities). If we approach forest management as an 'experiment', then the role of monitoring is crucial to identify and assess different types of policy-induced changes. And, since forest policies are shaped, created, decided and implemented at different governance levels, monitoring (including analysis of information) also needs to happen at each of these different levels.

The definition above conceptualizes that monitoring is a means of organizational learning, which has a potential to contribute to improved governance of forest at different levels. It is a periodic, continuous and not a one-off activity that gives information, insights and lessons to make right decision in right time for further improvement. In practice, however, 'monitoring' is used to refer to a variety of experiences, which in most cases have relatively little to do with learning or improvement. Box 1 presents three different approaches or threads of monitoring that emerged in different stages of the history of development interventions.

### Box 1. Monitoring : single word, multiple perceptions

Monitoring has different meanings to different people<sup>5</sup>. The term has been used extensively in the discourses and practices of development over the past 3 decades or so, yet it has no agreed, coherent, conceptual definition. At least three different approaches to or 'conceptual threads' of monitoring have evolved over time: a) control-oriented monitoring, b) monitoring designed to meet project requirements, and c) learning-oriented monitoring (for more detail see Paudel and Ojha 2002). The first thread, or *control-oriented monitoring*, has been an integral element of management within bureaucracies (including in the Nepal forestry sector) historically, in which it is used primarily as a tool of top-down checking for failure<sup>6</sup>. This punishment-related connotation of monitoring is still prevalent within many traditional organizations, as well as some newly evolving organizations such as NGOs. This has been a means to achieve 'upward accountability' and control in centrally-dictated organizations.

The second thread, or *project-oriented monitoring*, refers to all forms of structured monitoring practices that are a part of development projects. They are usually linked with project log frames, and involve the collection of large amounts of data. This type of monitoring was initially often 'ex poste' (ie carried out at the conclusion of the project), but later has increasingly been also carried out 'ex ante' (ie during the project). Especially in the latter case, in which may partially be used to provide feedback to planning and decision making, and where the monitoring has included participatory methods, this thread has paved the way for the third thread, learning-oriented approach to monitoring.

The third thread of monitoring, or *learning-oriented monitoring*, has shifted more towards enhancing learning within organizations. In this sense, monitoring is fundamentally a way of learning to improve by consciously linking reflection with action<sup>7</sup>. This is based on the premise that: a) what we plan to achieve through some action is in fact an *assumption* (ie we cannot know it to be certain) regarding the relationship amongst a complex set of factors and variables; and b) there is a great scope for learning if such assumptions are made explicit and tested during the course of actions. Learning-oriented monitoring is at the heart of adaptive and collaborative approaches to resource management.

We suggest that at present, the weak two way communication and very limited effective monitoring (as a means of organizational learning), among Micro (mainly FUGs), Meso (mainly DFO) and Macro level (mainly Regional Directors, Department of Forest and MOFSC) institutions has been one of the reasons for limited responsiveness and accountability of the different layers of governance to people's needs, as well as the emerging challenges and opportunities at the local level. The sections below outline the current concepts and experiences in macro-micro level monitoring in Nepal, and some suggestions for future directions.

### Current Monitoring Systems in Community Forestry in Nepal

Two recent studies<sup>8</sup> of the Adaptive and Collaborative Management Research Project concluded that there is a low level of effective (learning oriented) monitoring in CF currently, and that there are a range of factors underlying this which we highlight here.

**Lack of clarity about monitoring:** The studies found that although there are some official monitoring mechanisms in place from the national to the local level within the formal CF framework, there was significant lack of clarity relating to monitoring, as well as a preponderance to approach all monitoring as 'control oriented'. There is a perception amongst various organizations that 'forms' (or 'formats') are synonyms of monitoring. Lack of clarity in organizational mandates is also a hindrance for effective monitoring system, particularly at the meso and macro levels.

**Comment:** Does this mean general lack of clarity re mandates, or lack of clarity re monitoring mandate?

**Bureaucratic & hierarchical structures:** The bureaucratic structure of MOFSC, characterized by routine work, vertical 'lines of command' with limited flexibility, and lack of incentives to learn and innovate, provides very limited room for monitoring as a way of critically reflecting on what worked and

what did not, under what conditions and why, so that lessons can be drawn and communicated to different levels, for future improvement.

The singular emphasis on upward accountability<sup>9</sup> has given rise to a disproportionately high flow of the local to the national, compared to the limited return of feedback and information to the local level. Furthermore, the information passed 'upwards' tends to be data rather than analysis. As such, analysis and development of analytical capacity (and in fact adaptive management capacity) is focused and the higher levels, giving limited attention to establishing and strengthening monitoring systems at the district and local levels.

Comment:

**Perceptions of monitoring as only control-oriented:** Many stakeholders groups interviewed at all levels expressed similar conceptions that monitoring implied supervisors or external evaluators checking for 'wrong-doings', or a one-off activity to 'go back to see' the implemented activities. Monitoring was primarily seen as a supervisors' weapon, and one that essentially brings fear, or at best it focused on identifying problems and their causes, rather than also identifying any best practices that could be replicated. Very few stakeholders viewed monitoring as a continuous process of collecting information for further improvement.

Relatedly, the perception that they will be penalized for reporting poor progress, regardless of the cause, creates considerable incentives for 'lower level' stakeholders (including DFO staff) to report consistently high progress.

**Limited qualitative and policy-oriented feedback:** In the current CF system, achievement is measured in quantitative figures (such as number of FUGs created). It does not currently encourage district level staff to report on qualitative aspects of progress, including the nature of the FUG process and lessons learned about what worked well or poorly and why. Progress monitoring of investment projects is not linked to other monitoring instruments such as employee performance evaluation, financial auditing, and the processes followed to perform the tasks. Current monitoring focuses only on implementation of activities (operational level) but not on policy decisions (constitutional levels)<sup>10</sup>. Monitoring systems in line agencies are geared to measure inputs and outputs of a "development project". The system has little relevance at the strategic or policy level; in this sense, current monitoring systems have very limited effective linkages to forest governance.

Comment: pls clarify what you mean by 'invmt pjts'

Comment: are you using line agencies here for Pjt or for govt extension line agencies? Or?

Absence of learning questions and non-appreciation of decision-making uncertainties by decision makers limit the scope of developing proper indicators, as well as application of feedback into planning and decision-making<sup>11</sup>.

**Lack of ownership and integrated analysis at multiple levels:** Monitoring formats are developed by senior officers with the help of donor funded project staff but the lower level staff are not involved in the process of format development. The field staffs of DOF and user groups are found to have little ownership and relevance of, and commitment to, such formats.

Furthermore, although there are many formats, there is no unified monitoring system with DOF and MOFSC that would help collate, compile, compare and integrate information from various sources to generate answers to questions of strategic importance. As a result, much information remains unprocessed and unused.

Finally, although an increasing number of monitoring ‘formats’ are being prepared and circulated, no coordinated efforts are made to strengthen the overall micro-macro monitoring systems; rather monitoring is a neglected area of organizational management, and governance, at all levels.

**Box 2. Current monitoring systems in community forestry at different layers of governance**

<b>What has been achieved thus far?</b>	<b>What remains to be done?</b>
<ul style="list-style-type: none"> <li>• Some diversity of monitoring approaches adopted by district forest offices</li> <li>• Compilation and publication of some monitoring reports (such as by Kathmandu and Lalitpur DFOs)</li> <li>• Collection of very large amounts of quantitative information mostly related to project activities and targets</li> <li>• Frequent workshops, meetings and interactions across the institutions at different layers of forest governance such as regional planning meetings</li> <li>• CF Databases at DFO and DOF levels</li> <li>• DFO monitoring of FUGs connected to FUG support strategy (such as FUG categorization forms in Baglung district)</li> <li>• Formation of monitoring units in projects and various layers of MOFSC</li> <li>• Increased appreciation policy makers and project managers of the need for monitoring at all levels, along with increased concerns over the need for taking into account activity, process, outputs, inputs and impacts while designing a monitoring system</li> <li>• Trials and experimentations by projects and DFOs</li> <li>• Some adaptation of centrally designed formats at lower levels (such as by Kathmandu DFO)</li> <li>• Some events of self-monitoring such as meetings, retreats, team-building workshops at various institutions, including the government</li> <li>• Some practices designed to facilitate internal learning of FUGs (such as by NUKCFP, Reading University/ForestAction, CIFOR/MOFSC)</li> <li>• Initiatives for assisting communities to undertake upward ‘monitoring’ of policies and governance contexts (such as by FECOFUN)</li> <li>• Longitudinal studies to monitor impact of CF initiatives (such as by NUKCFP on the impact of community forestry on forest condition)</li> <li>• Development and application of multiplicity of tools (mostly ‘format’ based) in monitoring by different institutions at different levels</li> </ul>	<ul style="list-style-type: none"> <li>• Shift from only an emphasis on upward accountability to one with more downward information and feedback</li> <li>• Participation of FUGs in the design of monitoring practices, including FUG self-monitoring</li> <li>• Clarity on learning objectives (and approaches) of monitoring at all levels</li> <li>• Recognition and use of qualitative indicators</li> <li>• Self-monitoring by support institutions</li> <li>• Emphasis of/responsibility for analysis and learning taking place at each level, with ; ‘pyramid shaped’ information flow upwards (rather than transfer of raw data to the upper levels)</li> <li>• More refined analysis of costs and benefits of monitoring, and development of ways to mitigate costs</li> <li>• Equitable involvement of all categories of stakeholders (government, forestry projects, NGOs and local governments) in monitoring</li> <li>• Resolution of contradictions in defining scope and objectives of monitoring for local government</li> <li>• Strengthening of institutional capacity to design and undertake monitoring including analysis and use of information at each level</li> <li>• Effective cross-institutional communication and cross-learning</li> <li>• Effectively using indicators that emerge through new learning through project implementation</li> <li>• Continuation and scaling up of successful innovative practices and their documentation</li> <li>• Establishing and institutionalizing coherent and coordinated monitoring systems</li> <li>• Emphasis on promoting learning at all levels</li> </ul>

**Comment:** how much is this general practice, or how much is this the exception?

**Ways forward**

Although there is still considerable progress to be made in developing learning-oriented monitoring systems linking the macro and micro levels, the considerable monitoring related experiences of a variety of stakeholders in CF in Nepal (see box 2) provides a good base upon which to build. In this section we suggest various ways through which micro-macro monitoring systems can be strengthened and mainstreamed in Nepal's community forestry system. A list of specific actions that can be taken at different levels to improve micro-macro monitoring linkages is also given in Box 3.

Clarify the perceptions of monitoring in relation to governance. Since the perception of monitoring is very diverse and often hasnegative (control-oriented) connotations are attached to it, decision-makers at every

level of governance, need the opportunity to explore and develop their understanding of the scope and potential of monitoring from the perspective of learning organizations and adaptive management. Monitoring, from this perspective, can be introduced as a topic of discourse, training and debate in the on-going activities such as trainings, seminars, regional and national planning workshops, FUG assemblies, and through site/organization visits to institutions that are applying this approach to monitoring. .

- Review and redefine roles of different layers of forest governance, including relating to monitoring.** While there is clarity of organizational mandate, roles and rights with respect to forest governance to some extent, there is still confusion in terms of exact roles (such as that of Ilaka forest office within district forest office and regional forest directorate), and rights (between communities and national government, between communities and local government). DFOs are mandated with a dual role of policy enforcing and service provisioning, which is often contradictory and counter-productive<sup>12</sup>. There is also a lack of clear boundary between DOF, MFSC and NPC in relation to forest governance planning and enforcement. Most relevant to this brief, is the fact that the division of roles and responsibilities in terms of monitoring are unclear between these actors, and thus the monitoring that does occur tends to be isolated, and much – especially analysis - is left undone. A review of this situation should be made to identify contradictions, confusions, overlaps, tensions and inefficiencies, and the roles, including those relating to monitoring, be redefined for better clarity accordingly. Very importantly, institutions at each level should be involved in analysis that is relevant to them and can assist in their own learning and improvement, as well as in the communication of that analysis, to other levels. (This should be done in connection with the final suggestion re PAR below).
- Identify ‘learning questions’, decision-making uncertainties and key indicators.** Decision-makers at all levels in CF in Nepal face significant uncertainty – such as about the social and natural systems, and their interconnections and responses to management activities; yet, few have explicitly identified what the critical uncertainties (ie that most powerfully influence change) and the “learning questions” are that need to be answered in order for their management to improve or achieve those goals. Rather, monitoring systems currently tends to focus on collection of considerable amounts of broad areas of ‘data’. We suggest that as a part of each level of management preparing a strategic plan for the medium term (5-7 years), and spelling out the impact they wish to achieve, they should explicitly pinpoint their uncertainties, knowledge gaps and decision-making questions. They can develop indicators that not only track ‘implementation’, but also specifically provide information about the key uncertainties<sup>2</sup>.
- Incorporate mechanisms to conduct monitoring of policy impact in an on-going basis.** Related to the above, the focus of monitoring at multiple levels could also usefully expand (selectively) from input-focussed (eg number of FUG formed, number of trainings carried out), to include monitoring of implementation processes, governance at different levels and impacts of policy. For example,
- Allow flexibility and scope for experimentation.** Active and effective monitoring is a means of enhancing and speeding up the learning and feedback of learning to management (including policy) decisions. In order for this to be effective, this necessitates flexibility in the hands of decision makers to apply new learning for improvement relatively quickly. Currently neither regulations nor forest bureaucracy’s organizational culture are very conducive to this kind of rapid adjustment (for example,). attempts should be made to educate and institute provisions that facilitate speedy uptake and application of new knowledge. This also relates to the need for ‘space’ for experimentation in

**Comment:** This is an important point, but I don't think we can include it in its 'big sense' here (ie all roles need clarification) , within this note, I think we should just focus on monitoring-related roles?

**Comment:** What is it about the regulations that are not conducive? In what way should they change?

**Comment:** What does this mean specifically?

<sup>2</sup> EG

policy, for example by ‘piloting’ policy innovations on a small scale, with a built in feedback loop about its impact prior to its wider application. This also requires the development of an institutional culture in which ‘failures’ – for example in ‘pilots’ - are viewed as opportunities for learning and improvement in policies or policy implementation.

- **Integrate monitoring at different levels.** Each level of CF has its own locus of decision-making, and at the same time is linked (at least in principle) to higher and/or lower levels through a system of upward and downward accountability. For example, forest user groups are required to furnish annual activity reports to DFOs, and DFOs are required to inform policy related changes to FUGs. Currently, the upward flow of information strongly dominates the downward flow, and (as described above) the various monitoring initiatives that do exist are not well-integrated (for example....). These upward and downward linkages should be strengthened via better defined monitoring roles and responsibilities (as described above), and also by enhanced emphasis on to downward accountability in the monitoring system. The overall monitoring system should integrate the monitoring systems of the upper and lower decision-makers' self-monitoring system to avoid duplication of efforts, and so that decision-makers at each level have the opportunity for analysis and adjustment at their own level. (In a sense, this is ‘self monitoring’ by institutions at each level). This would require strengthening monitoring and analysis at the lower levels, and a shift away from extractive monitoring approaches (ie by the higher levels of the lower levels, including of FUGs by rangers), and very likely an increase in collaborative monitoring (e.g., where different actors, such as DFO staff, FUG members and FECOFUN members, and others might jointly assess the status of some indicators of common interest to them).<sup>3</sup> Relatedly, the higher the level of governance, the more strategic the information is and the fewer the data needed. So there should be processing and analysis of information at every level, and the upward flow should look like a pyramid in terms of the extent of information flow.
- **Conduct participatory action research (PAR) on creating effective micro-macro linkages at a pilot scale.** Since no detailed ‘prescription’ can be made for such a system, improving micro-macro linkages and learning should be considered as a form of ‘participatory action research’. In other words, a process of learning by doing involving a cross-section of decision makers at all levels of forest governance (taking a few pilot institutions at meso and micro levels, and linking them with micro level institutions). These actors can jointly design ‘improvements’ in the monitoring system at different levels, and these improvements can be implemented as ‘experiments’ on small scales; the actors and other stakeholders can then undertake some explicit reflection on the strengths and weaknesses and outcomes of the ‘improvements’ as they proceed, and then these ‘improvements’ can be adjusted as learning and experience is built up, and eventually the ‘best practices’ can be extended to larger scales. This could, for example, begin with processes suggested above, such as reflection on the CF system and its ‘uncertainties’ in terms of decision-making and the development of agreed (trial) indicators for various levels, roles and responsibilities for monitoring, and plans for analysis at each level. This would most usefully build from and draw on the considerable (albeit disparate) experiences to date of various stakeholders in various innovations in monitoring.

**Comment:** At one level this seems a fairly straightforward statement, but on close inspection, I think we need to break it down and make it more specific. Ie, is the real issue that there are limited incentives in govt (or who?)? Or are there disincentives? ‘Org incentive structure’ makes it sound structural, rather than cultural – is that correct? If so – what specifically? Or, are we recommending something more simple: ie that there needs to be a mechanisms for better sharing of information about innovations across institutions? (do you mean from donor to govt? or?) If the point is: “The processes and experiences that have been tried should be used as the basis for the development of future innovations in monitoring” – then I think we should move that down to the last bullet point on PAR (ie that would be one of the first steps in the par)

**Comment:** Can we break this term down (de-jargonize and give specifics or examples)

---

<sup>3</sup> Insert risk re collab monitoring influence on incentives for self-monitoring

**Box 3. Mainstreaming Monitoring in community forestry – what improvements can be made?**

Existing documents, forums and events	How to incorporate?
Master Plan	Add the strategy of monitoring in the preamble/background, revise the monitoring and evaluation program component to better reflect learning-oriented and multi-scale monitoring
Forest Act and Forest Rules	Include monitoring of the <i>impact</i> of CF (and other relevant, as possible) legislation (e.g., on five year cycles)
Operational guidelines	Include explicit self-monitoring at FUG and DFO level as a critical part of the planning and implementation cycle
Training of FUGs and forestry staff	Design and incorporate curriculum on learning-oriented monitoring in trainings related to CF planning, management and other aspects of institutional development (including hands-on experiences)
MoFSC, RD, DoF, DFOs and ACM Research partners	Support a PAR approach to developing more effective macro-micro linkages (on a pilot scale)  Deliberate on how to monitor these plans at each level, and how best to communicate between levels on the findings of monitoring
Academics	Introduce adaptive management and monitoring in the MSC and MSC level curriculum in forestry and natural resources courses
multi-stakeholder forums at central, regional, and district levels	<ul style="list-style-type: none"> <li>▪ Revitalize Forestry Sector Coordination Committee with a balance of representation from government, bilateral institutions, civil society and local government</li> <li>▪ Organize similar interactions at regional level</li> <li>▪ Recognize district level forestry forums of DFOs, NGOs, FECOFUN, projects, local governments</li> </ul> <p>----- Deliberate on how to monitor these plans at each level, and how best to communicate between levels on the findings of monitoring</p> <p>- share monitoring models and experiences</p>

### About the authors:

Hemant Ojha is Team Leader (Forest Resources and Livelihoods) of ForestAction. Email: forestaction@wlink.com.np

Dr Bharat Pokharel was formerly a Class II forest officer in Nepal Ministry of Forest and Soil Conservation. Email: bkp@mail.com.np

Cynthia McDougall is Research Fellow at Center for International Forestry Research, Indonesia. Email: c.mcdougall@cgiar.org

Krishna Paudel is Team Leader (Forestry Institutions and Governance) of ForestAction. Email: forestaction@wlink.com.np

For full list of references cited in the text, please write to Tara Bhattarai at forestaction@wlink.com.np

---

<sup>1</sup> Refer to the Joint Technical Review Report of Ministry of Forest and Soil Conservation (2001) for a review of current issues in community forestry in Nepal. One of the biggest challenge in the management of community forest is enhancing equity, a glimpse of which may be obtained by ICIMOD's annotated bibliography on equity and common property resources, 2002. See

<sup>2</sup> In recent years, new understanding has emerged about how collaboration, partnerships, and team work can be fostered. These share some common elements in terms of recognizing the political dimensions and the conditions in which various actors can engage successfully in negotiations. Edmund and Wollenberg (2002) suggest that negotiations are useful to disadvantaged stakeholders only when the uneven power relations are taken into account and addressed; otherwise a so-called 'consensus' may likely be just an imposition of views by powerful groups. Riley (2002) contends that collaboration requires each of the collaborating agencies to recognize the other as a legitimate actor, and that the collaborative relationship should engage all key stakeholders in defining problems and finding solutions, with shared authority. These insights on the political aspects of collaboration indicate that the question of how stakeholders in different layers of forest governance, with unequal power and authority, can engage in negotiations for equitable outcomes remains a major challenge in governance.

<sup>3</sup> This concept of monitoring is drawn from 'adaptive management', as described by Lee ( ), X< and Y( ). Adaptive management is an approach to management (NRM or other) that considers policies as 'experiments' (Lee, ). It suggests that by explicitly comparing expectations and assumptions with actuality, institutions can learn to correct errors, improve their understanding, and effectively and efficiently change action and plans. Adaptive management does not postpone action until "enough" is known but acknowledges that management decisions and actions have to be made in conditions of uncertainty, complexity and dynamism. 'Adaptive managers' go beyond the concern to solve only immediate problems, and rather seek to combine experiments that will enhance learning for future options with their actions. They understand managed systems in terms of dynamic linkages, and tend to see these as (and/or develop) models as a means of spelling out their assumptions (about the way the system works, and outcomes of actions) as basis of for future learning. In this sense, monitoring is a key component of adaptive management, and a fundamental way of incorporating reflection into actions. This is based on the premise that what we plan to achieve through some actions is actually an assumption regarding the relationship among a complex set of factors and variables. Policies (and their implementation) are needed to address management problems while simultaneously helping to develop better understanding of the challenges and opportunities that exist. Adaptive

---

management can also be a means of conflict management by developing an agenda of questions, rather than solutions, agreed by disputing parties to be answered through the experience [\(ref?\)](#).

<sup>4</sup>, Mayers and Bass (1999) emphasizes that in order to achieve a desirable policy processes, there is a need for 'making spaces' to disagree and experiment while developing policy arrangements, and this requires that stakeholders are engaged in collaborative learning through experience.

<sup>5</sup> See Abbot and Guijt (1998) for different meanings and purposes of monitoring.

<sup>6</sup> See Pokharel and Grosen, 2000.

<sup>7</sup> See Salafsky (1998), Lee (1993).

<sup>8</sup> Pokharel et al 2002; Paudel and Ojha 2002

<sup>10</sup> Agrawal and Ostrum (1999) have distinguished at least three analytical distinctions in the level of rules or rights relating to resource use. These are: a) operational choice (which is related to actual work on forest or the physical world), b) collective choice (which structures operational rules – who, how, when to use or interact with the resource), and c) constitutional choice (higher order rules, legislations that affect who, how of collective choice decisions). The three types of rights may rest with a single social entity or with combinations of different institutions in the administrative /political system. Forest governance can be considered to go beyond operational decisions, and incorporate all three types (levels) of decision-making systems. Monitoring and learning is required not only in the operational choice level (e.g., how trees can be cultivated better), but on also in relation to choices of institutional rules for sustainable resource management, as well as to choices regarding higher order political/legal institutional arrangements.

<sup>11</sup> An analogy is presented here. If you have decided to construct a house, and you know your main needs, and identify the main questions you have about how to go about it, then your observations of different models, designs and patterns of other houses that you pass by can be very useful. If you do not have a plan and some key questions, then you can hardly notice any patterns in your observations, and drawn little from them. Likewise, if decision makers do not have a clear vision of where they want to go, and some clear questions (uncertainties) to be addressed through monitoring, then monitoring is of relatively little benefit. This being said, it is also important to be open to learning from monitoring that is outside the main questions, ie 'surprises' that you did not anticipate, but emerge as important through the monitoring experience. Thus the 'learning questions' should be 'guideposts', but not 'blindners'.

<sup>12</sup> See Ojha (2002) for an example of how this conflicting role of DFOs is creating tensions in relation to inventories in community forests in Nepal.