

## **Roots for Good Forest Outcomes: An Analytical Framework for Governance Reforms**

# Roots for Good Forest Outcomes: An Analytical Framework for Governance Reforms

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**THE WORLD BANK**  
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# Abbreviations and Acronyms

AGIs	Actionable Governance Indicators
ARD	Agriculture and Rural Development Department
BB	Bank Budget
CAS	Country Assistance Strategy
CIFOR	Center for International Forestry Research
CPI	Corruption Perceptions Index
CPIA	Country Policy and Institutional Assessment
DC	Deputy Commissioner
DFO	Divisional Forest Officer
DI	Department of Inspection
EC	European Commission
ECA	Europe and Central Asia
ESW	economic and sector work
EU	European Union
FCMO	Forest Crime Monitoring Office
FCMR	Forest Crime Monitoring and Reporting Unit
FLEG	Forest Law Enforcement and Governance
FSC	Forest Stewardship Council
GDP	gross domestic product
GFI	Governance of Forests Initiative
GHG	greenhouse gas
ICV	Instituto Centro de Viva
IFM	independent forest monitors
IIED	International Institute for Environment and Development
IMAZON	Instituto do Homem e Meio Ambiente da Amazonia
ITTO	International Tropical Timber Organization
IUCN	International Union for Conservation of Nature
LEB	log export ban
M&E	monitoring and evaluation
MFPCs	Multi-Sectoral Forest Protection Committees
MP	Montréal Process
NGOs	nongovernmental organizations
NTFPs	non-timber forest products
ODA	overseas development assistance
PEFC	Programme for the Endorsement of Forest Certification
PETS	public expenditure tracking system
REDD	reduced emissions from deforestation and degradation
SDN	Sustainable Development Network
SFM	sustainable forest management

TF	Trust Fund
TFD	The Forests Dialogue
TI	Transparency International
UNDP	United Nations Development Programme
VPA	Voluntary Partnership Agreement
WRI	World Resources Institute

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# Executive Summary

## **IN A NUTSHELL**

Poor governance is a major impediment to achieving development outcomes of the forest sector. It results in losses of income, employment, government revenues, and local and global environmental services. However, at present, no comprehensive guide to reforming forest governance has been developed. Although usually it is relatively easy to recognize that the forest sector in a country is failing to deliver all its potential benefits, the lack of an appropriate analytical framework makes it much harder to identify the major shortcomings and to propose a fitting response. This economic and sector work (ESW) is the first step in creating a reformer's tool to diagnose forest governance weaknesses and pinpoint appropriate reforms.

## **STYLIZED FACTS AND BROAD RATIONALE FOR THE STUDY**

Consider a reform-minded Minister of Forestry in a developing country where forests are a notable resource for rural livelihoods, commercial extraction, harvesting of non-timber forest products (NTFPs), biodiversity conservation, and carbon sequestration. The Minister is committed to ensuring that the forest sector in her country is well managed and is able to yield the desired development outcomes. At the same time the Minister is aware that the sector is not as well managed as it should be.

A preliminary assessment of the situation makes it clear that the main challenge is in the way the resource is governed. This is demonstrated by widespread illegal logging and trade in wood products and wildlife, corruption and bribery, land grab, and encroachment, and the sector is contributing much less to the gross domestic product (GDP) and government revenues than one should expect. At the same time, the country is serious about implementing Reduced Emissions from Deforestation and Degradation (REDD), but poor governance could stand in the way.

There is a need to identify the underlying causes for poor governance and fix those. However, the Minister is much less sure about what to do next. The international experience showcases specific actions, but it does not offer explicit guidance on

picking the most appropriate action in a specific country context. A big issue that she is grappling with is: What constitutes forest governance, and how can I identify appropriate reforms in the right sequence?

The Minister considers this to be a complicated task. Poor governance and corruption are found not only in the forest sector but across the economy, and they cannot be fixed just like that. In order to make progress, the governance challenge in the forestry sector needs to be broken down into some manageable tasks, allowing time for their implementation and for impacts to be realized. It also becomes obvious that the first critical step is to define the dimensions and scope of forest governance as carefully as possible. In addition, the Minister realizes that governance is not shaped by her government alone. Several stakeholders (forest dwellers, local communities and landowners, private sector, etc.) can lay claim to the resource and have a hand in its use and overall management. Through participation and inclusion of the interests of legitimate stakeholder groups in the decision-making process, the Minister has to ensure that the highest-priority reforms are identified, that the risk of interest group capture is minimized, and that the probability of successful implementation is maximized.

Based on a set of building blocks, this study creates a framework that will help analyze the governance challenge for the sector. Concomitantly this framework provides a tool whereby stakeholder consultation and consensus building can be facilitated.

## CHALLENGES TO IMPROVING FOREST GOVERNANCE

Forests, whether they are tropical, temperate/boreal, or woodland, etc., are complex ecosystems and provide multiple products, benefiting many stakeholders. Forests provide private goods for commercial trade (e.g., round wood, some NTFPs, and tourism services), private goods for subsistence use (e.g., many NTFPs, fodder, fuel wood and construction poles, medicinal plants), local public goods (e.g., watershed management and soil conservation), and global public goods (e.g., biodiversity and carbon sequestration). In addition, forestland often has potentially valuable alternative uses such as for agricultural and pasture and for plantations (e.g., rubber or oil palm).

Ensuring sustainable forest management (SFM), typified by balancing multiple uses among many different users, rests critically on high-quality governance for the sector. Yet there are significant gaps in our knowledge and in our readiness to identify and plan reforms to improve the governance of the sector. This report identifies three interconnected reasons for this. First, governance is a broad term, embracing a varied set of actors and factors, with complex interrelations. Unless these complexities are properly understood, reform programs will not be successful. Second, there have been few attempts to merge the academic efforts with the field experience, to accelerate learning and development of practical approaches. This has created what this report calls a problem of the “missing middle.” This is demonstrated by the lack of any notion of a big-picture approach covering crucial aspects of forest governance. Third, governance reforms create losers and gainers. The former block reform efforts whereas the latter would be supportive. For obvious reasons politicians are unwilling to take “hard” decisions, and the political will required to initiate and sustain reforms is usually lacking. Thus, there is a need to better understand the political economy of reform processes, underpinned by stakeholder analysis.

## A COMPREHENSIVE FOREST GOVERNANCE FRAMEWORK

This ESW argues that the above challenges are best addressed by carrying out an in-depth diagnosis of forest governance through a *comprehensive* framework. A detailed review of the available literature and ongoing initiatives established that no such framework is currently available. The main contribution of this report is to provide such a framework for analyzing forest governance and improving countries’ capacity to understand critical governance issues.

The framework was constructed based upon an extensive literature review complemented with expert opinions. This provided a large collection of “elements” comprising forest governance. It also pointed to a need: (i) to focus on governance indicators as a way to transform governance elements into a practical framework; (ii) to give greater consideration to economic elements as they impinge heavily on the “traditional” elements of forest governance; and (iii) to develop actionable forest governance indicators. The literature review

## The Building Blocks of Forest Governance and Their Principal Components

### Transparency, Accountability, and Public Participation

Transparency in the forest sector  
Decentralization, devolution, and public participation in forest management  
Accountability of forest officials to stakeholders  
Accountability within the forest agencies

### Stability of Forest Institutions and Conflict Management

General stability of forest institutions  
Management of conflict over forest resources

### Quality of Forest Administration

Willingness to address forest sector issues  
Capacity and effectiveness of forest agencies  
Corruption control within the forest sector  
Forest monitoring and evaluation (M&E)

### Coherence of Forest Legislation and Rule of Law

Quality of domestic forest legislation  
Quality of forest law enforcement  
Quality of forest adjudication  
Property rights recognized/honored/enforced

### Economic Efficiency, Equity, and Incentives

Maintenance of ecosystem integrity: sustainable forest use  
Incentives for sustainable use and penalties for violations  
Forest products pricing  
Commercial timber trade and forest businesses  
Equitable allocation of forest benefits  
Market institutions  
Forest revenues and expenditures

also demonstrated that governance can be analyzed from various perspectives (e.g., impact on poverty, economic development, and carbon sequestration and REDD), which should be accommodated into the overall framework.

The governance framework is underpinned by five building blocks, which are envisaged to cover all dimensions of forest governance. In seeking practicality, the report split the five building blocks into principal components and their subcomponents. The forest governance elements available from the review of the literature and expert opinions were used to develop the appropriate set of principal components and subcomponents (see table below for a compact version of the proposed framework, and Annex 2 for the detailed framework with subcomponents).

Specific advantages to constructing a comprehensive framework such as this include:

- Developing a common and comprehensive understanding of the nature and scope of forest governance among various stakeholders and measuring and compiling a baseline situation of forest governance
- Addressing the “missing middle” problem to improve understanding of the real drivers of illegality and poor governance (including those originating from outside the forest sector) and to mainstream governance issues into SFM approaches
- Formulating targeted and actionable interventions to improve forest governance and to

make informed choices regarding reform priorities

- Better understanding of the political economy challenge, including identifying governance components and actions that strengthen the demand for good governance
- Fostering stakeholder participation toward building a strong consensus for reforms
- Designing reforms that have a high chance of success, and identifying indicators to measure their progress
- Enabling identification of sector-specific and broader governance issues and promoting the mainstreaming of forest governance concerns into the broader governance and anticorruption agendas of the World Bank and other development agencies

## TOWARD IMPLEMENTATION

The framework developed in this approach is only the beginning of a process. However, it provides the essential foundation for developing (through subsequent field testing and empirical validation) a forest governance diagnostics tool. Dissemination of this report will be a priority to create awareness and build consensus for the proposed approach to governance analysis. A dissemination plan is included in Annex 3 of this report.

The second step would consist of field testing this conceptual framework under country-specific situations, including their specific objectives, and developing the diagnostics for a number of

countries. Particular emphasis will be given to countries participating in REDD programs and those with significant land-tenure issues. The framework is generic in that it can be readily applied to all forest types (tropical, boreal, drylands, miombo, etc.) in a large number of countries. It is possible to develop the subcomponents of the five building blocks into individual indicators, which experts familiar with forest governance issues can adapt to country-specific circumstances and assign a rating. This enables benchmarking the state of governance in a country and identification of priority areas requiring reforms. In turn, this would allow for a comprehensive assessment (“diagnostics”) of the state of forest governance in that country and identification of the strengths and

weaknesses of the system and also the scope of reforms necessary to improve governance in the country.

The third and final step will consist of producing a forest diagnostics toolkit. Step 3 will be based on the field experiences, additional expert inputs, and stakeholder consultations from different countries gathered in Step 2 of the process.

In conclusion, it is important to reemphasize that the scope of this report is restricted to constructing a comprehensive conceptual framework of forest governance, of broad applicability to several forest types in a large set of countries. Field testing, country forest governance diagnostics, actionable indicator development, and preparation of a governance toolkit are important follow-up tasks.

# Introduction

*“And one should bear in mind that there is nothing more difficult to execute, more dubious of success, nor more dangerous to administer than to introduce a new order of things; for he who introduces it has all those who profit from the old order as his enemies, and he has only lukewarm allies in all those who might profit from the new. This lukewarmness partly stems from fear of their adversaries . . . and partly from the scepticism of men, who do not truly believe in new things unless they have actually had personal experience of them.”*

(From Chapter VI of Niccoló Machiavelli, *The Prince*. Peter Bondanella and Mark Musa, translators. Oxford University Press revised edition, 1984, p. 21.)

This economic and sector work (ESW) is the first step in creating a reformer’s tool to diagnose forest governance and identify needs for reforms. Poor governance is a major impediment to achieving development outcomes of the forest sector. It results in losses of income, employment, government revenues, and local and global environmental services. However, at present, no comprehensive “nuts-and-bolts” guide to reforming forest governance has been developed. Often it is relatively easy to recognize that the forest sector in a country is failing to deliver all its potential benefits, but due to the lack of an appropriate analytical framework the development community has not been able to identify a fitting response to the identified shortcomings.

Take a reform-minded Minister of Forestry in a developing country where forests are a notable resource for rural livelihoods, commercial extraction, biodiversity protection, and carbon sequestration. The Minister is committed to ensuring that the forest sector in her country is well managed and is able to yield the desired development outcomes. At the same time the Minister is aware that the sector is not as well managed as she would like. In the initial assessment of the situation, it has become evident that the main challenge is in the way the resource is governed. This is demonstrated by widespread illegal logging and trade in wood products and wildlife, corruption and bribery, land grab, and encroachment. In her discussions with the Minister of Finance it has also become evident that forestry

is contributing much less to the GDP and government revenues than one should expect.

However, the Minister is much less sure about what to do next. The international experience only showcases specific actions but does not offer explicit guidance on picking the most appropriate action in a specific country context. A big issue that she is grappling with is: What constitutes forest governance, and how can she identify appropriate reforms in the right sequence?

Thinking about the problem, she finds it more and more obvious that this is a complicated task. Poor governance and corruption is found not only in forest sector but also across the economy, and it cannot be fixed just like that. In order to make progress, the governance challenge in the forestry sector needs to be broken down into some manageable tasks. Sufficient time needs to be given for implementation and for impacts to be realized. It also becomes obvious that the first critical step is to define the dimensions and scope of forest governance as carefully as possible.

In addition, the Minister realizes that governance is not shaped by her government alone. Several stakeholders (forest dwellers, local communities and landowners, private sector, etc.) can lay claim to the resource and have a hand in its use and overall management. Through participation and inclusion of the interests of legitimate stakeholder groups in the decision-making process, the Minister has to ensure that the highest-priority reforms are identified, that the risk of interest group capture is minimized, and that the probability of successful implementation is maximized.

This study is aimed at creating a framework that will help the Minister to analyze the governance challenge through a set of building blocks. This tool draws on knowledge of governance in general and forest governance in particular. It reflects the theoretical understanding of governance while being oriented toward action. It also builds upon the work that others have done, incorporating good measurement approaches and lessons learned. Finally, the framework is generic and is amenable to being customized to different forest types and specific country contexts.

Section I of this study explores the consequences of poor governance and the need for and the track record of forest governance reforms. It highlights some key gaps in our understanding of the governance challenge that provide the rationale for this report.

Section II reviews the available literature and extant initiatives on describing and measuring governance. It looks at existing general indicators of governance and indicators aimed specifically at the forest sector and highlights the main lessons learned.

Section III presents a comprehensive conceptual framework with which forest governance diagnostics can be undertaken in a country. Drawing heavily on the review of Section II, it identifies the critical parts of forest governance and organizes them into an analytical framework, consisting of five principal building blocks and their components and subcomponents.

Section IV summarizes the material and offers conclusions.

The framework presented in this report provides the essential foundation for developing (through subsequent field testing and empirical validation) a forest governance diagnostics tool. It is important to reiterate that this ESW presents **only the first essential step**—a conceptual framework—of a multistep process to increase our understanding and develop a forest governance diagnostics tool.

The next step would consist of disseminating the report to a variety of audiences within and outside the Bank and field testing this conceptual framework in a number of countries that are committed to improving the quality of their forest governance, including those undertaking specific programs such as REDD. Annex 3 of the report gives the dissemination plan and budget.

The third and final step will consist of producing a forest diagnostics toolkit. Step 3 will be based on the field experiences, additional expert inputs, and stakeholder consultations from different countries that were gathered in Step 2 of the process. Steps 2 and 3 will be implemented in succession, after the completion of step one.

# Impacts of Poor Governance and Global Efforts at Improving its Quality

## OVERALL EFFECTS OF POOR FOREST GOVERNANCE

Forest sector governance is defined as the *modus operandi* by which people, stakeholder groups, and institutions (both formal and informal) acquire and exercise authority in the management of forest resources, to sustain and improve the quality of life for those whose livelihood depends on the sector. Good forest governance is characterized by the prevalence of the rule of law, low levels of corruption, robust institutions, high competence of officials and other functionaries who implement rules, willingness to address forest sector issues, sanctity of critical legal elements such as enforcement of property right and voluntary contracts, etc. (World Bank 2008b).

Poor forest governance can have significant negative impacts on development outcomes in all the three pillars of the World Bank forest strategy: the environment, poverty reduction and social development, and economic growth (World Bank 2004).

### Environmental Impacts

Poor governance impedes SFM. People depend upon forests to provide fiber, fuel, food, water, and many other values. Where demands are high, the only route to SFM is through some combination of inventorying, planning, protecting, controlling use, monitoring, and evaluation. Whether the land is private, relying on the state to protect ownership rights, or public, relying on the state to manage and apportion benefits, rational use, and accountability depends on robust governance. Protected areas particularly depend on good governance. Violations of protected-area boundaries and threats to the conservation of forest resources and biodiversity are typically rife when governance is weak.

Healthy forests protect biodiversity and water supplies and sequester carbon. REDD is considered a cost-effective way to mitigate climate change (Stern 2009; Box 1). However, poor forest governance will likely be a major impediment in obtaining large-scale climate change mitigation impacts from REDD. Areas with poor governance will pose risks that discourage investors. By minimizing illegal use and managing forests under long-term plans, good

### Box 1: REDD and the Need for Good Forest Governance

Deforestation and forest degradation are leading causes of global warming, together accounting for about 20% of global greenhouse gas (GHG) emissions and over one third of emissions from developing countries. Proposals have recently been made to include REDD in the potential scope of the post-2012 climate change regime.

Factors driving deforestation are related to market failures; perverse incentives; population pressures; and corruption, greed, and the open-access nature of the resource. Addressing the fundamental drivers of deforestation and ensuring the sustainability of approaches to reducing deforestation and degradation requires strong attention to forest governance. The following are arguably at the top of the list of governance

issues: providing clarity on land tenure, access, and use (including to carbon); encouraging participatory decision making; reducing legislative conflicts; improving laws and regulations that govern and deliver incentives; strengthening social and environmental safeguards; developing efficient and fair contracts under which landowners agree to protect their forests; the equitable sharing of benefits among stakeholders; and controlling illegal logging and corruption and interest-group capture.

The above is a generic list of governance concerns. Specific governance issues will need to be identified through country analysis, and the framework developed in this ESW could facilitate the necessary country contextualization.

Source: The Forests Dialogue (TFD). 2008. *Beyond REDD: The role of forests in climate change*. TFD Publication Number 3, pp. 28–33. Available at: <http://research.yale.edu/gis/tfd/>.

forest governance makes investing in REDD projects more predictable.

On the other side of the ledger, where climate change may have negative impacts on standing forests, adaptation strategies need to be developed to counter these impacts. These include afforestation, reforestation, reducing risks of forest fires, pest-resistant species selection, etc. This is important not only for preserving the environmental contribution of forests, but also for protecting communities dependent on their livelihoods from these forests. Clearly, good governance would be necessary to identify the most appropriate adaptation strategies and to muster resources for their implementation (CIFOR 2005).

#### Poverty Reduction and Social Impacts

Poor governance harms forest-dependent communities. Unclear and insecure land tenure and other property rights, lack of adherence to the rule of law, and excessive discretionary authority threaten the livelihoods of hundreds of millions of indigenous people and the rural poor. Good governance can promote equitable distribution of forest benefits, honor traditional rights and knowledge, and provide the platform for prior and informed consultations with legitimate stakeholders. Clarifying

land tenure, access, and use rights (for example) is necessary in allowing collection of fodder, fuelwood, and NTFPs, thereby protecting the livelihoods and rights of forest-dependent communities and guarding against the risk that they are victimized.

Poor governance erodes institutions and spreads corruption across the economy through a corruption contagion effect. The corrosive effects of illegal logging, especially on governance, are not confined to the forest sector. Forest products are bulky, and illegal lumber could be easily intercepted by officials. So the connivance and corruption of a range of officials—customs, police, local politicians, and transport authorities—is needed for the industry to survive. Corruption in the forest sector is therefore contagious and weakens governance through other segments of the economy. The effects of corruption spread further by providing opportunities for money laundering, weakening the rule of law in forest areas, diluting the effectiveness of policies, generating trade distortions, and disrupting legitimate economic activities more generally. Poor forest governance also “empowers” criminals. Forest crimes such as illegal logging, illegal occupation of forest land, woodlands arson, wildlife poaching, encroachment on both public and private forests, and corruption, thrive in an environment of poor

governance (Kishor and Damania 2007; Ross 2001; Seneca Creek Associates 2004).

## Economic Impacts

Poor governance and corruption distort forest economies. Economic policy failures, including price controls, subsidies, and government-controlled collection and marketing of forest products, etc., create opportunities for rent seeking and corruption. They subject legitimate forest enterprises to unfair competition from illegal, often underpriced forest products and discourage investors from making socially and environmentally responsible investments in the sector. This leads both to fiscal losses and inefficient resource allocation. If the quality of forest governance is not conducive to sustainable forest management, the objectives of the various pillars of the forest strategy cannot be met simultaneously. On the other hand, with good forest governance, for example, the carbon stocks in the forests can be maintained at the same time as the operation of well-managed commercial logging activities. More specifically, climate mitigation through REDD can be implemented conjointly with forest-based economic development.

Poor governance distorts trade in forest products, with effects rippling around the world. In an in-depth, multicountry study of illegal logging, Seneca Creek Associates (2004) found that the value of “suspicious” wood products worldwide may be as high as US\$23 billion. Of the total of illegal timber, the study estimates that about US\$5 billion enters world trade, representing as much as 10% of the value of global trade of primary wood products. The study also estimates that 12% of global softwood round-wood exports and as much as 17% of global hardwood round-wood exports are of suspicious origin. At the country level, the percentage of “suspicious” log supply ranges from about 3% in the case of the United States to more than 60% in Indonesia.

There is little doubt that poor forest governance reduces the contribution of the sector to overall development. Globally, the volume of illegal logging is about US\$10 billion per annum. On top of this, approximately US\$5 billion per annum is lost to governments because of evasion of royalty and tax payments (World Bank 2006b). The two combined are more than eight times the global overseas development assistance (ODA) for sustainable

forestry.<sup>1</sup> In short, in moving toward sustainability, the hemorrhaging caused by poor governance needs to be stopped.<sup>2</sup>

## TRACK RECORD OF IMPROVING FOREST GOVERNANCE: ACHIEVEMENTS HAVE BEEN SIGNIFICANT BUT MUCH MORE IS NEEDED

The forestry community of practice, including the Bank, has been grappling with improving forest governance since long. It has invested considerable resources in addressing the challenge and has achieved significant successes. The Forest Law Enforcement and Governance (FLEG) program, funded by the European Commission and coordinated by the World Bank, provides technical assistance to improve governance at the global, regional, and national level. There are also regional programs on forest governance—for example, in Southeast Asia, funded by AUSAID. The FLEG-T (Trade) program of the European Union (EU) uses the EU’s leverage over countries exporting timber to the European Commission (EC) to improve legality and forest governance in these countries through voluntary partnership agreements. A recent analysis indicated that over the period 1994 to 2005, the Bank has directed about US\$300 million, or more than 11% of its forest projects lending, at improving forest governance (see World Bank 2006b for a summary of Bank-led as well as other major initiatives addressing forest governance). These have been complemented by projects, analytical work, studies, reports, and global best-practices and research papers addressing a variety of issues, including development of national action plans to control illegal logging, institutional reforms, legislative reforms, independent forest monitoring, developing customs cooperation protocols, local community monitoring and control of illegal logging, decentralization and devolution of public and private forestlands to local communities, timber theft prevention at the concession level, chain

<sup>1</sup> It is useful to distinguish two types of losses due to poor governance. When “productive” activities are totally outside the purview of authorities (such as illegal/unsanctioned logging in remote areas), the entire revenue, including the pure rent component, is lost. However, when taxes and royalties are evaded on legally sanctioned activities, clearly, it is that component of rent that is lost to the public treasury.

<sup>2</sup> For further examples on the ills of poor governance, see World Bank (2006b) and Tacconi (2007).

## Box 2: A Sample of Achievements in Improving Forest Governance

The community of practitioners in forestry has identified the impact poor governance has on sustainable forest management and the wider development outcomes derived from the sector. This has led to several bottom-up and top-down initiatives to address these governance challenges. Often these initiatives have been developed by governments and nongovernmental organizations (NGOs) as well as bilateral and multilateral donors such as the World Bank.

- The FLEG ministerial processes (in East Asia, Africa, Europe, Central Asia, and Latin America) have galvanized international and regional actions between consumer and producer countries. Regional ministerial declarations and action programs such as developing customs cooperation among East Asian countries and illegal-logging action plans in Europe and Central Asia (ECA) are strengthening the political will and technical capacity to address illegal logging and poor sector governance.
- In the Philippines a participatory system for resource monitoring was established in 1992 as a part of the World Bank-funded Environment and Natural Resources Sector Adjustment Loan. These Multi-Sectoral Forest Protection Committees (MFPCs) were funded by the national government and had members from central and local governments, law enforcement, forest administration, NGOs and other civil society, media, industries, etc. Their role was to monitor both concessions and community forests. Some MFPCs had marked success in curtailing illegal logging. After the World Bank-funded program ended, many committees could not continue their activities, but some have continued to exist, and the Philippines forest authorities plan to revitalize the system.
- A number of countries have established independent forest monitors (IFM). These organizations, often national or international NGOs but also private companies, follow the performance of the sector and the activities of forest authorities. The goal is to increase accountability and transparency in the sector (see Box 3 for additional details from Cambodia). An interesting innovation was made in Honduras, where a government agency, CONADEH, was selected as the IFM. CONADEH is an independent national ombudsman that has maintained its independence also within the state apparatus.
- In Ghana the government and the EU signed an agreement in September 2008 to promote legality and governance in the domestic forest sector. This Voluntary Partnership Agreement (VPA) will, once fully implemented, give Ghanaian timber exports easier access to the EU markets. The EU will also provide support to the country to improve its capacity for sustainable management of forests. EU is negotiating similar VPAs with a number of countries, such as Cameroon, Democratic Republic of Congo, Indonesia, Malaysia, and Vietnam.
- Certification of sustainable forest management has been expanding greatly in recent years. Both Forest Stewardship Council (FSC) and the Programme for the Endorsement of Forest Certification (PEFC) have become global schemes to promote good forest practices. Verification of legal origin verifies that timber comes from a source that has a documented legal right to harvest, pursuant to the laws and regulations of the government of the jurisdiction. These have provided good opportunities to promote legality in the sector. However, forest certification covers only 8% of global forests, and even those are mainly found in temperate regions.
- Liberia, starting from a post-conflict situation of an almost clean slate, has been able to rebuild strong legal frameworks for its sector governance. Specifically, it has established a sophisticated system of forest management on the triple pillars of community, conservation, and commerce (see Box 6 for details).
- In the United States the Lacey act was amended in 2008 to include wood products. This amendment makes imports of illegally harvested wood (in all stages of processing) highly risky, with violators liable to face severe penalties.

Sources: Brown, D., et al. Undated. *Legal timber: Verification and governance in the forest sector*. London: Overseas Development Institute.

Federal Register (2008). vol. 73, no. 196/Wednesday, Oct. 8, 2008/Notices [docket no. APHIS-2008-0119].

[http://www.ghana.gov.gh/ghana/eu\\_ghana\\_stem\\_illegal\\_timber\\_trade.jsp](http://www.ghana.gov.gh/ghana/eu_ghana_stem_illegal_timber_trade.jsp) (accessed 6/11/2009).

UNECE/FAO. 2008. *Forest products annual market review 2007–2008*. Geneva Timber and Forest Study paper 23. United Nations, New York and Geneva.

of custody and log-tracking systems, etc. (Brown et al. undated; Chatham House 2009; Lawson 2007; FGLG Update, June 2008; Magrath et al. 2007; World Bank 2008b). Box 2 presents a small sample of these initiatives and gives a flavor of the breadth of the efforts and achievements in areas ranging from national legislation to control illegal imports, to forest certification and chain-of-custody systems.

Undoubtedly, many of the initiatives supported by the above programs have improved various aspects of forest governance and have established entry points for additional and deeper reforms and created the climate for scaling up of successful initiatives. Yet improving forest governance is a difficult challenge and much more needs to be done to ensure that interventions will improve the quality of forest governance substantially and that the improvements will have a significant and irreversible impact on the symptoms of poor governance, such as the extent of illegal logging, corruption, encroachment of protected areas, and violations of tenure and ownership rights.<sup>3</sup>

## **RATIONALE FOR THIS REPORT: GAPS IN UNDERSTANDING THE FOREST GOVERNANCE CHALLENGE**

The rationale for producing this report lies in gaining a better understanding of the three reasons that we perceive to stand in the way of scaling up efforts at improving forest governance.

The first major reason relates to our inadequate understanding of the complexity of forest governance. Governance is a broad term, embracing a varied set of factors and a multiplicity of actors. It includes complex actions and interrelations, many of which are relatively poorly understood. This is clear even from the pithy definition of forest governance above. Good governance is concerned with wide-scale prevalence of the rule of law, low levels of corruption, robustness of institutions, a high degree of competence of officials and other functionaries who implement rules governing the sector, strong political commitment to address complex sector issues, the sanctity of critical legal

elements such as enforcement of property right and voluntary contracts, etc. (Dixit 2004; World Bank 2008b, chapter 5).

The complexity and interconnected nature of various aspects of governance make sustainable reform in this area difficult. However, there is no common understanding of what constitutes forest governance, and different people have defined it from their own special and limited perspective and focused on limited facets of it. Focusing change on just one or two aspects without fully appreciating the interconnections could compromise its effectiveness and even become self-defeating. The Cambodian experience in the context of forest crime prevention is somewhat illustrative of this problem (Box 3). There the reforms were limited principally to the forest sector but succeeded in setting up a world-class system of forest crime monitoring and reporting. However, the effectiveness of the program was blunted due to poor governance in other areas, such as the low effectiveness of the judiciary. A broader suite of reforms would likely have resulted in better outcomes.

The second reason is related to the gap between theory and practice. The academic literature on good governance and its application to the management of forest resources mostly covers conceptualization of the issue, research on incentives, and the political economy of natural resource management. On the other hand, field activities supported by international organizations, development banks, and NGOs have tended to focus on verification of legality in timber trade and the monitoring and control of forest crime. These programs have provided valuable experience and have helped raise the profile of forest governance issues. However, on account of their opportunistic and fragmented approaches, they have not always led to structural and deep-seated reforms. In particular, the driving forces behind illegality, noncompliance, and poor governance are rarely systematically diagnosed, especially at the field level. Thus, there is a “missing middle,” with no practical big-picture approach covering forest governance. Without this “missing middle,” drivers of illegality and poor governance can be overlooked. Without it, reformers cannot readily identify priorities, target and sequence reforms, and ultimately improve governance. Thus, reforms will have to move away from the current piecemeal approach toward a consideration of forest governance issues in a holistic manner.

A third important reason for our modest track record has been an inadequate understanding of

<sup>3</sup> In judging how successful reform efforts have been, a lack of objective baselines from which to measure change has been a significant constraint to such evaluations. The framework proposed in this report would help prepare baselines and identify actionable indicators to track progress of interventions.

### Box 3: Evolution of Forest Governance in Cambodia

The Cambodian forestry sector has not been able to contribute its full potential to national development. In the 1990s it became globally known for poor governance and interest-group capture. Noncompetitive allocation of forest concessions to foreign or joint-venture companies and the financial involvement of the military in forestry were major symptoms (FAO/ITTO 2004; GAO 2002). Forest legislation also allowed illegally cut timber in concession areas to be easily legalized. For example, rather than confiscating illegally cut logs found in the forest and handing them over to the State, the concession holders, who had control over the area, were allowed to sell the wood. With no official control over the companies, many concession holders relied for their wood supply almost exclusively on high-grading concession areas and “creaming” the forest, rather than on sustainable logging based on proper forest management plans. It has been estimated that almost 95% of logging in 1997–98 was illegal.

The history of rampant mismanagement can be attributed to a number of factors, including collusion between national officials and logging companies, the legacy of a lack of rule of law, the financing of internal conflicts by extracting natural resources, interference from vested interests in neighboring countries, and under-allocation of resources to the public administration.

To control illegal logging in the forest sector, the government of Cambodia established the Forest Crime Monitoring and Reporting Unit (FCMR) in October 1999. The FCMR consisted of three components: an office in the Department of Forestry and Wildlife, known as the Forest Crime Monitoring Office (FCMO), to monitor crimes in production forests; an office in the Ministry of Environment, known as the Department of Inspection (DI), to monitor forest

crimes in protected areas; and an independent forest monitor (initially, Global Witness) to independently monitor the performance of the two new government agencies. A designated focal point in the Prime Minister’s office helped strengthen accountability of the system.

A case-tracking system was developed to serve as a database of all forest crimes. The case-tracking system was also an important tool for prioritizing enforcement efforts, for cataloging the actions taken, and for increasing the transparency and accountability of the two government agencies. The FCMR’s efforts to control illegal logging resulted in the suspension of corrupt forestry officials, on-the-spot investigations of allegations of illegal logging by high-ranking officials, and destruction of illegal sawmills (UNDP/FAO 2002).

However, the project was plagued by a variety of problems: (i) Global Witness being considered “biased” and advocacy-oriented by the government; (ii) top-down approach, with little involvement of local people and civil-society organizations; and, (iii) a poorly functioning legal system that failed to move against the big offenders. The project came to a standstill in 2006 when money to pay the independent monitor ran out.

Recently the forestry law enforcement dialogue between the government and the donor community, including the World Bank, has been directed toward supporting the development of FLEG in the context of a National Forest Program. However, there has been little progress in this regard. Reports indicate that serious governance problems still exist in the sector, and this strengthens the view that piecemeal governance reforms are unlikely to succeed. What is necessary is a detailed diagnostic and a willingness (by government and stakeholders) to support programmatic implementation of reforms.

Sources: Castrén, T. Foreign direct investment: Road to riches or burden to national development? In: Ruohomäki, O. 2005. *Development in an insecure world: New threats to human security and their implications for development policy*.

FAO/ITTO. 2004. *Capacity building for law compliance in the forest sector: Case study—Cambodia*. Available at: <http://www.fao.org/forestry/media/12936/3/0/>.

GAO. 2002. *Cambodia: Governance reform progressing, but key efforts are lagging*. Report to the Chairman and to the Ranking Member, Subcommittee on Foreign Operations, Committee on Appropriations, U.S. Senate. Available at: <http://www.gao.gov/new.items/d02569.pdf>.

Global Witness. 2009. *Country for sale*. Available at: [http://www.globalwitness.org/media\\_library\\_detail.php/713/en/country\\_for\\_sale](http://www.globalwitness.org/media_library_detail.php/713/en/country_for_sale).

UNDP/FAO. 2002. *Forest crime monitoring and reporting project*. Report of the Evaluation Mission, CMB/99/A05/6M/12. Royal Government of Cambodia, United Nations Development Programme, and Food and Agriculture Organization, Rome, December.

the political economy of reforms. Governance involves many actors. Forest governance reforms create “losers” and “gainers.” Losers will oppose the reforms and will likely actively sabotage the reform process. The problem has been astutely and succinctly expressed by Machiavelli (see quote in the Introduction). Would-be reformers must offset the resistance of losers. This is easier said than done, since the losers are typically a small, well-entrenched and politically powerful group that can organize and act forcefully, while potential gainers are a much larger and scattered group, less capable of organizing themselves for collective action. While critical, our current understanding of how to overcome the resistance of the losers in the reform process is quite poor. On the other side of the coin, how to strengthen demand for good governance and get the support of potential gainers behind the reforms also needs to be better understood. In the same context, often the “reform-minded Minister of Forestry” who is expected to take the lead in improving governance is a myth. For obvious reasons politicians are unwilling to take “hard” decisions, and the political will necessary to initiate and sustain reforms is conspicuously lacking. In such situations (and to strengthen the support for reforms in any case), promoting “champions” who support reforms would be a feasible alternative. This requires an understanding of the balance of power and the nature of political equilibrium in a country. Thus, there is a need to better understand the political economy of reform processes, underpinned by stakeholder analysis. However, our understanding of this topic is still emerging, and our ignorance stands in the way of effective reforms.

## **BUILDING A “BIG-PICTURE” FRAMEWORK FOR FOREST GOVERNANCE**

This ESW is aimed at closing the three critical gaps identified above. The discussion suggests that the above challenges have the highest possibility of being addressed by carrying out an in-depth diagnostic study of forest governance with the help of a comprehensive forest governance framework (which is currently unavailable). This approach to forest governance will:

- Develop a common and comprehensive understanding of the scope and complexity of

forest governance and the roles of various stakeholders in its improvement, and measure and compile a baseline situation of forest governance

- Help to address the “missing middle” problem to improve understanding of the real drivers of illegality and poor governance (including those originating from outside the forest sector), at the field level, and to mainstream governance issues into SFM approaches
- Contribute to the formulation of targeted and actionable interventions to improve forest governance and to make informed choices regarding priorities, especially when improving law enforcement and strengthening institutions
- Contribute to a better understanding of the political economy challenge, including identifying governance components and actions that generate and strengthen the demand for good governance
- Foster stakeholder participation and build a strong consensus for reforms
- Help to design reforms that have a high chance of success, and identify indicators to measure the progress of reforms
- Contribute to a systematic development of Actionable Governance Indicators (AGIs) for the sector.<sup>4</sup>
- Enable identification of sector-specific and broader governance issues and promote mainstreaming of forest governance concerns into the broader governance and anticorruption agendas of the World Bank and other development agencies

To reiterate, this ESW constructs a comprehensive model of forest governance founded on five building blocks that incorporate the multiple and complex dimensions of forest governance, to better understand the sector governance challenges.

<sup>4</sup> AGIs complement the conventional input, output, and outcome indicators to give a better handle regarding which aspects of governance are functioning well or poorly, and how inputs and outputs of governance reform efforts contribute to a particular governance aspect. For further details on AGIs see Section II of this report.



# Describing and Measuring Governance

The forest governance framework presented in this ESW builds upon the available experiences and ongoing work in the area. This section explores how others have described and measured overall governance, including the use of governance indicators, and the main lessons emerging from the review. The section then looks at how forest governance has been defined and measured and the key emerging lessons from the experiences. Drawing upon the lessons learned from these reviews, the ESW then proposes a new operational framework for forest governance in Section III.

## CONCEPTUAL DEFINITIONS OF OVERALL GOVERNANCE

A perusal of the literature indicates that “governance” has been used to mean several related things. The term “governance” has been used for a long time to mean “government” or what governments do. Thus, the common dictionary definition makes “governance” a synonym of “government”—the process and actions of governing (*American Heritage Dictionary of the English Language* 2000, 760).

For at least the past two decades, however, the term has been used in a wider sense in policy circles. A United Nations Development Programme (UNDP) discussion paper (UNDP 1997) asserts that governance is the exercise of economic, political, and administrative authority in managing a country’s affairs. Along these same lines, some have used the term to mean formal and informal arrangements that determine how public decisions are made, who makes them, and how public actions are carried out (e.g., Kaufmann et al. 2008). Governance has also been defined as a mechanism through which citizens and groups articulate their interests, exercise their rights and obligations, and reconcile their differences (Robledo et al. 2008; UNDP 1997). Mimicopoulos (2007) explains that governance has three aspects. First, social governance provides the moral foundation; second, economic governance provides the material foundation; and last but not least, political governance provides the order and the cohesion in a society.

These wider definitions reflect an understanding that the boundaries of governance are inexact, and too narrow a focus on governance misses the full picture. As Graham et al. (2003) have observed, many actors beyond government play a role in governance, including citizens, the private sector, and civil society.

Recognizing the need to develop the “big-picture” framework, this ESW views “governance” in a broad sense. Thus, as used here, “governance” has social and economic aspects that extend beyond formal government. In some contexts, customary and informal rules are more influential than formal laws. Ownership and markets may be rooted in government enforcement of rights, but they shift power over behavior and goods out of the hands of government. All of these forces matter to people concerned about how a society or its resources are governed.

## WHAT IS “GOOD GOVERNANCE”?

Governance is said to be “good” when it allocates and manages resources efficiently, effectively, and equitably. Good governance is characterized by respect for the rule of law, transparency and free flow of information, significant citizen participation and equity, high levels of accountability, effective management of public resources, and control of corruption (Kaufmann et al. 2008; Mayers et al. 2002; UNDP 2006; World Bank 2006b). Furthermore, good governance is epitomized by predictable, open, and enlightened policymaking (i.e., transparent processes); a bureaucracy imbued with a professional ethos; an executive arm of government accountable for its actions; and a strong civil society participating in public affairs (World Bank 2000, p. xx). According to UNDP (2006), good governance ensures that there is broad consensus when setting political, social, and economic priorities and that the voices of the poorest and most vulnerable are heard and taken into consideration when deciding what should be done about a given resource. Poor governance, on the other hand, is characterized by unjust or unenforced legal systems, social exclusion, unengaged civil society, opaque decision making, abuse of executive power, unaccountable bureaucracies, arbitrary policy making, inequitable resource allocation, and widespread corruption (Mayers et al. 2002; Tacconi 2007; World Bank 2006b).

Good governance involves the mechanisms, processes, and institutions that enable citizens and groups to express their interests, exercise their legal rights, mediate their differences, and meet their obligations. Improving governance therefore entails making information available to the public, transparency and accountability in decision

making, equitable sharing of the costs and benefits of conservation of resources, and strategic, effective, and efficient management of resources (UNDP 1997).

To summarize, governance is shaped by and reflected in the values, institutions, and rules of society as a whole. It involves many kinds of people and organizations. Elected officials, civil servants, stakeholders, property and rights claimants, businesses, NGOs, and the media all play roles. Thus, it follows that while government is an important component, a full understanding of governance requires looking beyond government. Furthermore, *improvements in governance* can and indeed should be the *responsibility* of all stakeholders (Thomas et al. 2000). And within the stakeholder groups, care needs to be exercised to ensure that the interests of the weaker and politically disenfranchised are well represented and well protected in a governance reform process. This point assumes critical importance in any strategy for improving governance and will form one of the guiding principles in the development of the forest governance framework of this ESW.

## OPERATIONAL DEFINITIONS OF GOVERNANCE: CRITERIA AND INDICATORS

Conceptual definitions can set the boundaries of discussion, but when it comes to measurement or evaluation of governance, something more concrete is needed. Practitioners have sought to disaggregate governance into operational components or criteria, represented by measurable indicators. Kishor and Belle (2004) explain that breaking governance into operational components and indicators serves several useful purposes:

1. The division conveys a clearer understanding of what the term “governance” encompasses.
2. The division allows more precise policy discussions of what aspects need to be improved and how they can be improved.
3. By identifying indicators and measuring governance, one can assess its quality and track changes.
4. Indicators allow analysis of how governance affects important developmental outcomes.
5. Indicators allow for cross-country comparisons (although this is not a major focus of this ESW).

## Input, Output, Outcome, and Actionable (Governance) Indicators

Indicators come in many forms and perform different functions. Useful information for monitoring and evaluation of reforms is obtained if indicators are tied to inputs, outputs, or outcomes of interventions.

1. *Inputs* include the resources employed and activities undertaken to produce given outputs. They can be measured either in monetary terms or in terms of the magnitudes of particular types of inputs—for example, number of people in charge of monitoring a given forest, and offices for receiving complaints about illegal activities.
2. *Outputs* are the products of those inputs and activities. Individual outputs are required to achieve other, higher-level outcomes or results. Examples of outputs include revised forest laws, number of legal timber harvest auctions, and expansion of area under plantations.
3. *Outcomes* are the ultimate objectives of public policies and represent how transformational changes are achieved. An example would be larger or more forest cover and extent.

(Additional desirable aspects of indicators are described briefly in Annex 1.)

Reid (2009) cautions that this three-level hierarchy of indicators can be problematic when applied to governance issues because governance facilitates resource and economic outputs and outcomes rather than directly delivering them. Consider the process of trying to improve some particular element of a given dimension of governance.<sup>5</sup> In any such reform process, there will be a need to monitor both implementation and results of the reform efforts.<sup>6</sup> Projects typically focus their monitoring efforts on inputs, activities, and outputs, whereas a country assessment report (a World Bank Country Assistance Strategy [CAS], for example) is more likely to focus its monitoring on a mixture of outputs (e.g., laws passed) and outcomes (people

lifted above poverty). But it is rare for reformers or donors to design indicators that systematically monitor the *quality* of particular elements of given governance dimensions and the factors that affect those qualities. Thus, Reid develops the concept of AGIs, which provide evidence on the characteristics and functioning of particular governance systems.

To clarify further, input and output indicators for such governance reform efforts track inputs employed, actions taken, and products produced to improve the functioning of some specific governance element. Using input and output indicators alone is not sufficient for determining whether such a reform effort is actually making progress on the underlying governance improvements. Governance outcome indicators, on the other hand, focus on the final impacts of a country's governance institutions or on political, social, or economic phenomena that citizens care about (level of corruption, for example). They, however, provide very little guidance on *why* a given country is performing well or poorly on any given governance dimension. AGIs are designed precisely to drill down to the elements and sub-elements of each governance dimension, so as to shed light on both which elements or sub-elements and what features of any given element or sub-element are working well or poorly.

In sum, AGIs complement the input, output, and outcome indicators. "When coupled with evidence on context, as well as inputs and outputs, AGIs can facilitate research on how particular aspects of context, inputs and outputs of governance reform efforts interact and contribute to the performance of a particular element or sub-element of a given governance dimension." (Reid 2009).

AGIs are clearly crucial in diagnosing and tracking "changes" at the level of specific activities, aimed at improving particular aspects of governance. But other than in the human resources management area (Reid 2009), little effort has been invested in developing such indicators.<sup>7</sup> As it explores the governance literature, this ESW will

<sup>5</sup> As indicated in a later section, "governance dimension" is synonymous with "governance building blocks" as developed in this report.

<sup>6</sup> This is becoming increasingly important in the context of the implementation of the Governance and Anti-Corruption Strategy of the World Bank (World Bank 2008e).

<sup>7</sup> To give an example of an AGI: One of the objectives of a human resource management system is to attract qualified human capital skills. An indicator of how well this objective is being achieved is the average number of qualified applicants per advertised position. Higher averages would reflect better performance on this objective than would lower averages (Reid 2009).

also identify any available AGIs and initiate their systematic development for use in forest sector diagnostics.<sup>8</sup>

## EXAMPLES OF INITIATIVES ON OVERALL GOVERNANCE INDICATORS

Many governance indicators are in use all over the world. Researchers have estimated that there are approximately 140 aggregate indicators composed of thousands of individual indicators (Arndt and Oman 2006; World Bank Institute 2006). This section highlights a few important initiatives.

### Transparency International's Corruption Perception Index<sup>9</sup>

Since 1995, Transparency International (TI) has come up with a Corruption Perceptions Index (CPI). The CPI measures the perceived levels of public-sector corruption in a given country and is a composite index, giving an aggregated outcome assessment. It draws on a large set of expert and business surveys for its estimation. The index ranks countries of the world according to the degree to which corruption is perceived to exist among public officials and politicians. The 2008 CPI scores 180 countries on a scale from 0 (highly corrupt) to 10 (highly clean).

Denmark, New Zealand, and Sweden share the highest score at 9.3, followed by Singapore at 9.2. Bringing up the bottom is Somalia at 1.0, with Iraq and Myanmar at 1.3 and Haiti at 1.4. The poor performance of many of the world's poorest countries highlights the fatal link between poverty, failed institutions, and graft. Although the CPI itself is not geared to pinpointing interventions, TI recommends developing strong oversight through parliaments, law enforcement, independent media, and a vibrant civil society as ways to fight corruption.

<sup>8</sup> In our context, sustainable forest management would be, *inter alia*, concerned with issues of commercial timber trade and forest business enterprises. In particular, there would be interest in ensuring that concession allocation processes are transparent and competitive. Bid invitation through public announcements with a reasonable time to closing would promote transparency. Tracking the number of announcements and days available before bid submission would be good examples of AGIs for forest governance.

<sup>9</sup> [http://www.transparency.org/policy\\_research/surveys\\_indices/cpi](http://www.transparency.org/policy_research/surveys_indices/cpi).

### The Global Integrity Index<sup>10</sup>

Global Integrity, an international nonprofit organization that tracks governance and corruption trends around the world, compiles the Global Integrity Index. Early efforts started in 2006 and currently the index is aggregated from more than 300 discrete integrity indicators; it provides information largely on governance outcomes. The Global Integrity Index groups countries into five performance tiers according to a country's overall aggregated score: very strong (90+), strong (80+), moderate (70+), weak (60+), and very weak (<60). The data for the indicators come from peer-reviewed assessments by local experts. These are then vetted by peer reviewers to validate and increase the reliability of the data.

Instead of trying to measure actual levels of corruption (an extremely difficult task and one that is of dubious value and likely to yield only poor-quality estimates), Global Integrity quantitatively assesses the *opposite* of corruption—that is, the access that citizens and businesses have to a country's government, their ability to monitor its behavior, and their ability to seek redress and advocate for improved governance. The integrity indicators break down that access into a number of categories and questions, ranging from inquiries into electoral practices and media freedom to budget transparency and conflicts of interests regulations.<sup>11</sup> Thus, integrity indicators identify strengths and weaknesses in the national anticorruption architecture and serve as a road map for possible reforms.

### The World Bank's Country Policy and Institutional Assessment<sup>12</sup>

The World Bank's Country Policy and Institutional Assessment (CPIA) measures the quality of policies and institutions that are related to economic growth and poverty reduction and considered to be the main determinants of aid effectiveness

<sup>10</sup> <http://report.globalintegrity.org/globalIndex.cfm>.

<sup>11</sup> For 2008, the integrity indicators were organized into 6 main categories and 23 subcategories. The main categories were Civil Society, Public Information and Media and Elections, Government Accountability, Administration and Civil Service, Oversight and Regulation, and Anti-Corruption and Rule of Law.

<sup>12</sup> <http://web.worldbank.org/WBSITE/EXTERNAL/EXTABOUTUS/IDA/0,,contentMDK:20941073~pagePK:51236175~piPK:437394~theSitePK:73154,00.html>.

prospects. “Quality” refers to how conducive the ensuing framework is to fostering poverty reduction, sustainable growth, and the effective use of development assistance. The assessment has evolved into a set of 16 criteria, which are grouped in four clusters: economic management; structural policies; policies for social inclusion and equity; and public sector management and institutions. Criteria 12 (Property Rights and Rule-based Governance), 15 (Quality of Public Administration), and 16 (Transparency, Accountability, and Corruption in the Public Sector) are particularly relevant to assessing some elements of the quality of governance, including accountability, transparency, corruption, and protection of property rights. Each criterion is rated on a 6-point scale, with 1 indicating the lowest quality. Ratings for each of the criteria reflect a variety of indicators, observations, and expert judgments.

### The World Bank Institute’s Aggregated Governance Indicators<sup>13</sup>

In the late 1990s, the World Bank Institute and the Research Department of the World Bank started a research program on governance indicators. At that time there were no internationally comparable measures of governance (Kauffmann et al. 1999) have developed six governance indicators called worldwide governance indicators. They used an extension of the unobserved components model to aggregate a database of hundreds of cross-country governance indicators into six dimensions:

1. *Voice and accountability* looks at indicators of governance that deal with the political process, civil liberties, political rights, and the freedom of the press. This indicator attempts to measure the extent to which the citizens of a country participate in the selection and running of governments. This also includes the independence of the media.
2. *Rule of law* looks at issues such as the protection of property rights and the effectiveness and independence of the judiciary. It also assesses the incidence of violent or nonviolent crime, the effectiveness of the police, and whether or not contracts are enforced.
3. *Control of corruption (or graft)* attempts to measure the exercise of public power for private gain, including elite capture. Corruption is a common symptom of poor governance.
4. *Government effectiveness* looks at the quality of public services, the quality of civil service, and the degree of its independence from political pressures. It also assesses the quality of policy formulation and implementation and the government’s commitment to such policies.
5. *Regulatory burden/quality* measures the ability of the government to formulate and implement sound policies and regulations that permit and promote private-sector development. Some of the concepts measured are regulations applicable to exports, unfair competitive practices, and foreign investments.
6. *Political stability and absence of violence* assesses the perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means. With this indicator, issues such as military coup risk, armed conflict, country terrorist threat, and frequency of political killings are assessed.

The value of these indicators can lie between –2.5 (red-flag alert) and +2.5 (ideal). Indicators have been estimated from available data from perception-based surveys administered to stakeholders, business climate investment surveys, competitiveness assessments, etc.

These indicators make available a broad picture of the quality of governance in a country and its change across time. They also allow for international comparisons across countries. However, they are much less useful in offering insights into the causes for a particular state of governance and how it might be improved.

## LESSONS FROM THE LITERATURE REVIEW ON OVERALL GOVERNANCE INDICATORS

Our key ideas from the analysis of overall governance initiatives are as follows.

### Highly Aggregated Indicators Provide Useful Information

Although these are aggregate governance indicators, most do not attempt to measure all aspects of governance. Transparency International has designed the CPI for a targeted purpose, as an indicator of perceived corruption rather than as a

<sup>13</sup> <http://www.govindicators.org/>.

broader governance indicator. The Global Integrity Index focuses on accountability, transparency, and control of corruption. The World Bank's CPIA is concerned with economic growth and poverty reduction. The World Bank Institute's Aggregate Governance Indicators are as close as any of these come to a general measurement of governance.

This ESW aims to build a tool that looks at forest governance as a whole. Forest governance issues are embedded within overall governance issues. To cover this aspect fully, the tool must track the scope of issues covered by the broader indicators. Where necessary, the forest governance indicator must look beyond the forest sector to measure parts of general governance that affect forests.

### **An Indicator's Form Must Follow its Intended Use**

Transparency International has designed the CPI to allow country comparisons, but because of its design, it is not a particularly good tool for understanding the causes of corruption or the steps needed to improve governance (Galtung 2006). It is based on an aggregate of public opinion surveys not uniformly applied in every rated country. In contrast, some of the other aggregate indicators are easily broken down into component parts. The closer the components come to measuring root causes or specific areas open to change, the more guidance the tool provides for reform. Because this report's intended objective is to support reform, it will build a tool whose components can point to areas needing reform.

### **Useful Measures of Governance Are Often Subjective**

Achieving objectivity in the close measurement of governance is hard. Some indicators draw on objective measurements, such as the European Central Bank's reliance on statistics on lifespan, inflations, and income distribution (Afonso et al. 2003, 2006). These sorts of statistics are open to criticism that they are indirect measures that share only a rough connection with governance; they are really measuring something else. Some indicators draw on subjective impressions, collected and analyzed with rigor. These are open to criticism that they are not precise and that the measurement cannot be consistently repeated. However, the limited availability of objective statistics measuring governance

outcomes leads practically to the use of subjective measures. Subjective measures can capture reality. They can be validated through repeated measurement or peer review, and the resulting measures can have a high probability of being accurate, verifiable, and monitorable (Campos and Pradhan 2007, Introduction; Kaufmann et al. 2002).

### **Indicators Will Often Require New Data**

If an aggregate indicator is to be easy to produce, the individual indicators that make up an aggregate indicator must be easy to find "on the shelf" or easy to measure. Some aggregates draw on existing measures, which they combine and process into a novel format. Transparency International uses a mix of third-party surveys, a practice that has drawn criticism (Galtung 2006). The European Central Bank's indicators combine readily available demographic and economic data (such as infant mortality, longevity, school enrollment, inflation, and gross domestic product growth) with indicators of factors harder to quantify (such as red tape, corruption, and quality of the judiciary). The World Bank Institute uses a large number of "off the shelf" ratings: in 2007, it used 340 individual variables taken from 35 sources produced by 32 organizations. These sources included other aggregates, such as the Global Integrity Index and the World Bank's CPIA (Kaufmann et al. 2008).

Rather than look for data from others, some aggregators start with their own single indicators. The World Bank's CPIA uses subjective Bank staff ratings of different criteria on a common one-to-six scale. Global Integrity also generates its own data, but it does so through outside expert evaluators, verified by peers. These approaches that generate new data are adaptable to any country, regardless of what statistics the country keeps or what data others have gathered there. Thus, this ESW favors using indicators that are not entirely dependent on pre-existing data.

## **EXAMPLES OF INITIATIVES ON FOREST GOVERNANCE INDICATORS**

Section I of this ESW offered a conceptual definition of forest governance: the means by which officials and institutions (both formal and informal) acquire and exercise authority in the management

of the resources of the sector. Several initiatives have sought to improve forest governance by providing operational measures of it. The following is a brief discussion of some of the most prominent efforts to date.

### The International Tropical Timber Organization

The International Tropical Timber Organization (ITTO), in 1992, was the first to introduce the criteria and indicators concept and terminology (Prabhu et al. 1998). Its indicators were for tropical forests. It revised its indicators in 1998 to reflect developments that followed the United Nations Conference on Environment and Development in 1992, including the release of related policy guidelines by ITTO and the development of parallel criteria and indicators for temperate and boreal forests. In 2001 ITTO developed a standardized reporting format to get feedback from users of the indicators. In 2005, it revised its criteria and indicators based on user feedback, expert input, and experience with national indicators that used the ITTO set as a model (ITTO 2005).

The ITTO 2005 set has seven criteria for sustainable forest management: (1) enabling conditions for sustainable forest management; (2) extent and condition of forests; (3) forest ecosystem health; (4) forest production; (5) biological diversity; (6) soil and water protection; and (7) economic, social, and cultural aspects. Obviously, the indicators look well beyond the field of governance. Most of the governance-related indicators are included under criterion one.

ITTO's declared purpose for its indicators is to monitor and evaluate efforts to achieve sustainability and to track the effect of reforms. Some of the indicators are actionable (e.g., a requirement to list known gaps in forest policies, laws, and regulations) but many are largely descriptive (e.g., presence or absence of a framework for the control of forest management as regards policies, laws, or regulations). Some of the governance indicators are measurable only at the national level, while some (e.g., capacity for planning) independently apply at the level of the forest management unit.

Feedback has improved the indicators, both in their theoretical grounding and their practicality of use. The ITTO indicators were first, and no other set can claim the benefit of such extensive practical testing and revision.

However, they are not perfect for all purposes. Being general and practical, the indicators sometimes opt for the simple and do not cover all areas in depth. One observer, looking at the version of the indicators from 1998, criticized them for not fully covering macro- and extra-sectoral links or the broad governance issues such as freedom, transparency, and accountability (Mayers et al. 2002). Even with that criticism, the new versions touch on transparency and accountability only briefly, in an indicator measuring community and indigenous people's participation.

In sum, the ITTO indicators are not all actionable, and although they are broad and practical, they do not cover governance with particular depth.

### International Institute for Environment and Development

International Institute for Environment and Development (IIED) introduces the *pyramid of key elements of good forest governance*, which is a diagnostic and planning tool to be used by stakeholders to assess and plan the key enabling conditions for good forest governance (Mayers et al. 2002). IIED introduced the pyramid concept at the November 1999 Forest Certification and Verification Workshop of the World Bank/World Wildlife Fund Alliance to illustrate how certification should be viewed in the wider context of various efforts toward sustainable forest management, and to stress how it can be affected by various critical policy and institutional elements required for sustainable forest management. The pyramid looks at some of the elements of good forest governance that are common to a wide range of nations. The elements are generally desirable elements of good practice derived from a variety of sources and experiences. The elements make up the following set and provide a checklist to stimulate thinking, not to confine or limit responses:

1. *Verification of sustainable forest management* includes audit, certification, or participatory review.
2. *Extension* involves the promotion of sustainable forest management to consumers and stakeholders.
3. *Instruments* include a coherent set of "carrots and sticks" for implementation.

4. *Policies* include forest policies, standards for sustainable forest management, and legislation in place.
5. *Roles* include the various stakeholder roles and institutions in forestry and land use.
6. *Foundations* include property/tenure rights and constitutional guarantees, market and investment conditions, mechanisms for engagement with extra-sectoral influences, and recognition of lead forest institutions (in government, civil society, and private sector).

According to the authors, the first five tiers of the pyramid describe those good governance elements that are under the control of forest stakeholders. However, the pyramid's foundations are less directly controlled by forest stakeholders, but are crucial to an understanding of the constraints and opportunities originating from beyond the forest sector. Each tier represents a group of elements, and their vertical arrangement suggests a generic sequence, with elements in the tiers toward the bottom of the pyramid envisaged to be more fundamental to progress in many contexts.

While each tier describes an element of forest governance, by itself it does not explain the processes needed to generate that element. Putting in place the elements of good governance is achieved through *basic systems* that point to implementation of good forest governance *attributes*. The authors identify five such systems, which should include certain good governance attributes (in parentheses):

1. *Information* (access, coverage, quality, transparency)
2. *Participatory mechanisms* (representation, equal opportunity, access)
3. *Finances* (internalizing externalities, cost efficiency)
4. *Skills* (equity and efficiency in building social and human capital)
5. *Planning and process management* (setting priorities, making decisions, coordination, and accountability)

The better developed each of these systems is, the better the overall forest governance is likely to be.

The pyramid and its elements offer a comprehensive agenda for thinking through the main elements of forest governance—policy, law, roles, capacities, and instruments. The indicators and elements provide the basis for a country-specific process toward better forest governance, and the

assessment can be carried out with different degrees of information and participation.

However, the approach has several limitations too. The indicators cannot assess the condition of forests or their management in a country, nor do they provide objective results. The Brazil case study shows that the use of the tool is highly subjective, and its legitimacy depends on who does it, and how. While it is easy to classify the elements under scrutiny into the proposed three categories (red, amber, and green) of their quality, it is far too coarse to allow for prioritization of reform activities. Clearly, the approach cannot deliver criteria and indicators sufficiently specific for judging the state of forest governance in any one country, and thus it cannot directly contribute to actionable indicators (without much more country-based field testing). Finally, the approach can say little about the pattern of sequencing of reforms, as it is entirely possible that some “gravity-defying” progress can in reality be made on upper tiers even when lower tiers are not complete.

### **Criteria and Indicators for the Conservation and Sustainable Management of Temperate and Boreal Forests: The Montréal Process**

The Montréal Process Working Group on Criteria and Indicators for the Conservation and Sustainable Management of Temperate and Boreal Forests (MP) was launched in 1994 as a response to the Rio Forest Principles. In February 1995, member countries adopted the Santiago Declaration affirming their commitment to the conservation and sustainable management of their respective forests and endorsing 7 criteria and 67 associated indicators as guidelines for policymakers to use in assessing national forest trends and progress toward sustainable forest management.<sup>14</sup>

The seven MP criteria listed below characterize the essential components of sustainable forest management (e.g., biodiversity conservation). Each criterion is characterized by a set of indicators,

<sup>14</sup> Today, the Working Group has 12 member countries: Argentina, Australia, Canada, Chile, China, Japan, Republic of Korea, Mexico, New Zealand, Russian Federation, United States of America, and Uruguay. These countries account for 90% of the world's temperate and boreal forests, 60% of all forests, 45% of international trade in timber and timber products, and 35% of the world's population. A parallel process, the Helsinki process, covers the European temperate and boreal countries. (Russia is a member of both processes.)

which provide a way to measure and describe the criterion in detail.<sup>15</sup>

- Conservation of biological diversity
- Maintenance of productive capacity of forest ecosystems
- Maintenance of forest ecosystem health and vitality
- Conservation and maintenance of soil and water resources
- Maintenance of forest contribution to global carbon cycles
- Maintenance and enhancement of long-term multiple socioeconomic benefits to meet the needs of societies
- Legal, institutional, and economic framework for forest conservation and sustainable management

The MP criteria and indicators provide a common framework for member countries to describe, monitor, assess, and report on national forest trends and progress toward sustainable forest management. As such, the MP criteria and indicators help provide an international reference for policymakers in the formulation of national policies and a basis for international cooperation aimed at supporting sustainable forest management.

While many MP indicators are quantitative in nature, others are qualitative or descriptive. Some indicators can be readily measured (e.g., percent of forest cover). Others may require the collection of new or additional data, the establishment of systematic sampling, or even basic research. When indicators are measured periodically over time, they indicate changes and trends in conditions relevant to sustainable forest management, including natural, social, economic, and policy conditions.

These MP criteria and indicators were the product of extensive consultations with forest managers and users, researchers, the private sector, and other stakeholders in member countries, as well as with technical and policy experts from other temperate and boreal countries and the international technical and scientific community. The criterion on the legal, institutional, and policy frameworks includes a few indicators on property rights, enforcement of laws and regulations, public participation, supportive economic policies, etc. These provide useful information for the framework proposed in this report.

<sup>15</sup> For details see website: [www.rinya.maff.go.jp/mpci](http://www.rinya.maff.go.jp/mpci)

## Center for International Forestry Research

Since 1994, the Center for International Forestry Research (CIFOR) has been working on criteria and indicators for sustainable forest management and field testing them at the forest management unit level. Assessment at this level is more precise and the impacts of forest management practices on the forest and local people are more evident. It is also easier to combine the more powerful and easily useable criteria and indicators and eliminate those that are difficult to use (Prabhu et al. 1998).

CIFOR proposes a toolbox of criteria and indicators for sustainable forest management. The toolbox is made up of principles, criteria, and indicators that are intended to harness local expertise about standards for forest management in particular ecological regions or for particular forestry regimes.<sup>16</sup> This toolbox covers forest management generally, including elements of governance; CIFOR does not break out governance as a separate category. CIFOR's generic template for criteria and indicators (CIFOR 1999) includes policy, social, and production categories:

- Policy
  - There is sustained and adequate funding for the management of forests.
  - Precautionary economic policies exist (such as budget reserves, performance bonds, and anticorruption measures).
  - Non-forestry policies do not distort forest management.
  - Legal framework protects access to forest and forest resources.
- Social
  - Forest actors have a reasonable share in the economic benefits derived from forest use.
  - People link their and their children's future with management of forest resources.
- Production
  - Forest management plan is comprehensive.
  - Implementation of the management plan is effective.
  - An effective monitoring and control system audits management's conformity with planning.
  - There is equitable distribution and presence of economic rent.

<sup>16</sup> For details about the criteria and indicators refer to <http://www.cifor.cgiar.org/acm/pub/toolbox.html>.

The toolbox developed by CIFOR is easy to use. The stakeholder tests carried out by CIFOR at the forest management unit level confirmed the potential of these criteria and indicators to assess forest management operations. In a short time even untrained groups managed to work out a differentiated assessment of the forest management activities, although social sets of indicators were much more difficult to apply than ecological/policy and forest management sets.

The criteria and indicators developed by CIFOR are powerful in that they are actionable and linked closely to interventions and reforms. However, they apply mostly at the level of the forest management unit, and the indicators are less relevant to a broader program of improvement of forest sustainability. In particular, the social indicators exhibit much lower rates of commonality across location, regions, and nationalities (see Prabhu et al. 1998, 4). Finally, the fact that this initiative does not single out governance for specific focus limits its utility for tackling forest governance issues.

### Chatham House Initiative

Since 2006, Chatham House has published assessments of the global response to the problem of illegal logging and associated trade. In its assessment, 20 indicators are used to measure both the ultimate end goals and the early response, including issues such as building awareness and political will, providing financing, and developing policies.<sup>17</sup> The indicators have been used in three different types of countries: producer countries, ultimate consumer countries, and countries involved in processing timber for export (Lawson 2007).

The 20 indicators proposed in the project cover the following areas:

- *Awareness of illegal logging problem:* This includes the extent of awareness. For example, it could be assessed by evaluating the growth in media coverage and the change in the content of awareness campaigns. Indicators within this category include increased awareness of the illegal logging problem at all levels.
- *Policy and initiative development and adoption:* This includes measures such as policies, programs, and actions aimed at tackling the

problem of illegal logging undertaken by both the public and private sectors and in producing, processing, and consuming countries. Indicators within this category include timber procurement policies and other related initiatives, the level of development assistance for forest governance programs on the part of key consumer countries, forest policies and regulations in key producer countries, and development or revision of timber and wood product procurement policies and supply chain initiatives.

- *Policy and initiative implementation:* Examples of indicators within this category include implementation of timber procurement policies and legislation to prevent trade in illegal timber, implementation of forest policies, and implementation of wood product purchasing policies and initiatives.
- *Intermediate outputs and effectiveness:* Initial outputs should result from the effective implementation of policies. Examples of indicators within this category include declining trends in logging in protected areas, convictions achieved for forest crime and severity of penalties imposed, and improved transparency of a range of forest information, including regarding that for concession ownership.
- *End goal or output:* If the policies and initiatives are effectively implemented and monitored at all levels (producer, processor, and consumer and in public and private sectors) then the end goal of a reduction in the production of and trade in illegally produced wood products will be achieved. The indicator used in this category is decrease in illegal logging (production and trade), measured in percentage, volume, and value terms.

In 2008, Chatham House (2009) initiated a pilot assessment in five countries (Indonesia, Cameroon, Vietnam, the United States, and the United Kingdom—two producers, one processor, and two final consumers, respectively). The indicators/verifiers used in the assessment were organized into four groups—awareness, government policy development and implementation, private policy development and implementation, and actual levels of illegal logging and associated trade. Because the 2007 study found that sources of information with which to assess the indicators was quite thin,

<sup>17</sup> For details on Chatham House Indicators see Saunders and Nussbaum (2008) and Lawson (2007).

this pilot undertook a survey of perceptions of experts to fill the information gap. A detailed survey questionnaire was designed for this purpose. About 30 to 40 experts were targeted from each country, including from government, private sector, NGOs, academia, and the donor community, to ensure a balanced response to the questionnaire. In terms of results, for the period 2005–2008, while awareness indicators showed a decline in most countries, the other three suggested considerable improvement.

The Chatham House initiative draws conclusions from a combined set of objective and subjective data with a heavy emphasis on the latter, gathered through questionnaires administered to country experts. A large number of the questions are scored via a yes/no response, and the corresponding indicators are aggregated up from these. It appears that most of the indicators belong to the input or output categories. The initiative focuses on tracking global responses to illegal logging and associated trade. It therefore does not contribute directly toward strategy formulation and identification of priority actions to improve forest governance, which is the major focus of this report.

### **The World Resources Institute Indicators**

The Governance of Forests Initiative (GFI), a collaboration between the World Resources Institute (WRI), the Instituto do Homem e Meio Ambiente da Amazonia (IMAZON), and the Instituto Centro de Viva (ICV), has been working on several governance indicators with an aim of identifying processes and practices that protect forests and improve the livelihoods of forest-dependent people. The major premise is that good processes and capable institutions are critical to addressing the challenges of sustainable management of forest resources and reducing deforestation.<sup>18</sup>

The GFI indicator framework is intended to be an objective but qualitative assessment of the integrity of processes and arrangements that determine how decisions about forest management are made. In this endeavor it has developed a GFI indicator framework that provides a common definition of “good forest governance” based on five principles: transparency, inclusiveness, accountability, coordination, and capacity.

The indicators of governance of forests in the framework are based on several diagnostic questions that assess the quality and adequacy of a particular aspect of governance. The responses to these questions result in one of five values or scores, on a scale from good to bad. The focus of the indicators is on *how* decisions are made. However, the relevance of the questions being asked (to develop the values of the indicators) is linked to the extent to which they result in concrete changes in outcomes or outputs in the forest sector.

The main issues addressed are land and resource tenure, land use planning, forestland management, and revenue distribution and economic incentives. The framework considers these issues in the context of three main components of forest governance: actors, rules, and practice. The information needed to estimate indicator values will be drawn from a number of assessments (“formats”), principally case studies but also general assessments and expert assessments. A first round of evaluations will focus on Brazil and Indonesia.

This initiative uses a useful approach of organizing information along two axes (the five principles of good governance and the three governance components) and will likely make a valuable contribution to our understanding of forest governance once the results from the pilots are available. However, from the available description, it appears that the initiative will focus only on four main issues: land tenure, land-use planning, forestland management, and revenue distribution and economic incentives. It is not entirely clear how priority reforms will be identified and how actionable they will be.

## **LESSONS FROM THE REVIEW OF THE LITERATURE ON FOREST GOVERNANCE**

The key findings from a review of the six major initiatives described in the previous subsection are as follows.

### **A Holistic Approach to Forest Governance is Missing**

The initiatives described above focused on specific aspects of governance but much less on developing a comprehensive approach to forest governance. The ITTO and the MP approaches cover sector

<sup>18</sup> For concept paper refer to: <http://www.wri.org/climate/governance-of-forests-initiative>.

indicators extensively but do not cover governance in any particular depth. Similarly, the CIFOR approach develops a set of actionable indicators, but at the level of a forest management unit, and without particular emphasis on governance. The WRI initiative circumscribes the definition of good governance to mean “good processes” and “capable institutions” but is not explicit as regards the operational definitions of the two terms. The IIED approach is arguably the most detailed, but even that includes only key elements of good forest governance. However, these are all helpful efforts, and this ESW has drawn upon them to consolidate various elements and sub-elements of forest governance toward developing the much-needed holistic forest governance framework applicable to all forest types.

### **Governance Aspects Need to be Aligned to Forest Sector Development Objectives**

Governance concerns have to be aligned to specific forest sector objectives such as promoting poverty reduction, commercial extraction, development of woodlots, payments for environmental services, management of protected areas, etc. For example, if the promotion of sustainable commercial logging is a priority objective for a country, governance issues related to the management of logging concessions, including the processing of allocation to commercial interests, would assume additional importance. Similarly, if a country envisages that its forest should contribute to poverty reduction, governance issues related to benefits sharing, decentralization of forest management, etc., should take precedence. However, these concerns should not substitute for but should complement the broader sector governance analysis; the broad approach to governance proposed in this ESW allows for this possibility.

### **Economic Aspects of Forest Governance Need Greater Focus**

In the initiatives considered above, little effort has been made to analyze in depth the economic aspects of forest governance. Governance outcomes in forestry depend on how well the economic policy framework and incentives are aligned with the private and social objectives of forest utilization and conservation. Significant improvements in forest governance can be achieved by using

appropriate economic incentives and by removing distortionary incentives.<sup>19</sup> The WRI and MP initiatives, by considering the state of economic incentives, include a slice of the whole package of economic factors, but this is not enough. Thus, this ESW attempts to fill the gap related to the economic aspects of forest governance.

### **Actionable Governance Indicators Should be Highlighted**

The existing literature makes little attempt at classifying indicators into input, output, and outcome, and none whatsoever as regards “actionable.” This ESW makes clear that different indicator types—input, output, outcome, and actionable—perform distinct functions and need to be identified as such. In particular, actionable indicators play a crucial role in identifying priority governance reforms and in monitoring whether suggested interventions are in fact having the desired impacts on the particular governance system and its determinants. Our reading is that actionable indicators are scattered around in the extant initiatives without being identified as such. The forest governance framework proposed in this ESW facilitates a classification of indicators into indicator types and will be especially helpful in identifying actionable forest governance indicators.

### **Overall Governance Indicators Complement Sector-Specific Indicators**

In Section I, the ESW focused on the fact that forest governance problems are often an offshoot of the larger governance problems faced by a country. Thus, it is difficult to sustain sector-specific governance reforms without simultaneous improvements in the overall quality of governance. In other words, a “squeaky-clean” forest sector cannot exist when surrounded by poor governance. However, the literature does not focus enough on the interlinkages between the two levels of governance. Overall governance indicators, when combined with sector-specific indicators, provide a powerful approach to understanding the nature of these interlinkages, including the conflicts and complementarities, and will be incorporated into the framework being proposed in the ESW.

<sup>19</sup> See the relevant part of Section III for examples on how economic factors crucially influence the state of forest governance.

# Constructing a Comprehensive and Operational Framework for Forest Governance

This section suggests a framework for actionable forest governance indicators. In effect, it offers an operational definition of forest governance.

As seen from a review of the literature, governance generally, and forest governance in particular, has been defined, interpreted, and applied by researchers and practitioners in many different ways. Proponents have typically approached the issue from the perspective of their own motivation and professional skills, be it economic, legal, environmental, institutional, social, etc. The essentially embedded nature of forestry as a sector in the larger economy has not been given adequate attention. Reflecting this, our information base and intelligence on the issue have been uneven and scattered, and critical pieces are missing. In other words, forest governance has meant different things to different people, and this is not conducive either to developing a common understanding or to discovering solutions. Organizing the available knowledge on governance into a holistic framework is a crucial first step to providing our reform-minded Forest Minister with a useful tool to improve sector outcomes.

## **BUILDING BLOCKS OF FOREST GOVERNANCE**

In seeking to cover the full range of governance issues, the ESW looked to the literature and existing indicators, discussed in Section II. These the ESW analyzed from the perspective of the forest sector. Because economics has such a strong influence on how societies use forest resources, the ESW added a separate category of economic factors affecting forest governance. The report consolidated the available information into five basic categories or building blocks. These building blocks collectively aim to capture all dimensions of forest governance, including the sector-specific and cross-sectoral aspects (i.e., the governance challenges arising from the fact of general governance being intertwined with sector governance).

The five building blocks are:

1. Transparency, accountability, and public participation
2. Stability of forest institutions and conflict management
3. Quality of forest administration
4. Coherence of forest legislation and rule of law
5. Economic efficiency, equity, and incentives

**Table 1: The Building Blocks of Forest Governance and Their Principal Components**

**Transparency, Accountability, and Public Participation**

Transparency in the forest sector  
 Decentralization, devolution, and public participation in forest management  
 Accountability of forest officials to stakeholders  
 Accountability within the forest agencies

**Stability of Forest Institutions and Conflict Management**

General stability of forest institutions  
 Management of conflict over forest resources

**Quality of Forest Administration**

Willingness to address forest sector issues  
 Capacity and effectiveness of forest agencies  
 Corruption control within the forest sector  
 Forest monitoring and evaluation (M&E)

**Coherence of Forest Legislation and Rule of Law**

Quality of domestic forest legislation  
 Quality of forest law enforcement  
 Quality of forest adjudication  
 Property rights recognized/honored/enforced

**Economic Efficiency, Equity, and Incentives**

Maintenance of ecosystem integrity: sustainable forest use  
 Incentives for sustainable use and penalties for violations  
 Forest products pricing  
 Commercial timber trade and forest businesses  
 Equitable allocation of forest benefits  
 Market institutions  
 Forest revenues and expenditures

**Principal Components and Subcomponents**

Each building block includes specific principal components and subcomponents. The initial working set of principal components and subcomponents emerged from insights in the literature, from expert inputs, and from the authors’ practical working experience. Table 1 presents a compact version of the framework; Annex 2 lays out these principal components and subcomponents in greater detail.

The principal components and subcomponents aim to span the full range of governance, to be practical for a policymaker to apply, and to point to areas needing reform. The principal components (ranging from two to seven per building block) serve to flesh out the scope and content of each building block. They also illustrate the interconnections across blocks and beyond the sector.

The principal components are broken down into subcomponents that are observable and potentially measurable activities, closely related to a particular dimension of the forest governance system. The subcomponents will serve as the basis for the development of individual indicators. Because of their close association to specific governance dimensions, they can potentially yield actionable indicators.<sup>20</sup>

In offering the reform-minded Minister of Forestry a practical and useful tool, the set of

subcomponents presented here compromises some precision and objectivity. The ESW has developed a tool that can be applied without great expense, from the knowledge at hand: a way of ordering available information rather than a prescription for new data collection. That led to allowing some broad and subjective measures. The aim was a tool that can identify reform opportunities and track in-country developments in forest governance over time.

**BUILDING BLOCKS OF FOREST GOVERNANCE: DETAILS**

The discussion below explains each building block and its principal components in more detail.

**Transparency, Accountability, and Public Participation**

This building block includes components that deal with government transparency and accountability,

<sup>20</sup> The subsequent step consists of field testing the conceptual framework in a handful of countries. For each subcomponent, evaluative questions will be formulated to assist in the development of actionable indicators. Starting with a large and generic list of subcomponents, a core set of practical indicators will be identified, tailored to a specific country context. These can be assessed for their initial values and provide baselines for monitoring progress.

public participation, quality of monitoring and evaluation of forest activities, freedom of the press, and internal bureaucratic accountability. Participation, voice, and accountability have become dominant themes in the programs of major donors in their attempts to promote better governance (World Bank 2006b; Xu and Ribot 2004). The expectation is that an active and informed citizenry increases the likelihood of sustainable forest resource use. This building block measures the extent to which stakeholders can take part in forest planning and other forest-related activities. It also measures the independence and professionalism of media, which should monitor and hold accountable those in authority (Box 4).

The first principal component of the building block is transparency of processes and operations in the sector. Transparency is essential if government policy processes are to be made more accountable to stakeholders. Transparency provides information that supports public participation and improves planning. When there is no information about laws and institutions governing forest management, predatory agents or unscrupulous officials can easily manipulate the law to their advantage (Tan et al. 2008).

The second principal component is decentralization, devolution, public participation of various stakeholders in forest management, and the consideration of the property rights of indigenous communities and forest-dependent people. This is of particular concern due to the essential role indigenous communities and other forest-dependent communities play in sustainable forest management. The people—legitimate stakeholders—should have a voice in public decisions about the forest. Decentralized decision making can be more responsive to concerns of stakeholders. However, this requires that the decentralized structures are professionally competent and show high integrity at all levels. Otherwise, there is a great risk of local elite capture. Recent discussions on REDD, for example, have brought to the forefront the crucial importance of this aspect for the success of REDD schemes. How to ensure full and effective, continuous participation of indigenous peoples and local (forest-dependent) communities in forest management and national REDD processes has emerged as a key challenge for donors and recipients. In addition to providing a forum for participation, REDD processes will have to strengthen the capacity of these groups (through information

sharing and outreach) to participate effectively and to lead to equitable outcomes. Macqueen (2006) explains that abuses can be very common in isolated forest contexts if the lawmaking process is top-down and education systems are lacking.

The third principal component is the accountability of forest officials to stakeholders. Accountability of public officers to forest stakeholders could be improved by the presence of active and able civil society groups (including indigenous people's organizations), independent and interested media, and social values that support forest conservation. Independent social watchdogs who are responsible for monitoring forest management and use improve not only accountability but also transparency. Social watchdogs who are independent and are officially recognized can demand and promote policies that are in the interest of the public. They can play an important role of asserting the rights of the citizens to know what the government officials are doing as far as forest management is concerned, hence promoting transparency (Young 2007).

The fourth principal component is bureaucratic accountability within the forest agencies, which is the foundation of any governing process. Internal bureaucratic accountability relates to personal ethics, professionalism, commitment, and the promotion of a representative bureaucracy. It also can ensure the legitimacy of rule of law and the concept of the public administrator as the servant of the people. Governments should adopt clear forest policies, disseminate them, and hold officials accountable for implementing them. The precepts of quality assurance and environmental management, as found in the ISO 9000 and 14000, provide a basis for developing specific standards of accountability.

### **Stability of Forest Institutions and Conflict Management**

This building block has two principal components. The first is the stability of forest institutions. Frequent changes of/within forest-relevant institutions are likely to have an adverse impact on objectives, morale, and effectiveness of implementation. Political instability and wars discourage investment, which may harm the long-term management of the forests (FAO 1995). Armed conflict can hamper conservation efforts, especially in protected areas (Matthew et al. 2002). For example, during the Ethiopian–Eritrean war, parks and

### Box 4: Accountability: The Short and the Long of It

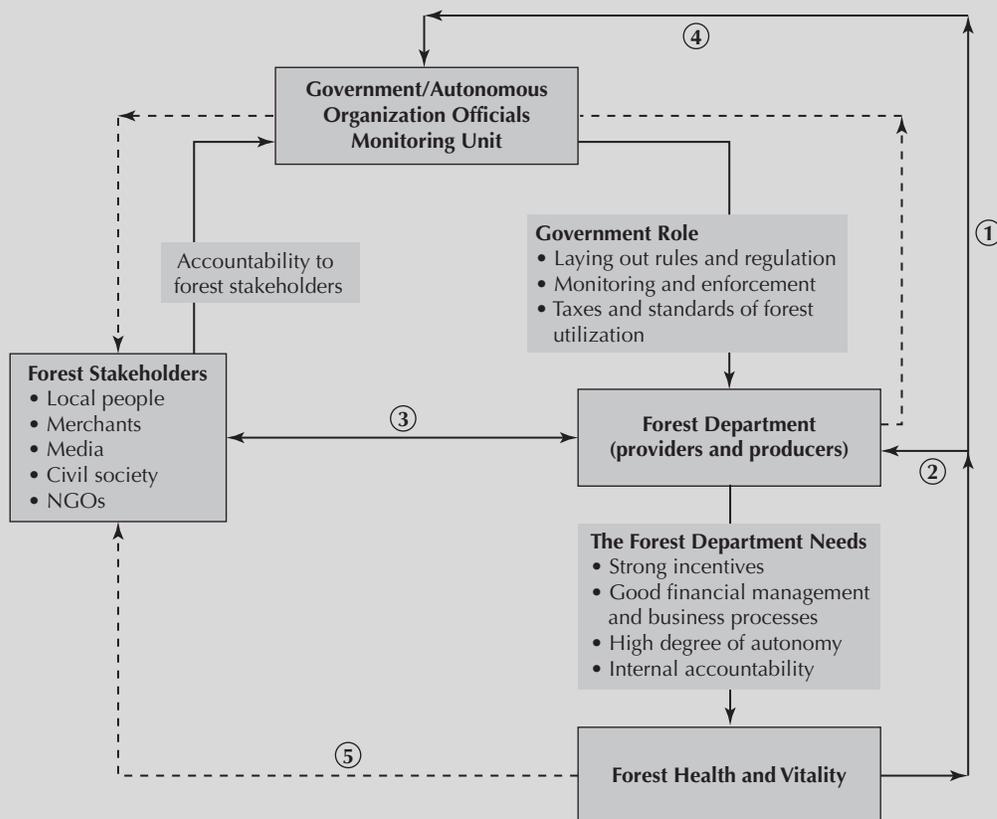
Accountability in the forestry sector is complicated, as Figure 1 illustrates. Governments are expected to define the rules and regulations for managing and using the forest resources and monitor and enforce them. Feedback about the state of the forest to the government (1) enables it to set the right service and tariff specifications, change rules and regulations as needed, and monitor and enforce rules appropriately. The government may own the Forest Department or may assume the role of a monitoring and regulatory authority (with a relatively autonomous Forest Department). To ensure forest health and vitality, the Forest Department needs strong incentives, a high degree of autonomy, good financial management and business processes, and internal bureaucratic accountability. Feedback about the state of the forest to the Forest Department (2) enables the department to adjust the harvesting and production to sustainable levels.

The **route of accountability may be short (direct)**, in which case the forest department is directly

accountable to the forest stakeholders and interacts directly with them as regards the management of the forests (3). Accountability in this case may be increased by making available to forest stakeholders the most up-to-date information about the state of the forests and the performance of the Forest Department. This direct line of accountability is most desirable and will likely ensure a high degree of efficiency of outcomes. The short route of accountability is rare, however; **a long (indirect) route of accountability (4) is more the norm**. A typical example of this is where forest stakeholders hold the government or an autonomous body in charge of monitoring, accountable for the forest sector performance. Forest health and vitality may act as feedback to the forest stakeholders (5) and may determine how much pressure stakeholders put on the government or monitoring unit to maintain forest health and vitality.

Forest stakeholders can hold government and providers accountable only if they have good

**Figure 1: A Simplified Illustration of Accountability in the Forestry Sector (Arrows signify the direction of flow of information along the routes of accountability)**



**Box 4: Accountability: The Short and the Long of It (continued)**

information on the forest resources and on the actual performance of the Forest Department and on what performance they should expect. One way to improve this would be to encourage public participation. If the government is truly committed to improving accountability and performance of the sector where an

indirect route of accountability obtains, it would establish an independent body or organization to monitor the Forest Department's performance and to apply penalties and sanctions. The monitoring unit will need adequate skills, resources, and focus and autonomy of action.

reserves lacked funds for staff, infrastructure, research, and management training (Jacobs and Schloeder 2001; Box 5).

Deacon (1994) concluded that political instability and insecurity of tenure increase deforestation rates. Conserving a forest area to yield a stream of outputs in future years is an investment, and unless landowners have some guarantee that they will receive the future returns, they will not take the risk. Countries that are faced by major constitutional changes, frequent regime changes, and guerilla warfare tend to suffer heavier forest losses, while

countries with democratically elected legislatures and stable, civilian governments have both lower harvesting rates and higher reforestation rates. In another study carried out on historical data, he found that insecure ownership increased the clearing of forests and that investments in forest conservation occurred under stable societies where the rule of law was well established (Deacon 1994).

The second principal component is the nature and level of conflict over forest rights. While domestic reasons principally underlie such conflicts, globalization and high mobility of foreign capital

**Box 5: Political Stability, Conflicts, and Forest Resources**

The Ethiopia–Eritrea conflict was one of the longest-running civil wars in African history. The conflict lasted 30 years and had significant impacts on forest resources and biodiversity in these countries. During the conflict there was lack of basic development and a diversion of finances toward conflict. The result was a decline in the availability of food products and other commodities, a scarcity of petroleum products, high inflation, and rising unemployment. This increased the reliance on the land and its many natural resources, including forests. The most significant consequence of this increase in reliance was higher rates of deforestation in Ethiopia's landscapes for agriculture, livestock production, shelter wood, and fuel wood. Deforestation resulted in the loss of critical habitat, species isolations, and local species extinctions.

The diversion of finances and development energies toward conflict also meant that Ethiopia's conservation

organization and all protected areas received insufficient funding and lacked sufficient infrastructure and equipment. The loss of conservation-related income and understaffing prevented adequate research, monitoring, and enforcement; resulted in ineffective management, training, and maintenance; and was a contributing factor to the decline in morale of environmental management personnel. Political instability also resulted in increased resistance to and ineffective enforcement of conservation bylaws and the government's exclusionary protected-area policy. Although the government tried to use the military to remove encroachers, this only alienated the local people, who felt that their survival was a stake. Need and survival pushed more and more people to move into the parks, even though there was a chance that they could be injured or killed.

Source: Jacobs, M., and C. Schloeder. 2001. *Impacts of conflicts on biodiversity and protected areas in Ethiopia*. Washington DC: Biodiversity Support Program.

also have been new factors in fuelling these conflicts. There is a race to acquire land (especially forest land with unclear or unenforceable ownership rights) for cattle ranching, industrial plantation, soybeans, palm oil, and the like—for its most profitable use. These mega-land acquisitions are often in direct conflict with traditional and customary land rights (World Bank 2008b). They also create a situation where corrupt administrations have an incentive to collude with foreign investors to legitimize contractual arrangements. Conflict over rights, especially violent conflict, breeds uncertainty, discourages investment, and frustrates long-term planning. The subcomponents of this building block include factors such as the perceived fairness of the distribution of rights to the forest and the incidence of violence in disputes over land and rights.

## Quality of Forest Administration

The next building block is the quality of forest administration. This block has four principal components: willingness to address forest sector issues, capacity and effectiveness of forest agencies, corruption control, and monitoring and evaluation.

Without the will to address sector problems, indifferent officials will ignore forest issues and there is little hope for good governance. Indirect but important measures of will include the acceptance of international commitments, the adoption of policies consistent with sustainable management, and the size and stability of government forest administration budgets (Box 6).

The capacity and effectiveness of forest administration is a complex component. Evaluating it

### Box 6: Capacity, Corruption, and Liberian Forests

Diversion of forest income to fuel armed conflict led the United Nations Security Council to impose sanctions on trade in Liberian timber in 2003 (UN Security Council Resolutions 1478 and 1521). After the end of Liberia's civil wars, with an eye toward getting sanctions lifted, the transitional government appointed a Forest Concessions Review Committee to investigate the allocation and use of forests.

Liberia suffered a breakdown of governance on many fronts. The violence and instability during the civil war contributed hugely to forest problems. Rule of law evaporated. Officials and warlords granted opportunities to harvest, which businesses eagerly exploited, with everyone ignoring legal standards and procedures. The Forest Concession Review Committee found that all 72 forest concessions in the country were invalid, either because the government issued them improperly or because the concession holders failed to honor basic concession requirements.

Lack of oversight capacity magnified the problems. The committee found that the government authorized more logging than it could possibly monitor and evaluate. "Improperly monitored and managed permits perpetuate[d] incentives to over-harvest and reduce[d] the long-term sustainable yield." (Liberia Forest Concession Review Committee 2005, p. 34).

With law and oversight absent, the doors were open for corruption. President Taylor's inner circle reallocated concession territories in 1998 and 1999, favoring political cronies, militia leaders, and arms dealers. "Less than 14% of all taxes assessed were actually paid into government accounts and used to fund constructive governmental functions and social development." Some concession holders "funneled their profits from resource exploitation into personal wealth and private militia." (Liberia Forest Concession Review Committee 2005, p. 34).

Liberia embarked on forest governance reforms to address these problems. A new forest law (adopted in 2006) and supporting regulations provide for a chain-of-custody system to track wood harvested from public forests and ensure that all fees and taxes on the wood are paid to the treasury before the wood is exported. The government now awards concessions through sealed bidding, and companies and persons involved in past abuse of the system cannot qualify to submit bids. Concession contracts and payment records are transparent.

The United Nations Security Council, noting Liberia's commitment to governance reform, allowed the timber trade sanctions to expire in 2006.

Source: Liberia Forest Concession Review Committee. 2005. *Forest concession review: Phase III*. Report of the Forest Concession Review Committee, May 31, 2005.

requires understanding the capacity of the forest agencies relative to the demands placed upon them; the quality of their work in inventory, planning, and implementation; the effectiveness and fairness of forest law enforcement; and several other factors. A dominant theme that has emerged recently is that the policy, regulation, enforcement, and management functions of the forestry administration should be separated. Under existing institutional arrangements, typically the same organization would plan, supervise, and manage its own operations. This resulted in a situation of poor accountability and a lack of a drive for results. Recent experiences with separation of their control and monitoring functions, from Albania and other countries in transition, suggest that this can be a powerful approach to improving the effectiveness of the forest management apparatus (ECSSD/PROFOR 2005).

There is widespread agreement that corruption is a symptom of public sector malfunction (World Bank 2000). Corruption in the forest sector and violation of forestry laws undermine the rule of law and act as a disincentive to legitimate investment in the forest sector (World Bank 2006b). Lower corruption is associated with greater economic growth and lower deforestation rates (Meyer et al. 2003). Combating corruption is one of the most relevant variables in the design of effective forest policy (Amacher 2006). The proposed indicators in this component look for evidence of anticorruption measures. These include budget and revenue collection transparency, auditing, and anticorruption institutions. Mindful that all these can be in place but be themselves undermined by corrupt activities, one subcomponent asks for a subjective evaluation of the effectiveness of the mechanisms.

The fourth principal component focuses on monitoring and evaluation (M&E). M&E of the resource and of the ways in which the resource is being managed is a powerful instrument to promote transparency and accountability and improve the effectiveness of resource management. M&E is intrinsically challenging and requires a level of technical capacity often unavailable in developing countries. This capacity needs to be built up through programs of technical assistance, supported by a generic set of M&E indicators that can be customized to a specific country situation (World Bank 2008d). The credibility of M&E processes can be considerably strengthened by involving multi-stakeholder groups. In particular, participation of local communities in M&E has

been shown to have a favorable impact on control of illegal logging and associated forest crimes (Acosta 1999; Springate-Baginski and Blaikie 2007).

## **Coherence of Forest Legislation and Rule of Law**

The rule of law is the opposite of the rule by whim of powerful individuals (Kishor and Belle 2004). This building block focuses on the laws governing forest resources and their even-handed implementation. Government policies and laws can have a great impact on the rate of deforestation in a country, but these policies tend to be difficult to capture at the macro level. Principal components considered within this building block include the quality of domestic forest legislation, the quality of civil law implementation, the quality of the implementation of criminal forest law, the quality of forest adjudication, and the protection of property rights.

The principal component measuring the quality of forest legislation looks at how costly it is to enforce the law and whether or not the law improves transparency and accountability (Lindsay et al. 2002). It also has a subcomponent judging the consistency of formal rules with customary rights and other informal rules. Access to forests for rural communities often depends on these informal rules and their interaction with formal rights and laws (see, e.g., Larson et al. 2008; Pacheco et al. 2008; Box 7).

The principal components on civil and criminal forest law enforcement look both at the penal aspect of laws and their enforcement in practice. Forest law should be applied mindful of labor safety and human rights, as they apply to the sector. Penal sanctions should be graduated and appropriate to the offense. The cost of enforcement should be within the capacity of the government, and the resulting levels of crime should be low.

The principal component on adjudication looks at courts and other available institutions for resolving civil disputes and criminal allegations. Ideally, these institutions should be accessible, fair, independent, and affordable, and their judgments should be enforceable. When forest laws are enforced in a manner that is discriminatory and abusive, they have unacceptable, negative impacts on poor people, ethnic minorities, and women. Also, dispute resolution should be reasonably prompt. In some countries, the court dockets are crowded and cases can drag on for years.

### Box 7: Forest Overregulation in Bangladesh

Sometimes regulatory structures grow and take on a life of their own, working against their original intended purpose.

Many countries require transit permits for wood. These permit systems make it more difficult for thieves to move illegally logged timber. In theory, that should increase confidence that trees will not be stolen and increase landowner interest in growing trees. However, sometimes the rules grow until they make it difficult to move any timber at all, unless you are an expert at navigating the bureaucracy. Then, instead of protecting forests, the rules discourage people from investing in trees.

For example, the procedure to get a transit permit to move wood off private land in Bangladesh was as follows. The applicant had to fill out a permit application, Form A, and submit it to the Divisional Forest Officer (DFO). The DFO would have to verify that the land involved was not under management of the Forest Department. Then the DFO would send the application to the Deputy Commissioner (DC) of the District. The DC had to verify who owned the land. This typically required the application to pass through

the hands of the Additional DC/Revenue and an Assistant Commissioner for Land before the application could reach a local official who actually could verify ownership. If the land were near a government forest, the local official would have to arrange for someone from the Forest Department to check the site and verify the boundaries. Then the application would pass back up the chain to the DC, who would return it to the DFO. If the land passed all tests, the DFO would send out a forest ranger to mark the trees. If fewer than 200 trees were involved, the DFO could approve the permit after making a personal inspection of the site. If 201 to 500 trees were involved, the DFO's supervisor would also have to approve the permit. If over 500 trees were involved, the nation's highest forest officer, the Chief Conservator of Forests, would have to sign off.

With all these steps and possible delays, and corresponding opportunities for officials to solicit grease payments, few private landowners braved the system alone. Instead, they sold their trees, at depressed prices, to middlemen who knew how to secure the necessary approvals.

*Source:* Authors' personal communication.

The principal component on property rights calls for security of land and contract rights. A reliable system of surveys and records should back up formal property claims. This component also calls for harmonious treatment of informal or customary rights of rural people. Exercise of informal rights is not always sustainable, but where the rights exist they must be factored into governance. Unresolved conflicts between formal and informal rights are seldom productive (Pacheco et al. 2008). This component gives low marks to open access. In many countries, government ownership is dominant, although the government has limited management capacity. Although most forest areas in developing countries are state-owned on paper, rural people may enjoy open access to them in fact. When property rights over natural resources are absent or unenforced (i.e., when there is open access) no individual bears the full cost of resource degradation. Resources left as open access and near populations with high demand tend to have a high

occurrence of conflicts, are overused, and suffer a "tragedy-of-the-commons" fate (Adhikari 2001; Bromley 1991).

### Economic Efficiency, Equity, and Incentives

Governance outcomes in forestry depend on how well the economic policy framework and incentives are aligned with the private and social objectives of forest utilization and conservation. When reforming economic governance in forests, one objective is to ensure that the society is able to achieve the highest and most equitable outcome possible, under a sustainable pattern of resource use.

The economics framework has to address two key issues on forest resource allocation: first, does the system incorporate externalities and provide the right incentives to move toward an optimal outcome (efficiency), and second, are the benefits distributed among forest users in a fair and just manner (equity). Equity has to consider distributional

### Box 8: Should Trade Policies Be Used to Encourage Domestic Industrialization and Forest Protection?

Maximizing domestic processing of natural resources has long been considered a possible development strategy for primary product-exporting countries. In the forestry sector, timber export taxes (and its most extreme form a log export ban [LEB]) and other restrictive trade policies have been pursued to encourage forest-based industrialization. It is believed that by adding export-oriented downstream processing industries, countries that are currently exporting primary products could increase value added and employment and increase their export earnings. A case has been made for a LEB as a policy for addressing environmental externalities: it is claimed that deforestation will decrease because of the reduction in timber exports.

The theoretical literature, however, does not support the above arguments. Imposing export restrictions is considered a poor policy, harmful to not only

exports but overall growth and welfare as well. The empirical experience has not been encouraging in terms of the impact of LEBs on forest conservation. Tropical timber export taxes and bans have proved only moderately successful in achieving the desired results, as enumerated in a number of country-specific case studies.

By depressing domestic timber prices below their pre-ban level, LEBs have often discouraged adoption of sustainable practices in timber harvesting and have reduced incentives to adopt modern technology geared toward increasing wood recovery ratios in timber processing. Evidence from a case study of Costa Rica illustrates that *removing* an LEB results in significant productive efficiency gains. Under a plausible scenario efficiency gains can be as high as US\$14 million per annum. Under most scenarios, the economy would suffer (small) environmental losses.

*Source:* Kishor, N. M., L. Constantino, and M. Mani. 2004. Economic and environmental benefits of eliminating log export bans—The case of Costa Rica. *World Economy* 24(4), 609–24.

aspects across various stakeholder groups at a point in time (intra-generational equity), as well as distributional aspects across time (inter-generational equity). However, optimizing the outcomes of forest management is difficult due to the complexity of the forest products and services and of the often-competing demands of forest users. Some forest products have market prices, but even some private goods are not necessarily marketed, while both local and global public goods often have no monetary value attached to them. Thus, worldwide, forests are degraded and cleared as a result of economic incentives and relative prices that make forest conversion appear more profitable than sustainable forest management. One way to change this and encourage sustainable forest resource use would be to impute economic values to nonmarketed benefits (Pearce 2001).

There are additional reasons why the decision-making process gets complicated and outcomes depart from the desirable. For one, policy decisions may be driven by political rather than economic and social considerations. Promoting an inefficient local processing industry ostensibly to create local employment and increase foreign exchange earnings, but in reality to build up a vote bank, would

be a good example. This can lead to avoidable distortions in the domestic economy and introduce opportunities for corruption and rent seeking to flourish (Box 8).

Consider another example. Poorly planned industrialization drives (or a misplaced enthusiasm for promoting domestic industrialization), combined with an inadequate knowledge of the resource base, easily lead to a situation where processing capacity may increase to unsustainable levels; in other words, sustainable yield and legally available round-wood imports cannot feed the industry. Huge scarcity rents can be earned, and this leads to endemic illegal logging, where industries try to secure their raw material supply without questioning the source of the feedstock (see Box 9 for the situation in Indonesia). Developing codes of conduct for corporate governance for forest enterprises aimed at transparency of their operations, including ensuring legality of their sources of raw material supply, has proven to be a good way to counterbalance this problem (CEPI 2005; World Bank 2009a).

Equitable access to forest resources is very important for SFM. When local forest resource users do not have what they think are equitable and fair

### Box 9: Balancing Timber Demand with Sustainable Supply in Indonesia

The Ministry of Forestry estimates that the total legal annual harvest of Indonesian native forest timber is approximately 17 million cubic meters and the installed capacity of the forest industry (catering to both domestic and international demand) is approximately 74 million cubic meters. While some of this wood (especially for the pulp and paper mills) comes from existing industrial plantations, it is estimated that the great majority (approximately 75%) of the timber is sourced illegally. This dramatic excess demand creates high rents to illegal timber supply and supports an entire value chain of illegal and corrupt activities. In addition, the readily available and cheap illegal supply undermines all incentives to import timber.

Piecemeal attempts at governance reforms are doomed to failure unless the supply–demand

imbalance is corrected. Elements of a successful strategy would include:

- Revitalizing the efficiency of forest industries to reduce demand by lowering production losses
- Developing a comprehensive wood industry restructuring plan to bring Indonesian mill demand into balance with the nation’s legal sustainable timber supply
- Augmenting sustainable supply through investments in (rapid growth) industrial and community forest plantations and through imports
- Streamlining/reducing the demand for illegally harvested timber through supporting adoption of “green” public and private timber procurement policies, and via the promotion of “green” consumerism

*Source:* Kishor, N. M., and Richard Damania. 2007. Crime and justice in the Garden of Eden: Improving governance and reducing corruption in the forestry sector. Chapter 3 in Campos, J. Edgardo, and Sanjay Pradhan, eds. *The many faces of corruption: Tracking vulnerabilities at the sector level*. Washington DC: The World Bank.

World Bank 2006b, Box 5.4.

property rights to the resource and are not involved in making local rules, they are unwilling to engage in monitoring and sanctioning of uses they consider to be illegal (Agrawal and Ostrom 2001). For example, although the Philippines has promulgated a number of policies favoring community-based management of the forest and has subsequently become known for its active pursuit of people-centered sustainable forest development (Utting 2000), there are still inherent difficulties in the implementation of these policies that limit equity of forestland allocation and access of local communities to forest resources. Where forests are owned and managed by the State (often the case with natural forests in developing countries) and public budgets are tight, these publicly owned forests become the source of illegal logs and lead to widespread degradation, including that of protected areas and national parks. This also puts pressure on the State to provide more surveillance and law enforcement services.

Uneven distribution of wealth and accessibility to forest resources, rampant corruption, weak governance, and opposition by small but powerful interest groups make it difficult to change and

implement sound forest policies (Utting 2000). A recent study of the charcoal sector in Tanzania illustrates this well (World Bank 2009b). An estimated 90% of Tanzania’s energy needs are fulfilled through the use of wood fuels. The contribution of the sector to the overall economy is estimated to be about US\$650 million per year, and it provides income and employment to several hundred thousand people in both rural and urban areas. Yet the sector is characterized by weak governance, poor law enforcement, corruption, widespread evasion of licensing fees and transport levies, and unsustainable harvesting from miombo woodlands. A combination of technical (expanding the areas under woodlots), law enforcement (confronting the vested and powerful interests controlling the sector, and tougher sanctions), and economic actions (providing incentives to offset increased investment costs associated with sustainably produced charcoal) is necessary to ensure that the charcoal sector is put back on the rails and the pressure to deforest the miombo is reduced (World Bank 2009b).

The importance of getting the economic policies right cannot be overemphasized. Inappropriate

subsidies or ignoring nonmonetized benefits may encourage inefficient logging and agricultural encroachment. For example, a study by Sizer et al. (1999) showed that applied subsidies and weak governance in British Columbia resulted in overcutting old-growth forests in remote areas. In another study, Carrere and Lohmann (1996) found that subsidies for paper and pulp industries in Brazil, Chile, Guyana, Indonesia, and Thailand resulted in conflicts with indigenous groups. Poorly planned and implemented pulp and paper industry subsidies resulted in a boom in plantation forestry in Chile. Conflicts with the indigenous people arose because the indigenous people felt that plantation forestry resulted in the destruction of their environment and did not benefit them at all.

Significant improvements in forest governance can therefore be achieved by using appropriate economic incentives and by removing distortionary incentives. Saunders and Nussbaum (2008), however, caution that while clear economic incentives have the potential to deliver behavioral change in the forest sector in the short term, the changes cannot be sustained over a longer term if they are not backed by an effective law enforcement apparatus.

The preceding examples and discussion highlight the importance of economic aspects: ignore economic factors and you can neither understand nor influence the quality of governance! A good economic framework is necessary to promote good overall governance. Thus, this fifth building block includes seven principal components that focus on the following:

- The economic structures of a country should promote ecosystem integrity. Demand and supply of forest resources should be in balance. If, for example, the processing capacity for wood is far greater than the capacity of the domestic forests and a “reasonable” quantity of imports, the forest will be under tremendous pressure for harvest, including illegal extraction.
- Incentives should favor sustainable uses; laws should impose high costs on unsustainable uses. Forest law enforcement should target illegitimate operations (and therefore promote legality).
- Forest resources should be priced to reflect their economic value, externalities and non-market private goods should be included in decision making, and policy distortions and adverse incentives should be eliminated.
- Timber sales and concession allocation processes should be competitive and transparent. Forest taxes, fees, and charges should be simple to understand and implement and should be set at levels to ensure normal profits.
- Equitable distribution of benefits should be promoted. Equity in the allocation of forest benefits encourages public support of governance and public participation in governance processes.
- Healthy commercial institutions and competitive markets should be promoted. Information on forest resources should be publicly available for investors and other stakeholders. This will increase the likelihood that owners of forest rights will make good decisions about the forest.
- Good management of public revenues and expenditures ensures that these benefits go to the public owners of the forest and these costs are well accounted for. This indicates that crime and carelessness are not distorting the public economic signals of forest revenues and costs.



## Findings, Recommendations, and Next Steps

This ESW has shown that poor governance results in poor outcomes in the forest sector. Improving governance is seen as a top priority, and there is a healthy trend among countries that produce and consume timber and forest products to seek cooperative solutions. At the same time, country-level efforts have also been stepped up. Despite these positive trends, much more needs to be done, as dislodging poor forest governance is a tough and time-consuming task.

There are still significant gaps in our knowledge that constrain our readiness to identify and plan reforms. The ESW argues that three of these are key. First, governance is a broad term, embracing a varied set of actors and factors with complex interrelations. Unless these complexities are properly understood, reform programs will not be successful, and unfortunately our current understanding is inadequate. Second, there have been few attempts to merge the academic efforts with the field experience to accelerate learning and development of practical approaches. This has created what this report calls a problem of the “missing middle.” This is demonstrated by the lack of any notion of a big-picture approach covering crucial aspects of forest governance. Third, governance reforms create losers and gainers. The former block reform efforts, whereas the latter would be supportive. For obvious reasons politicians are unwilling to take “hard” decisions, and the political will required to initiate and sustain reforms is conspicuously lacking. Thus, there is a need to better understand the political economy of reform processes, underpinned by stakeholder analysis.

At the same time, improving governance for the forestry sector has become more important than ever before. In the specific context of REDD, for example, it is widely agreed that without good governance and promotion of legality in the forest sector, REDD schemes have little opportunity to be successful.

In a broader, stylized yet realistic setting, the reform-minded Minister of Forestry (see the Introduction to this study) recognizes that poor governance of the sector stands in the way of reaching its full potential regarding economic, environmental, and social development. But the Minister is unsure how to define the problems, how they can be prioritized and sequenced for implementation, and what the entry points for reforms are.

As a starting point, the Minister needs a practical approach to benchmark forest governance and identify actionable weaknesses. In other words, the Minister needs tools to clearly define and unbundle

the problem before she can identify precise measures to deal with it. The findings of this report suggest that the above challenges have the highest possibility of being addressed by carrying out an in-depth diagnostic of forest governance with the help of a comprehensive forest governance framework. A detailed review of the available literature established that no such framework is currently available, and the main contribution of this report has been to provide such a framework.

The framework was constructed based upon an extensive literature review complemented with expert opinions. Starting with the broadest possible definition of forest governance (see Section I), the literature review concentrated on identifying a large collection of elements making up forest governance. The review also pointed to the importance of the following: (i) focusing on governance indicators as a way to transform governance elements into a practical framework; (ii) giving greater consideration to economic elements as they impinge heavily on the “traditional” elements of forest governance; and (iii) developing actionable forest governance indicators. Finally, the literature review demonstrated that governance can be analyzed from various perspectives (e.g., impact on poverty, economic development, and carbon sequestration and REDD), which should be accommodated into the overall framework.

The framework proposed in this report is underpinned by five building blocks that are envisaged to cover all dimensions of forest governance:

- Transparency, accountability, and public participation
- Stability of forest institutions and conflict management
- Quality of forest administration
- Coherence of forest legislation and rule of law
- Economic efficiency, equity, and incentives

In seeking practicality, the report splits the five building blocks into principal components and their subcomponents. The forest governance elements available in the literature were used to develop the appropriate set of subcomponents (for a detailed version of the framework see Annex 2). The specific benefits to constructing such a framework are as follows:

- Develop a common and comprehensive understanding of the scope and complexity of forest governance and the roles of various

stakeholders in its improvement; and measure and compile a baseline situation of forest governance

- Help to address the “missing middle” problem to improve understanding of the real drivers of illegality and poor governance (including those originating from outside the forest sector), at the field level, and to mainstream governance issues into SFM approaches
- Contribute to the formulation of targeted and actionable interventions to improve forest governance and to make informed choices regarding priorities, especially when improving law enforcement and strengthening institutions
- Contribute to a better understanding of the political economy challenge, including identifying governance components and actions that generate and strengthen the demand for good governance
- Foster stakeholder participation and build up a strong consensus for reforms
- Help to design reforms that have a high chance of success, and identify indicators to measure the progress of reforms; and contribute to a systematic development of actionable indicators for the sector
- Enable identification of sector-specific and broader governance issues and promote mainstreaming of forest governance concerns into the broader governance and anticorruption agendas of the World Bank and other development agencies

To reiterate, this framework provides the reform-minded Minister of Forestry (and/or the champions for change) an essential tool with which to diagnose governance issues in the sector. To be sure, this is not a “quick-fix” approach, and the Minister is well aware of it. However, she is committed to spearheading a sustainable, long-term reform program and is convinced that a tool such as this offers a logical and practical approach, likely to yield concrete outcomes in the future.

In conclusion, it is important to reemphasize that the scope of this report is restricted to constructing a comprehensive conceptual model of forest governance, of broad applicability to several forest types in a large set of countries. Field testing in a handful of countries, developing forest governance diagnostics and actionable indicators, and

preparing a governance toolkit are important follow-up tasks.

## WHAT NEXT?

This report provides the framework for a comprehensive look at forest governance in terms of the five building blocks and their principal components and subcomponents. As such, it provides a better insight into what constitutes “ideal” forest governance. Extensive dissemination of this report (within and outside the Bank) will be undertaken to create awareness and to build up a consensus for the framework and approach proposed in this report (details on a proposed dissemination plan are provided in Annex 3).

The next important step consists of field testing this conceptual framework and developing the diagnostics in a number of countries. The framework is generic in that it can be readily applied to all forest types (tropical, boreal, drylands, miombo, etc.) in a large number of countries. It would be

aligned to support specific sector objectives such as poverty reduction, commercial logging, REDD, etc.

The subcomponents of the five building blocks will be developed into individual indicators, which experts familiar with forest governance issues can adapt to country-specific circumstances and assign a rating. This would enable benchmarking the state of governance in a country and identifying priority areas requiring reforms. In turn, this would allow for a comprehensive assessment (“diagnostics”) of the state of forest governance in that country and identification of the strengths and weaknesses of the system and the scope of reforms necessary to improve governance in the country. A periodic measurement of the identified indicators would enable tracking of the changes and trends in the condition of specific governance components.

The final step will consist of producing a forest diagnostics toolkit. This step will be based on the outcomes of the field testing, additional expert inputs, and stakeholder consultations from different countries.



# Annex 1: Additional Properties of Governance Indicators

Within the three important categories (input, output, and outcome), indicators may be *single* or *aggregate*. Single indicators reflect the state of a single attribute or measure. Mimicopoulos (2007) gives the example of an indicator that reports expenditures for labor or capital investment. The World Bank's "Doing Business Survey" provides single indicators on ten specific areas of business regulation, such as paying taxes and trading across borders (Kaufmann et al. 1999). Although single indicators cover only a single aspect of governance, they offer an understanding of governance impacts on the ground. *Aggregate indicators* are composites, usually based upon individual indicators from numerous sources. They compile multiple measures into a single index using an underlying model. Aggregate indicators provide a more rounded measure of governance than single indicators. However, using a single aggregate indicator sacrifices the detail that individual indicators offer. Aggregate indicators will be weak if the underlying model is weak. Aggregate indicators also lump disparate aspects of governance and hence may not be helpful in the design and implementation of reforms (Mimicopoulos 2007).

Indicators may be *descriptive* or *predictive*. Almost every indicator has a descriptive aspect, but a few are tied, through theory, to prediction. For example,

certain economic indicators are "leading," with their movement tending to predict upcoming movements of the general economy. The U.S. Millennium Challenge Corporation, in its search for natural resource indicators with a link to "economic growth or poverty reduction" (Millennium Challenge Corporation 2005), shows a preference for predictive indicators.

Indicators may be *direct* or *indirect* measurements of the desired criterion. Some criteria, such as ratification of international accords, existence of an ombudsman's office, or levels of staffing, lend themselves easily to direct measurement: yes, the country has ratified the treaty; no, it does not have an office with an ombudsman function; and it employs  $x$  number of forest officers in enforcement. Some criteria, such as the presence of corruption, are by their nature hidden. For these, the best alternative may be indirect measures, such as the country's reputation for corrupt activities.

Indicators may be *objective* or *subjective*. In the previous set of examples, the level of enforcement staffing can be objectively determined; a person's opinion on the corruptibility of those staff is subjective. Objective indicators tend to be easier to replicate and verify. However, not every criterion yields easily to objective measurement.



# Annex 2: The Five Building Blocks of Forest Governance and Their Components: An Indicative List

(NOTE: The following list is not final but is a work in progress. Starting with this large and generic list of subcomponents, the subsequent step consists of field testing the conceptual framework in a handful of countries. For each subcomponent, evaluative questions will be formulated to assist in the development of actionable indicators. From the generic list, the aim is to identify a core set of practical actionable indicators tailored for a specific country context. These can be assessed for their initial values and will provide baselines for monitoring progress in improving forest governance.)

Principal Components	Indicative Subcomponents
<b>Building Block 1: Transparency, Accountability, and Public Participation</b>	
Transparency in the forest sector	<ul style="list-style-type: none"> <li>• Public availability of forest data, plans, laws, budgets, and other information relevant to forest use and management</li> <li>• Public notice of any pending forest agency actions</li> <li>• Transparent allocation of timber and NTFPs concessions</li> </ul>
Decentralization, devolution, and public participation in forest management	<ul style="list-style-type: none"> <li>• Forest communities have institutional roles in creating public forest management rules and plans</li> <li>• Accessibility to forest resources by local communities</li> <li>• Supporting framework for participatory forest management               <ul style="list-style-type: none"> <li>◦ Forest agencies are responsive to public input</li> <li>◦ Participatory processes structured to promote consensus</li> </ul> </li> </ul>
Accountability of forest officials to stakeholders	<ul style="list-style-type: none"> <li>• Feedback to stakeholders about forest resources and their management</li> <li>• Presence of autonomous organization for monitoring activities</li> <li>• Influence and interest of civil society organizations on forest issues</li> </ul>
Accountability within the forest agencies	<ul style="list-style-type: none"> <li>• Management in the forest agencies/departments is oriented toward accountability               <ul style="list-style-type: none"> <li>◦ Clear statement of forest management strategy or goals</li> <li>◦ Goals and objectives of forest management disseminated to rank-and-file officials</li> <li>◦ Forest officials evaluated and held accountable for failures to meet stated goals</li> </ul> </li> </ul>
<b>Building Block 2: Stability of Forest Institutions and Conflict Management</b>	
General stability of forest institutions	<ul style="list-style-type: none"> <li>• Risk posed to forest management from changing forest agency budgets, leadership, or organization</li> <li>• Risk posed to forest management from changing or inconsistent laws and policies and their implementation</li> <li>• Risk posed to forest management due to unreliability of tenure rights</li> </ul>
Management of conflict over forest resources	<ul style="list-style-type: none"> <li>• Perceived fairness of distribution of rights</li> <li>• Level of conflicting claims over public forests</li> <li>• Prevalence of violence or use of arms by forest users</li> </ul>
<b>Building Block 3: Quality of Forest Administration</b>	
Willingness to address forest-sector issues	<ul style="list-style-type: none"> <li>• Commitment to legality, certification, and sustainable management of forests               <ul style="list-style-type: none"> <li>◦ Support for adoption of forest practices code</li> <li>◦ Support for private certification</li> <li>◦ Support for codes of professional conduct among foresters and civil servants</li> </ul> </li> <li>• Institutional separation of key functions—legislative, administrative, and control</li> </ul>

(Table continued on following page.)

Principal Components	Indicative Subcomponents
Capacity and effectiveness of forest agencies	<ul style="list-style-type: none"> <li>• Signatory to and quality of implementation of international commitments related to forestry</li> <li>• Maintenance of workable forest policies                             <ul style="list-style-type: none"> <li>◦ Collaboration with regional partners to harmonize forest policies and legal frameworks</li> <li>◦ Cross-sectoral policy coordination</li> <li>◦ Ability to revise and respond to change</li> </ul> </li> <li>• Public confidence in forest agencies</li> <li>• Capacity of forest agencies                             <ul style="list-style-type: none"> <li>◦ Human resources, skills, and knowledge</li> <li>◦ Equipment and tools</li> <li>◦ Stability of budgets and quality of budget process</li> </ul> </li> <li>• Quality of forest resource management                             <ul style="list-style-type: none"> <li>◦ Quality of information about the forests</li> <li>◦ Quality of planning and impact assessment (including cross-sectoral coordination)</li> <li>◦ Activities in the forest are in accord with plans</li> <li>◦ Commitment to sustainability</li> </ul> </li> <li>• Effectiveness of enforcement institutions                             <ul style="list-style-type: none"> <li>◦ Fairness and responsiveness of forest officers (and police, if involved in forest enforcement)</li> <li>◦ Effectiveness of prosecutors and courts in forest matters</li> </ul> </li> <li>• Forest extension and environmental education efforts</li> <li>• Independence of civil service from political pressures</li> <li>• Taxes on forest products and services uniformly applied and collected</li> <li>• Availability of incentives to practitioners of responsible forest use and management</li> </ul>
Corruption control within the forest sector	<ul style="list-style-type: none"> <li>• Revenues from forests accounted for</li> <li>• Budget transparency</li> <li>• Audits of forestry projects</li> <li>• Existence of government anticorruption institutions and measures, including channels for reporting corruption and whistleblower protection</li> <li>• Effectiveness of anticorruption institutions and measures</li> <li>• Clear code of business conduct for forest industries</li> <li>• Presence of strong nongovernmental watchdogs</li> </ul>
Forest monitoring and evaluation (M&E)	<ul style="list-style-type: none"> <li>• Continuous forest inventory of plots established and measured regularly</li> <li>• Documentation and record of forest management and forest activities to facilitate monitoring</li> <li>• Results of M&amp;E are incorporated into new forest management plans</li> <li>• Result of monitoring are readily available to the public</li> <li>• Local people are involved in monitoring of forest resources</li> </ul>
<b>Building Block 4: Coherence of Forest Legislation and Rule of Law</b>	
Quality of domestic forest legislation	<ul style="list-style-type: none"> <li>• Forest legislation effectively and efficiently implemented by forest agencies                             <ul style="list-style-type: none"> <li>◦ Avoids legislative overreaching</li> <li>◦ Avoids unnecessary and cumbersome requirements</li> <li>◦ Enhances transparency and accountability</li> <li>◦ Informal rules, where present, are consistent with formal rules</li> </ul> </li> <li>• Forest legislation is consistent with participatory governance                             <ul style="list-style-type: none"> <li>◦ Gives local actors a stake in good management</li> <li>◦ Developed with public involvement</li> <li>◦ Clearly states how local people can play a meaningful part in planning, management, and allocation of forest resources</li> </ul> </li> </ul>
Quality of civil law implementation	<ul style="list-style-type: none"> <li>• Forest laws are actually applied</li> <li>• Labor, safety, environmental, human rights, and other laws are applied in forest settings</li> </ul>
Quality of criminal forest law implementation	<ul style="list-style-type: none"> <li>• Suppression: Credible and graduated sanctions, consistently applied</li> <li>• Detection: Capacity to detect illegal activity</li> </ul>

(Table continued on following page.)

Principal Components	Indicative Subcomponents
Quality of forest adjudication	<ul style="list-style-type: none"> <li>• Prevention: Number of forest-related crimes               <ul style="list-style-type: none"> <li>◦ Organized crime</li> <li>◦ General crime</li> </ul> </li> <li>• Access to courts or arbitrators               <ul style="list-style-type: none"> <li>◦ Fair, honest, and independent</li> <li>◦ Affordable, rapid</li> <li>◦ Enforceable outcomes</li> </ul> </li> </ul>
Property rights recognized, honored, and enforced	<ul style="list-style-type: none"> <li>• Formal and informal rights to forest resources in harmony</li> <li>• Security of property rights to forest resources, including carbon</li> <li>• Quality of forest surveys, records, and cadastre</li> <li>• Contracts and agreements honored/enforced</li> <li>• Legality of land-lease contracts with international investors</li> <li>• Support for community/small/medium enterprises</li> </ul>
<b>Building Block 5: Economic Efficiency, Equity, and Incentives</b>	
Maintenance of ecosystem integrity/sustainable forest use	<ul style="list-style-type: none"> <li>• Knowledge of supply and demand for forest products and their alignment</li> <li>• Minimum safeguards for sustainability included in forest management plans</li> <li>• Forest stakeholders have reasonable share in the economic benefits from forest use</li> </ul>
Incentives for sustainable use and penalties for violations	<ul style="list-style-type: none"> <li>• Payments for protecting environmental services from forests</li> <li>• Forest law enforcement should target illegitimate operations</li> <li>• Expected returns from illegal use lower than the expected penalties imposed for illegal use</li> </ul>
Forest products pricing	<ul style="list-style-type: none"> <li>• International market prices used as reference prices for traded products</li> <li>• Internalization of effects of social and environmental externalities arising from forest resources use</li> <li>• Removal of distortionary subsidies within the forest sector</li> <li>• Forest resource allocation based on market prices</li> </ul>
Commercial timber trade and forest businesses	<ul style="list-style-type: none"> <li>• Timber and NTFPs concession allocation processes are transparent</li> <li>• Forest products auctions are competitive</li> <li>• Streamlined export taxes and import duties on forest products</li> <li>• Verification, certification, and labeling of forest products</li> </ul>
Equitable allocation of forest benefits	<ul style="list-style-type: none"> <li>• Equitable pattern of land and forest resource tenure</li> <li>• Adequate access and use rights where ownership is with the state (or contested)</li> <li>• Equitable share of timber and NTFPs</li> </ul>
Market institutions	<ul style="list-style-type: none"> <li>• Competitive forest sector</li> <li>• Use of appropriate incentives in forest management</li> </ul>
Forest revenues and expenditures	<ul style="list-style-type: none"> <li>• Efficient system of revenue collection for timber and NTFPs               <ul style="list-style-type: none"> <li>◦ Taxes, levies, and charges based on ensuring normal profits</li> </ul> </li> <li>• Efficient system of public expenditures for forestry               <ul style="list-style-type: none"> <li>◦ Public expenditure tracking system (PETS) operational in the sector</li> </ul> </li> </ul>



# Annex 3: Dissemination Plan and Budget

## DISSEMINATION

Consensus building on the forest governance building blocks will be a major objective of the dissemination of this ESW. Extensive dissemination of this report (within and outside the Bank) will be undertaken to create awareness and to build up a consensus for the framework and approach proposed in this report.

In FY10, the proposed dissemination activities are:

- Posting the ESW report on the Global Donor Platform for Rural Development and on the Bank's FLEG website
- Sending the report to a number of forest governance professionals and practitioners (via e-mail), with individual follow-up to get their inputs
- Organizing training workshop for Bank staff with participants from HQ and field offices. One or two such workshops will be organized in FY10, including one at the Rural Week.
- Organizing a dissemination workshop at Chatham House, directed at forestry staff from development partners such as key bilateral donors, EC, WRI, Chatham House, International Union for Conservation of Nature (IUCN), WWF, etc.
- Possible side event at the World Forestry Congress (October 2009 in Argentina)
- Training and dissemination workshops for the major stakeholder groups in selected client countries. Two regional workshops, one in Africa and another one for Eastern and Central Asia (ECA), will be organized in FY10. This would be followed up by individual workshops in those countries identified for field testing.

## BUDGET

The dissemination expenses for FY10 are estimated to be US\$125,000 (Bank Budget [BB] \$25,000 + Trust Fund [TF] \$100,000).



# Bibliography

- Acosta, R. T. 1999. *Forest management and protection: The Philippine experience*. Paper prepared for the Regional Symposium on Strengthening Cooperation for Forest Law Enforcement in Mekong Basin Countries, Phnom Penh, Cambodia, June 14–15.
- Adhikari, Bhim. 2001. *Literature review on the economics of common property resources. Review of common pool resource management in Tanzania*. Report prepared for NRSP Project R7858. Unpublished.
- Afonso, A., L. Schuknecht, and V. Tanzi. 2003. *Public sector efficiency: An international comparison*. European Central Bank, Working Paper Number 242. Available at: <http://www.ecb.int/pub/pdf/scpwps/ecgwp242.pdf>.
- Afonso, A., L. Schuknecht, and V. Tanzi. 2006. *Public sector efficiency: Evidence for new EU member states and emerging markets*. Working Paper No. 2006/01. Lisbon, Portugal: Department of Economics, School of Economics and Management, Technical University of Lisbon.
- Agrawal, A., and E. Ostrom. 2001. Collective action, property rights, and decentralization in resource use in India and Nepal. *Politics & Society* 29(4): 485–514.
- Amacher, G. S. 2006. Corruption: A challenge for economists interested in forest policy design. *Journal of Forest Economics* 12: 85–89.
- American Heritage Dictionary of the English Language*. 2000 (4th ed.).
- Arndt, C., and C. Oman. 2006. *Uses and abuses of governance indicators*. Paris: Development Center of the Organisation for Economic Cooperation and Development.
- Bhattarai, M., and M. Hammig. 2004. Governance, economic policy, and the environmental Kuznets curve for natural tropical forests. *Environment and Development Economics* 9: 367–382.
- Bondanella, Peter, and Mark Musa, trans. 1984. Niccolò Machiavelli, *The Prince*. Oxford University Press revised edition, 1984, p. 21.
- Bromley, D. W. 1991. *Environment and economy: Property rights and public policy*. Oxford: Oxford University Press.
- Brown, David, et al. Undated. *Legal timber: Verification and governance in the forest sector*. London: Overseas Development Institute.
- Campos, J. Edgardo, and Sanjay Pradhan, eds. 2007. *The many faces of corruption: Tracking vulnerabilities at the sector level*. Washington DC: The World Bank.
- Carrere, R., and Lohmann L. 1996. *Pulping the South*. London: Zed Books, 1996.
- Castrén, T. 2005. Foreign direct investment: Road to riches or burden to national development? In: Ruohomäki, O. 2005. *Development in an insecure world: new threats to human security and their implications for development policy*.
- CEPI (Confederation of European Paper Industries). 2005. *Illegal logging: codes of conduct for the paper industry*. Brussels.
- Chatham House. 2009. *Illegal logging and related trade: Pilot assessment of the global response, 2008*. Energy, Environment and Development Programme, Chatham House, March 2009. Available at: [www.chathamhouse.org.uk/eedp](http://www.chathamhouse.org.uk/eedp).
- Christy, Lawrence C., Charles E. Di Leva, Jonathan M. Lindsay, and Patrice Talla Takoukam. 2007. *Forest law and sustainable development: Addressing contemporary challenges through legal reform*. Law, Justice and Development Series. Washington DC: World Bank.
- CIFOR. 1999. *The CIFOR Criteria and Indicators Generic Template (C&I Toolbox Series, Tool #2)*. Available at: <http://www.cifor.cgiar.org/acm/methods/toolbox2.html>.
- CIFOR. 2005. *Tropical forests and adaptation to climate change: In search of synergies*. Edited by Carmenza Robledo, Markku Kanninen, and Lucio Pedroni. Bogor Indonesia: CIFOR.
- Deacon, R. T. 1994. Deforestation and the rule of law in a cross-section of countries. *Land Economics* 70(4): 414–30.
- Dixit, Avinash K. 2004. *Lawlessness and economics: Alternative modes of governance*. Princeton, NJ: Princeton University Press.
- ECSSD/PROFOR (Europe and Central Asia Socially Sustainable Development department/Program on Forests). 2005. *Forest institutions in transition: Experiences and lessons from Eastern Europe*. Washington DC: World Bank.
- FAO (Food and Agriculture Organization). 1995. *FAO Yearbook of Forest Products 1993*. Rome: FAO.
- FAO/ITTO. 2004. *Capacity building for law compliance in the forest sector: Case study—Cambodia*. Available at: <http://www.fao.org/forestry/media/12936/3/0/>.
- Federal Register. 2008. Vol. 73, no. 196, Wednesday, October 8, 2008, Notices (docket no. APHIS-2008-0119).
- FGLG Update June 2008. Available for download at: <http://www.iied.org/forestry/research/projects/forest.html>.
- Galtung, F. 2006. Measuring the immeasurable: Boundaries and functions of (macro) corruption indices. In C. Sampford, A. Shacklock, C. Connors, and F. Galtung, eds. *Measuring corruption* (pp. 101–30). UK: Ashgate.
- Global Witness. 2009. *Country for sale*. Available at [http://www.globalwitness.org/media\\_library\\_detail.php/713/en/country\\_for\\_sale](http://www.globalwitness.org/media_library_detail.php/713/en/country_for_sale).
- Graham, J., B. Amos, B., & T. Plumptre. 2003. *Principles for good governance in the 21st century* (Policy Brief No. 15). Institute on Governance, Ottawa, ON. Available at: <http://www.iog.ca/publications/policybrief15.pdf>.
- Jacobs, M., and C. Schloeder. 2001. *Impacts of conflicts on biodiversity and protected areas in Ethiopia*. Washington DC: Biodiversity Support Program.
- Kaufmann, Daniel, Aart Kraay, and Massimo Mastruzzi. 2008. *Governance matters VII: Aggregate and individual governance indicators, 1996–2007*. World Bank Policy Research Working Paper No. 4654, June 24, 2008.

- Kaufmann, Daniel, Aart Kraay, and P. Zoido-Lobaton. 1999. *Governance matters*. World Bank Policy Research Working Paper No. 2196. Washington D.C.: World Bank.
- Kaufmann, Daniel, F. Recanatini, and S. Biletsky. 2002. *Assessing governance: Diagnostic tools and applied methods for capacity building and action learning*. Discussion draft, June 2002. World Bank. Available at: [www.worldbank.org/wbi/governance](http://www.worldbank.org/wbi/governance).
- Kishor, N. M., and A. Belle. 2004. Does improved governance contribute to sustainable forest management? *Journal of Sustainable Forestry* 17(1/2/3, 2004): 55–79.
- Kishor, N. M., L. Constantino, and M. Mani. 2004. Economic and environmental benefits of eliminating log export bans—The case of Costa Rica. *World Economy* 24(4), 609–24.
- Kishor, N. M., and Richard Damania. 2007. Crime and justice in the Garden of Eden: Improving governance and reducing corruption in the forestry sector. Chapter 3 in J. Edgardo Campos and Sanjay Pradhan, eds. *The many faces of corruption: Tracking vulnerabilities at the sector level*. Washington DC: The World Bank.
- Kishor, N. M., and K. L. Rosenbaum. 2003. *Indicators to monitor progress of forest law enforcement*. International Forestry Review, Commonwealth Forestry Association.
- Larson, A. M., P. Cronkleton, D. Barry, and P. Pacheco. 2008. *Rights are not enough: Community access to forest resources in Latin America*. Prepublication draft from PROFOR.
- Lawson, Sam. 2007. *Illegal logging and related trade: Measuring the global response*. London: Chatham House, Energy, Environment and Development Programme. Available at: [www.chathamhouse.org.uk/eedp](http://www.chathamhouse.org.uk/eedp) and [www.illegal-logging.info](http://www.illegal-logging.info).
- Liberia Forest Concession Review Committee. 2005. *Forest concession review, Phase III*. May 31, 2005.
- Lindsay, J., A. Mekouar, and L. Christy. 2002. *Why law matters: Design principles for strengthening the role of forestry legislation in reducing illegal activities and corrupt practices*. FAO Legal Paper Online #27.
- Macqueen, D. 2006. *Governance towards responsible forest business: Guidance on different types of forest businesses and the ethics to which they gravitate*. Edinburgh: International Institute for Environment and Development.
- Magrath, William B., Richard L. Grandalski, Gerald L. Stuckey, Garry B. Vikanes, and Graham R. Wilkinson. 2007. *Timber theft prevention: Introduction to security for forest managers*. East Asia and Pacific Region Sustainable Development Discussion Paper. Washington DC: World Bank.
- Matthew, R., M. Halle, and J. Switzer, eds. 2002. *Conserving the peace: Resources, livelihoods and security*. Manitoba, Canada: International Institute for Sustainable Development.
- Mayers, James, Stephen Bass, and Duncan Macqueen. 2002. *The pyramid: A diagnostic and planning tool for good forest governance*. International Institute for Environment and Development.
- Meyer, A. G., C. van Kooten, and S. Wang. 2003. Institutional, social and economic roots of deforestation: A cross-country comparison. *International Forestry Review* 5(1): 29–37.
- Millennium Challenge Corporation. 2005. *Natural Resources Working Group Fact Sheet*. Available at: <http://www.mcc.gov/press/factsheets/2005/factsheet-060005-natreswkggroup.pdf>.
- Mimicopoulos, M. G. 2007. *Public governance indicators: A literature review*. New York: Department of Economic and Social Affairs, United Nations.
- Pacheco, P., D. Barry, P. Cronkleton, and A. M. Larson. 2008. *The role of informal institutions in the use of forest resources in Latin America*. Prepublication draft, PROFOR & CIFOR.
- Pearce, D. 2001. The economic value of forest ecosystems. *Ecosystems Health* 7(4): 284–96.
- Prabhu, R., C. Colfer, and G. Shepherd. 1998. *Criteria and indicators for sustainable forest management: New findings from CIFOR's forest management unit level research*. Rural Development Forestry Network Paper 23a.
- Reid, Gary. 2009. *Actionable governance indicators—Concepts and measurement*. PREM informal note, World Bank.
- Robledo, Carmenza, Jürgen Blaser, Sarah Byrne, and Kaspar Schmidt. 2008. *Climate change and governance in the forest sector: An overview of the issues on forests and climate change with specific consideration of sector governance, tenure and access for local stakeholders*. Washington DC: Rights and Resources Initiative.
- Ross, Michael L. 2001. *Timber booms and institutional breakdown in Southeast Asia*. Cambridge University Press.
- Saunders, J., and R. Nussbaum. 2008. *Forest governance and reduced emissions from deforestation and degradation (REDD)*. London: Energy, Environment and Development Programme, Chatman House.
- Seneca Creek Associates LLC and Wood Resources International LLC. 2004. *"Illegal" logging and global wood markets: The competitive impacts on the U.S. wood products industry*. Prepared for the American Forest & Paper Association, Washington DC.
- Sizer, N., D. Downes, and D. Kaimowitz. 1999. *Liberalization of international commerce in forest products: Risks and opportunities*. Washington DC: World Resources Institute.
- Springate-Baginski, Oliver, and Piers Blaikie. 2007. *Forests, people and power: The political ecology of reform in South Asia*. Earthscan Forestry Library.
- Stern, Nicholas. 2009. *The global deal: Climate change and the creation of a new era of progress and prosperity*. New York: Public Affairs.
- Tacconi, Luca, ed. 2007. *Illegal logging: Law enforcement, livelihoods and the timber trade*. Earthscan Forestry Library.
- Tan, N. Q., N. V. Chinh, and V. T. Hanh. 2008. *Statutory and customary forest rights and their governance implications: The case of Viet Nam*. Hanoi: International Union for Conservation of Nature.
- TFD (The Forests Dialogue). 2008. *Beyond REDD: The role of forests in climate change*. Available at: <http://research.yale.edu/gisf/tfd/>
- Thomas, V., M. Dailami, A. Dhareshwar, D. Kaufmann, N. Kishor, R. Lopez, and Y. Wang. 2000. *The quality of growth*. New York: Oxford University Press.
- UNDP. 1997. *Reconceptualizing governance*. New York: United Nations Development Programme.
- UNDP. 2006. *Measuring democratic governance: A framework for selecting pro-poor and gender-sensitive indicators*. New York: UNDP.
- UNDP/FAO. 2002. *Forest crime monitoring and reporting project*. Report of the Evaluation Mission, CMB/99/A05/6M/12. Royal Government of Cambodia, United Nations Development Programme, and Food and Agriculture Organization, Rome.
- Utting, P. 2000. *Forest policy and politics in the Philippines: The dynamics of participatory conservation*. Ateneno de Manila University Press.
- World Bank. 2000. *Reforming public institutions and strengthening governance: A World Bank strategy*. Public Sector Group, PREM network. Washington DC: World Bank.
- World Bank. 2004. *Sustaining forests: A development strategy*. Washington DC: World Bank.
- World Bank. 2006a. *World Bank Global Monitoring Report 2006: Millennium development goals: Strengthening mutual*

- accountability, aid, trade and governance*. Available at: [http://publications.worldbank.org/ecommerce/catalog/product?item\\_id=5367015](http://publications.worldbank.org/ecommerce/catalog/product?item_id=5367015).
- World Bank. 2006b. *Strengthening forest law enforcement and governance: Addressing a systemic constraint to sustainable development*. Environment and Agriculture and Rural Development Departments. Sustainable Development Network. Report No. 36638-GLB, Washington DC.
- World Bank. 2007. *Strengthening World Bank group engagement on governance and anticorruption*. March.
- World Bank. 2008a. *Doing business 2009—Comparing regulation in 181 economies*. A publication of the World Bank and the International Finance Corporation, Washington DC.
- World Bank. 2008b. *Forests sourcebook: Practical guidance for sustaining forests in development cooperation*. Washington DC: World Bank.
- World Bank. 2008c. *Land governance assessment framework*. Internal Note, World Bank Land Thematic Group.
- World Bank. 2008d. *Tracking results in agriculture and rural development in less-than-ideal conditions: A sourcebook of indicators for monitoring and evaluation*. Published by Global Donor Platform for Rural Development, FAO and the World Bank.
- World Bank. 2008e. *Strengthening World Bank group engagement on governance and anticorruption: One year progress report*. SecM2008-0414, October 2008. The World Bank.
- World Bank. 2009a. *Bosnia and Herzegovina forest development and conservation project*. Aide Memoire, May 4–14, 2009, Annex 3. The World Bank.
- World Bank. 2009b. *Environmental crisis or sustainable development opportunity? Transforming the charcoal sector in Tanzania*. A Policy Note, Sustainable Development Africa Region, The World Bank [Draft].
- World Bank Institute. 2006. *Governance data: Web-interactive inventory of datasets and empirical tools*. Washington DC: World Bank.
- Xu, J., and J. C. Ribot. 2004. Decentralisation and accountability in forest management: A case from Yunnan, Southwest China. *European Journal of Development Research* 16(1): 153–73.
- Young, D. W. 2007. Independent forest monitoring: Seven years on. *International Forestry Review* 9(1): 563–74.



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