FRAMEWORK FOR ASSESSING AND MONITORING FOREST GOVERNANCE
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FRAMEWORK FOR ASSESSING
AND MONITORING FOREST GOVERNANCE
I. INTRODUCTION

BACKGROUND

The need for a comprehensive analytical framework to diagnose, assess and monitor forest governance is widely recognized among forest stakeholders. The quality of governance often determines whether forest resources are used efficiently, sustainably and equitably, and whether countries achieve forest-related development goals. Poor forest governance has ripple effects and often reflects overall weakness in governance within a country.

Improving forest governance requires a systematic approach to identifying areas of weakness, devising and implementing suitable responses, monitoring results, continuing adaptation and learning to ensure progress. A widely accepted, comprehensive analytical framework will facilitate efforts within and across countries to improve forest governance.

In 2009, several organizations working to develop and field test forest governance indicators initiated a series of discussions on forest governance monitoring and indicator development. In February 2010, the European Union organized a coordination meeting on Forest Law Enforcement, Governance and Trade (FLEGT) at the Food and Agriculture Organization of the United Nations (FAO) headquarters in Rome. At this meeting, participants representing key international forestry organizations identified the need to develop practical and workable forest governance indicators, and endorsed the idea of an international workshop on the topic.

In May 2010, the United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (UN-REDD) and Chatham House organized an expert workshop on monitoring governance safeguards in REDD+. The workshop aimed to improve understanding of what monitoring of governance for REDD+ might entail, drawing on current and past experiences from the forest sector and beyond. Three core governance parameters were presented as a basis for discussion of what REDD+ should monitor.

In September 2010, the World Bank, FAO and the Swedish International Development Cooperation Agency (SIDA) organized an international symposium in Stockholm to take stock of progress and lessons from experience in the development and application of indicators in specific areas of governance. Participants included designers and users of forest governance indicators, and representatives of organizations engaged in forest governance monitoring and assessment. They agreed that a common framework or a core set of principles and criteria for assessing and monitoring forest governance should
be developed in order to avoid overlap and duplication, especially in country-level applications, and to foster synergies among forest governance initiatives and enhance efficiency.

It was envisioned that the core set of principles and criteria for assessing and monitoring forest governance should be generic enough for wide application, but also amenable to fine tuning to meet specific application requirements. FAO and the World Bank’s Program on Forests (PROFOR) were called upon to convene a core group of experts and practitioners, including experts from potential user countries, to develop a common framework for forest governance indicators.

The Framework for Assessing and Monitoring Forest Governance (the Framework) presented in this report is based on a draft framework introduced at the Stockholm meeting and builds on the proposed core parameters for REDD+ governance monitoring. The draft framework was further developed by the group of experts between January and March 2011, in close coordination with the UN-REDD/Chatham House initiative for the development of draft guidance on how REDD+ governance safeguards could be monitored.

**PURPOSE**

The Framework facilitates description, diagnosis, monitoring, assessment and reporting on the state of governance in a country’s forest sector. It features a globally relevant and comprehensive list of the major elements that describe forest governance. It also provides a frame of reference for organizing governance-relevant information that can be used within and across countries to assess and monitor the governance of forests and forest resources. It can assist countries in reflecting on and responding to critical issues in forest governance in ways that can be measured, tracked and improved over time. By enabling informed discussions among stakeholders on governance in the forest sector, the Framework also seeks to foster opportunities for wider national discussions on overall governance beyond the forest sector.

The Framework draws on several approaches currently in use or under development in major forest governance-related processes and initiatives, including the World Bank’s Framework for Forest Governance Reform; the World Resources Institute’s Governance of Forests Initiative; the Criteria and Indicators for Sustainable Forest Management of the Montreal Process and of the International Tropical Timber Organization (ITTO); and the proposed draft UN-REDD/Chatham House Framework for Monitoring REDD+ Governance. It also builds on existing national forest governance-related monitoring systems.

By including core parameters already shared by many processes and initiatives, the
Framework is well positioned to enable discussions across these processes and initiatives. Its common use could help minimize unnecessary duplication of forest governance monitoring and assessment efforts. This could reduce the burden on countries facing multiple demands for governance information from the various forest governance-related processes and initiatives in which they participate.

While the Framework is not an assessment or monitoring tool itself, it can facilitate the use of existing tools specifically designed for the purpose. It can serve as a starting point for understanding forest governance and for contextualizing the various tools available that can be appropriately employed for forest governance assessment and monitoring.

This Framework is a dynamic instrument. It is hoped that its use and further improvement will enhance common understanding of and communication about forest governance and lead to improvements that strengthen the practice of governance.

**INTENDED USERS**

The Framework can be used by anyone involved in forest governance. It can assist governmental and non-governmental actors interested in the characteristics and quality of forest governance in a particular country.

National governments can use the Framework for their own diagnosis, monitoring and assessment of the state of forest governance in their country. It also can be adapted by governments at subnational levels and by those engaged with different forest governance processes, projects and initiatives. In addition, advocates, investors, donors, researchers and generators of forest governance data can use the Framework to organize, analyze and communicate forest governance information.

Initiatives such as REDD+, the Forest Investment Program (FIP) of the World Bank, and the FLEGT Voluntary Partnership Agreement processes may use the Framework as a starting point for deciding what to monitor for their specific purposes. Initiative-specific frameworks may then be developed by focusing on and expanding particular governance parameters of interest or by adding parameters not currently covered in the Framework. In the case of REDD+, these are likely to include aspects related to other land uses and specific parameters concerning the REDD+ process itself.

Those interested in comparing forest governance across countries may find the Framework helpful as a general frame of reference. However, the Framework is not readily employable for cross-country comparisons. Whether and to what extent the Framework can be appropriately employed for cross-country comparisons will depend on the choice of indicators and the protocols adopted for their measurement and standardization.
II. FRAMEWORK DESIGN, STRUCTURE AND ELEMENTS

FRAMEWORK DESIGN

The Framework builds on the understanding that governance is both the context and the product of the interaction of a range of actors and stakeholders with diverse interests. The base upon which the Framework stands consists of generally accepted pillars and principles of “good” forest governance (see Figure 1).

Fig. 1 Pillars and principles of governance

Discussions on the conceptual bounds and operational definitions of governance are still underway. However, there is consensus in the literature about key attributes and processes that characterize “good governance”, both in general and in specific sectors, such as the forest sector. Governance is generally considered “good” if it is characterized by stakeholder participation, transparency of decision-making, accountability of actors and decision-makers, rule of law and predictability. “Good governance” is also associated with efficient and effective management of natural, human and financial resources, and fair and equitable allocation of resources and benefits.

The achievement of good governance is predicated upon mutually supportive and
cooperative relationships among government, private sector and civil society. Although government is key, the private sector and civil society also play important roles in governance, with private sector generally understood to encompass for-profit business entities not owned or operated by the government, and civil society comprising groups acting voluntarily in their capacities as citizens to advance common goals and agendas. Civil society groups may be formally organized and coordinated, such as officially registered not-for-profit or non-governmental organizations (NGOs), or they may be unregistered, loosely organized cause-oriented groups of individuals, such as advocacy networks and social movements.

The Framework provides a means to view and analyze the institutions and interactions within and outside the forest sector that together create the conditions and possibilities for the governance of a country's forests and forest resources. The Framework uses the term “institutions” to refer to customs, behavioural patterns and rules that define:

- who has access to forests and forest resources and shares in their benefit flows;
- what can be withdrawn from, modified or put into forests;
- who has what rights and duties related to forests and forest resources; and
- who participates in key decisions about these issues and about transferring rights and duties to others.

These institutions result from, and are played out through, the decisions and actions of diverse actors, stakeholders, organizations and agencies, including government forest agencies.

STRUCTURE OF THE FRAMEWORK

The basic elements of the Framework are its pillars, components and subcomponents. It is composed of three fundamental pillars and 13 basic components which are listed here and then explained in detail below.

**Pillar 1: Policy, legal, institutional and regulatory frameworks**
1.1 Forest-related policies and laws
1.2 Legal framework to support and protect land tenure, ownership and use rights
1.3 Concordance of broader development policies with forest policies
1.4 Institutional frameworks
1.5 Financial incentives, economic instruments and benefit sharing

**Pillar 2: Planning and decision-making processes**
2.1 Stakeholder participation
2.2 Transparency and accountability
2.3 Stakeholder capacity and action
Pillar 3: Implementation, enforcement and compliance
3.1 Administration of forest resources
3.2 Forest law enforcement
3.3 Administration of land tenure and property rights
3.4 Cooperation and coordination
3.5 Measures to address corruption

PILLARS

The three pillars of the Framework represent fundamentals of forest governance.

Pillar 1: Policy, legal, institutional and regulatory frameworks – considers long-term systems of policies, laws, rules and regulations within the forest sector and in other sectors that impinge on forests. Under Pillar 1, the Framework addresses the clarity and coherence of these systems and how they interact to define the overall context for forest use, management and forest-related decision-making.

Pillar 2: Planning and decision-making processes – considers the degree of transparency, accountability and inclusiveness of key forest governance processes and institutions. Further, it explores the characteristics of these processes and institutions; the operation of key agencies and the space they create for the participation of stakeholders; and the accountability of power holders and decision-makers.

Pillar 3: Implementation, enforcement and compliance – examines the extent to which the policy, legal, institutional and regulatory frameworks are implemented. It further considers the level of effectiveness, efficiency and equitability of implementation.

COMPONENTS

A component is an essential element of a pillar.

The Framework includes five components each under Pillar 1 and Pillar 3 and three components under Pillar 2.

Components under Pillar 1 probe the existence and quality of forest policies, laws and regulations; frameworks for protection of forest-related tenure and rights; and the functioning of key institutional frameworks. They examine the extra-sectoral links that affect forest sector governance. The components also consider the concordance between forest policies and broader development policies, such as financial incentives and economic policies, and address equity in the distribution of forest resources and benefits.
**Components under Pillar 2** examine the extent, characteristics and quality of participation of a range of stakeholders in forest governance and the capacity of different stakeholder groups to engage in governance processes. Components under this pillar also consider the transparency of forest-related decision-making and resource allocation, and the degree of accountability of governance mechanisms and processes.

**Components under Pillar 3** examine critical aspects of forest administration and law enforcement, measures that deal with corruption, and the administration of tenure and property rights. A major component under this pillar considers the cooperation and coordination across implementing and enforcement agencies, which is vital for effective management and enforcement and for promoting overall good governance.

**SUBCOMPONENTS**

A subcomponent is an identifiable element of a governance component and an important aspect of forest governance by which a component may be assessed.

The Framework offers a choice of subcomponents likely to be important to a wide range of users. The basic subcomponents of the Framework, listed in Section III, provide users a starting menu to consider and use as an entry point for the selection of indicators to measure and assess different aspects of forest governance. Users do not have to cover all subcomponents in the list. Depending on their needs and areas of interest, users may focus on only one or a few of the listed subcomponents to measure and monitor, or they may opt to add to or amend the list of subcomponents to better fit their purposes.

**INDICATORS**

An indicator is a quantitative, qualitative or descriptive attribute that, if measured or monitored periodically, could indicate the direction of change in a governance subcomponent.

The Framework does not specify indicators since they are necessarily country-, context- and situation-specific. Rather, it provides a structure for contextualizing the many governance indicators already in existence or under development. According to their aims and areas of interest and the constraints they face concerning data and resource availability, users are encouraged and expected to choose from the Framework’s subcomponents and develop new indicators, or adopt or modify existing indicators for the subcomponents as needed and appropriate. The desirable characteristics of indicators are discussed in Section IV.
III. BASIC SUBCOMPONENTS OF THE FRAMEWORK

The basic subcomponents listed under each Framework component have been derived from the growing governance literature and from governance indicator initiatives relevant to the forest sector. This list of subcomponents encompasses those aspects which have been identified as important and which should be considered in assessing and monitoring forest governance.

PILLAR 1: POLICY, LEGAL, INSTITUTIONAL AND REGULATORY FRAMEWORKS

1.1 FOREST RELATED POLICIES AND LAWS

- Existence and quality of policies, laws and regulations governing forest use and management
- Clarity and coherence of policies, laws and regulations governing forest use and management
- Extent to which forest-related laws and regulations facilitate effective and efficient implementation and avoid overreaching and unnecessary requirements
- Extent to which policies and laws support adaptive forest management
- Consistency of forest laws with relevant international commitments and obligations

1.2 LEGAL FRAMEWORK TO SUPPORT AND PROTECT LAND TENURE, OWNERSHIP AND USE RIGHTS

- Extent to which the legal framework recognizes and protects forest-related property rights, including rights to carbon
- Extent to which the legal framework recognizes customary and traditional rights of indigenous peoples, local communities and traditional forest users
- Consistency between formal and informal rights to forest resources
- Extent to which the legal framework provides effective means of resolving disputes by due process

1.3 CONCORDANCE OF BROADER DEVELOPMENT POLICIES WITH FOREST POLICIES

- Consistency and coordination of national development plans and strategies with forest policies
- Consistency and coordination of sectoral (e.g. mining, agriculture, transport, energy) policies, laws and regulations with forest policies, laws and regulations
- Extent to which forest laws support and enable sustainable livelihoods of forest dependent communities
- Consistency of land use plans with forest policy goals and priorities
- Consistency of forest policies with policies on climate change mitigation and
• Existence of means, including high level cross-sectoral policy coordination mechanisms, to harmonize development policies and forest policies
• Extent to which forest and land use policies ensure gender equity

1.4 INSTITUTIONAL FRAMEWORKS
• Extent to which the forest-related mandates of national agencies are clear and mutually supportive
• Extent to which the forest-related mandates of national and subnational governments are clear and mutually supportive
• Adequacy, predictability and stability of forest agency budgets and organizational resources
• Availability and adequacy of information, technology, tools and organizational resources for the pursuit of agency mandates

1.5 FINANCIAL INCENTIVES, ECONOMIC INSTRUMENTS AND BENEFIT SHARING
• Existence of legal provisions and mechanisms for equitable sharing of forest revenue
• Equity in the distribution of access to forest resources, rights and rents
• Existence of economic incentives and policies to promote increased value-addition and sustainable utilization of timber and non-timber forest products
• Existence of incentives for sustainable management of forests and measures to correct inappropriate subsidies and distortions in forest product prices
• Openness and competitiveness of procedures, such as auctions, for allocation of forest resources
• Mechanisms for the internalization of social and environmental externalities from forest resource use, including payments for forest-derived environmental services
• Existence and adequacy of safeguards against social and environmental harm from forest-related policies and activities

PILLAR 2: PLANNING AND DECISION-MAKING PROCESSES

2.1 STAKEHOLDER PARTICIPATION
• Extent to which the legal framework provides opportunities for public participation in forest-related policies and decisions and opportunities for redress and remedy
• Existence and effectiveness of processes that ensure participation by key stakeholders, including sanctions for failure to facilitate stakeholder participation
• Transparency of processes and accessibility of guidance on how to participate in forest-related planning, decision-making and implementation at all levels
• Extent to which stakeholder processes ensure the participation of women in forest-related decision-making processes
• Extent to which government engages with, creates space for and supports the participation of civil society, indigenous peoples and forest dependent communities in forest-related processes and decision-making
• Capacity of governments at different levels to engage with civil society and other forest stakeholders on forest-related policy decision-making and implementation
• Existence and effectiveness of conflict resolution and grievance mechanisms

2.2 TRANSPARENCY AND ACCOUNTABILITY
• Extent to which the legal framework supports public access to information, promotes scientific debate relating to forest policies and imposes sanctions for failure of agencies to meet obligations to disclose information
• Quality, timeliness, comprehensiveness and accessibility of forest-related information available to stakeholders, including public notice of pending forest agency actions.
• Transparency in the allocation of timber and non-timber forest products concessions, permits and user rights
• Transparency of forest revenue collection, budgeting, expenditure, accounting, redistribution and audit
• Existence, effectiveness and independence of governmental oversight mechanisms external to the forest agency
• Existence and extent of use of internal accountability mechanisms, such as internal monitoring bodies, performance standards and performance-based rewards and penalties
• Transparency and accountability of private agencies, corporate entities, businesses and civil society organizations operating in the forest sector

2.3 STAKEHOLDER CAPACITY AND ACTION
• Presence of strong, independent civil society organizations, including non-governmental monitors and watchdog organizations
• Capacity of civil society, indigenous peoples, and small and medium enterprises to participate and engage in forest-related planning, decision-making and implementation
• Adoption and implementation of voluntary environmental and social standards and safeguards by private sector actors, including banks operating in the forest sector
• Extent to which governments encourage corporate entities and businesses operating in the forest sector to comply with recommended international codes of conduct and standards and safeguards
PILLAR 3: IMPLEMENTATION, ENFORCEMENT AND COMPLIANCE

3.1 ADMINISTRATION OF FOREST RESOURCES

- Adequacy of staff capacity and effectiveness of agencies tasked with forest administration
- Quality and effectiveness of information and data management systems
- Adequacy, effectiveness and transparency of monitoring and evaluation and accessibility of results
- Extent to which monitoring and evaluation results are clearly incorporated into forest management planning
- Effectiveness of collection, sharing and redistribution of forest taxes, royalties, charges and rents
- Extent to which on-the-ground management of forests follows adopted policies, laws and plans

3.2 FOREST LAW ENFORCEMENT

- Appropriateness and consistency of application of penalties for breaches of forest laws and regulations
- Effectiveness of division of jurisdictional authority and responsibility for forest law enforcement
- Effectiveness of measures and tools to prevent forest crimes
- Effectiveness of incentives for officers and agencies to enforce forest laws, including investigation and prosecution
- Capacity of law enforcement agencies to suppress, detect and prevent forest-related crimes and illegal activities
- Extent, appropriateness and effectiveness of enforcement agencies’ use of tools, instruments and information to enforce laws
- Capacity and willingness of the judiciary and law enforcement agencies to deal with cases of forest crime effectively
- Extent to which courts and arbitrators are accessible, fair, honest and independent; work in a timely manner and are affordable; and deliver enforceable outcomes

3.3 ADMINISTRATION OF LAND TENURE AND PROPERTY RIGHTS

- Comprehensiveness and accuracy of documentation and accessibility of information related to forest tenure and rights
- Existence and effectiveness of implementation of processes and mechanisms for resolving disputes and conflicts over tenure and rights
- Effectiveness of compensation mechanisms when rights are extinguished
- Adequacy of measures and mechanisms to ensure the tenure security of forest owners and rights holders
3.4 COOPERATION AND COORDINATION

- Extent, appropriateness and adequacy of coordination and cooperation between national and subnational governments on forest-related activities
- Extent, appropriateness and adequacy of coordination and cooperation within and among national agencies with forest-related mandates
- Extent of cooperation and coordination of national law enforcement agencies, including police and customs, in forest law enforcement at different levels and across agencies
- Extent to which other government agencies (land, minerals, agriculture, transportation, communication, environmental protection, finance, etc.) coordinate and cooperate with forest agencies concerning forests
- Extent of application of human rights, labour, safety, environmental and other relevant laws in forest activities
- Effectiveness of implementation of forest-relevant international commitments
- Effectiveness of cross-border cooperation in the management of common forest resources and in other forest-related international activities
- Effectiveness of cross-border cooperation in law enforcement to combat illegal trade in forest products

3.5 MEASURES TO ADDRESS CORRUPTION

- Implementation and effectiveness of forest-related procurement rules in the public sector
- Existence, adequacy and effectiveness of standards of conduct for civil servants, political appointees and elected officials
- Private sector participation in efforts to address corruption, including adoption of codes of conduct and ensuring transparency of payments
- Existence and effectiveness of channels for reporting corruption and whistleblower protection
- Extent and effectiveness of follow-up action, including prosecution of all parties involved in cases of corruption
- Implementation of and follow-up on internal controls and internal and external audits
- Efficiency and effectiveness of systems for forest revenue collection, expenditure, budgeting, accounting, redistribution and audit
IV. DESIRABLE CHARACTERISTICS IN INDICATORS

In the context of this Framework, an indicator identifies information needed to describe and/or measure a governance subcomponent at a given time but also to monitor changes in the subcomponent over time. When compared with conditions defining what is or is not deemed desirable for a governance subcomponent, indicators can be used to judge whether and to what extent the indicated status and changes in the subcomponent may be viewed positively or negatively.

Indicators can be specified in a number of different ways and can have a variety of forms according to their intended functions. For example, they may be designed to identify needed actions for reform, to track changes in particular aspects of governance within a country over time, or to compare aspects of governance across countries at any point in time. Indicators may be qualitative or quantitative. They may be narrow or broad in scope – measuring a single aspect or several different aspects of governance together, or drawing on a single source of data or constructed from several sources of data as a composite index.

Indicators are often specified as measures or descriptions of inputs, outputs or outcomes:

- input indicators measure the resources employed, and activities or interventions undertaken to produce governance outputs;
- output indicators measure or describe tangible and intangible products and results achieved or facilitated by the application of resources and implementation of activities and governance interventions;
- outcome indicators measure or describe the ultimate, higher-order results derived individually and collectively from governance outputs.

The choice of indicators can be based on a number of considerations, including:

- availability and quality of data/information;
- cost of information collection;
- ease of interpretation and communication; and
- user capacity to measure chosen indicators and analyze and explain results to intended audiences.

Selection generally requires screening possible indicators against some desirable characteristics. Ideally, indicators for selected subcomponents of the Framework should have characteristics that make them:

- directly relevant and appropriate to the scale of the subcomponent to be measured;
- sensitive to changes in key factors that affect the subcomponent;
- amenable to verification and replication;
• free of hidden bias;
• easy and inexpensive to construct and measure; and
• framed in ways that promote constructive debate and motivate action for improvement.

It would be rare for any indicator to meet all these requirements fully, thus compromise is often needed. In fact, it most likely will be necessary to use a number of different indicators to capture all facets and nuances of a governance subcomponent.

The availability and quality of data often constrain the feasibility of observing and measuring some, if not most, ideal indicators. In such cases, a user may opt to employ just one or a few indicators from among the initially specified group of indicators, which can serve as the “proxy” measure for the subcomponent. This would entail choosing the one/s for which data and information are more readily available and that have the greatest degree of consistency and reliability. By selecting and using only one of several possible indicators, the user in effect chooses to highlight one aspect of the governance subcomponent. Indicators not directly observable may be measured indirectly by using closely correlated parameters which may be observable and more readily measured as the proxy.

Indicators are ideally based on objective information. However, due to a dearth of needed data and owing to the nature of governance issues, most governance indicators are based on perceptions and subjective opinion. Despite attempts at objectivity, indicator measurement and governance assessments based on these measures will inevitably have some element of subjectivity.

There is often a tendency to choose indicators based on readily available quantitative data, even if the available data is a relatively poor indicator and may address only one aspect of a subcomponent. In these cases, it is often better to measure the subcomponent more directly, by using a well designed and calibrated opinion-based measure, such as a score on a 4-point scale. An indicator based on subjective, qualitative information which addresses a subcomponent directly is better than a quantitative indicator which addresses it poorly. Ultimately, the choice of indicators and how these are measured and assessed should be guided by the purposes and intended audiences for forest governance measurement, assessment and monitoring.

With sound methodology, qualitative, perception-based measures can provide robust indicators of reality that people of different perspectives can agree on. The credibility and reliability of perception-based indicators depend to a large extent on whose opinions are represented and on the transparency and inclusiveness of the process of indicator definition and measurement. Use of broad-based consultation and inclusive multi-stakeholder processes for defining and measuring indicators can enhance credibility significantly, facilitate the uptake of results and bolster support for follow-up action.
V. HOW TO USE THE FRAMEWORK

The Framework provides basic scaffolding upon which additional dimensions, layers of nuance and depths of detail may be added to custom fit the aims of different users. It can be used in whole or in part, depending on the purpose and the intended audiences for the results. It also can be simplified by focusing on certain pillars and components and disregarding others. What a user does with the Framework will depend on whether, for example, it is to be used for governance diagnosis or monitoring.

Diagnosis refers to an analysis undertaken to broaden understanding of a governance system. The diagnosis identifies a system’s characteristics, its general patterns, and issues likely to be significant and in need of attention, monitoring or intervention. Users of the Framework for diagnostic analysis need to cover a broad range of governance aspects to capture the context and key factors related to their issues or areas of concern. Thus, using the Framework for diagnosis entails choosing a larger set of subcomponents from the list than when using it for monitoring.

Monitoring focuses on specific aspects of governance that have been pre-identified as needing surveillance, measurement and assessment over a period of time. Users of monitoring would likely seek fine-grained detail on the governance aspect or issue of interest. This would mean focusing on a much smaller set of subcomponents than when using it for diagnostic analysis, choosing those that pertain directly to the issues or aspects being monitored.

To use the Framework, for each pillar and component, the user should choose the subcomponents relevant for the purpose. If the governance aspect or issue of interest is not covered by any of the subcomponents, the user may specify additional subcomponents.

Similarly, if the Framework’s components do not offer adequate coverage of the aspects or issues of interest to the user, additional components may be added under the relevant pillar/s. The user may then specify subcomponents pertaining to the governance aspect or issues of interest under the components added.

Users do not have to include all applicable or relevant subcomponents in the list. If they are constrained by available resources, they may select only one or a few subcomponents to measure or monitor. If a user can cover no more than three subcomponents, one subcomponent from each of the three pillars may be selected for a wider sampling of the status and quality of the governance aspect of interest. The user should prioritize and choose which of the relevant subcomponents to cover.
Ideally, setting priorities and selection of governance subcomponents to measure and track within a country should be undertaken through a multi-stakeholder process that enables the expression of stakeholders’ priorities, needs and concerns. This can include creating multi-stakeholder fora for forest governance or mobilizing existing fora, such as those established in the context of national forest programmes.

For each selected subcomponent, the user should define indicators appropriate for the purpose, taking into account available resources as well as conceptual and other practical considerations. Annex I illustrates possible ways to formulate and score indicators for a subcomponent.

Multi-stakeholder processes and fora can aid in the specification and selection of appropriate indicators. Verification, triangulation and peer review can greatly enhance the accuracy, reliability and credibility of the chosen indicator and measurement, and of the governance assessments based on these measures. Stakeholder consultation can serve this purpose.

Having the indicator measures and assessments cross-checked and verified by different stakeholders in the context of multi-stakeholder fora and dialogues can help reduce subjectivity and bias. Stakeholders may not necessarily agree on the measured results or their interpretation and assessment. However, the areas and extent of disagreement among stakeholders can, in themselves, provide valuable insights and point to issues requiring greater attention. The dialogue and informed discussions engendered by the results of indicator measurement are often more important than the measured results. Such dialogues among stakeholders and between stakeholders and governments at different levels create opportunities to forge agreement on appropriate actions to take and aspects to track in order to ensure that issues are addressed and forest governance is improved over time.

In order to use the Framework for fine-grained cross-country governance comparisons, users need to ensure consistency of definition and protocols for measurement at the level of subcomponents and indicators.
ANNEX I
ILLUSTRATION: HOW TO FORMULATE AND SCORE INDICATORS FOR A SUBCOMPONENT

Example of the subcomponent “Adequacy of staff capacity and effectiveness of agencies tasked with forest administration”, from Component 3.1.

There are many ways to define and measure the adequacy of staff capacity and the effectiveness of agencies tasked with forest administration. Thus, there are also many ways to define indicators. The examples of individual indicators, provided below, are measured on a 4-point scale, the results of which can be combined to determine effectiveness of the agency.

Effective agencies can be defined as those that bring about, or are designed to bring about, a desired outcome. For forest administration in most countries, the desired outcome is sustainable management of forests. The effectiveness of agencies tasked with forest administration depends to a large extent on the agencies’ staff capacity relative to the demands placed upon them. To be effective, agencies need to have sufficient and capable staff with the appropriate mix of skills and expertise, the motivation and will to act, and the incentives and resources necessary to achieve their mandate.

STAFF SKILLS AND EXPERTISE

The ability of an agency’s staff to meet demands for its services depends on both its numbers and the skills and expertise staff members bring to the job. An agency needs to have at least the minimum necessary mix of skills and expertise and a sufficient number of staff with appropriate skills relative to the scale of its responsibility, measured, for example, in terms of size of its area or territory, or volume of its production.

The following indicator for available agency staff skills and expertise may be used and measured using a 4-point scale.

- Number of staff with appropriate skills and expertise per unit (area, volume, etc.) under the agency’s management and administration

  0 – the agency has no staff with the required skills and expertise
  1 – the number of skilled agency staff per unit under agency administration is less than the minimum required
  2 – the number of skilled agency staff per unit under agency administration is equal to the minimum required
The minimum required mix of skills and expertise, and the required number of staff per unit managed or administered by the agency can be established through estimates provided by knowledgeable informants. These informants could include current and past managers of the agency, analysts, researchers, advocates, investors or activists tracking the agency’s operations and functioning. Based on their informed opinions, a range of estimates for the minimum required skill mix and the number of required staff with requisite skills per unit can be established as points of reference.

**MOTIVATION, INCENTIVE AND PROFESSIONAL CONDUCT**

To translate an agency’s staff skills and expertise into effective action, staff members must have the motivation and willingness to discharge their responsibilities and perform their mandated functions according to norms of professional behaviour. Staff motivation and will to act is not directly observable, but it is linked to incentives and rewards for good performance within an agency. The relative attractiveness of the agency’s compensation package and prospects for professional growth and promotion can motivate staff and serve as incentives for good performance. Norms of professional behaviour set standards and expectations on how staff members ought to conduct themselves in the course of their work. The degree to which these standards are adhered to also provides some indication of quality of staff performance and of how effectively an agency is managed.

The following indicators may be used as indirect measures of staff motivation, incentive and professional conduct. They can be measured using 4-point scales.

- **Staff salary and benefit package relative to the package in comparable organizations**
  - 0 – salary and benefit package in the agency is much lower (more than 20% less) than the package in comparable organizations
  - 1 – salary and benefit package in the agency is somewhat lower (up to 20% less) than the package in comparable organizations
  - 2 – salary and benefit package in the agency is about the same or slightly higher (up to 20% higher) than the package in comparable organizations
  - 3 – salary and benefit package in the agency is much higher (more than 20% higher) than in comparable organizations

- **Use of performance-based rewards and promotions**
  - 0 – the agency does not have a system of performance-based rewards and promotions
  - 1 – staff performance is sometimes used as basis for rewards and promotions
  - 2 – staff performance is often used as basis for rewards and promotions
  - 3 – staff performance is always used as basis for rewards and promotions
• Opportunities for professional development
  0 – the agency does not provide opportunities for professional development
  1 – the agency has some opportunities for professional development but the
criteria for accessing these are unclear and completely arbitrary
  2 – the agency has some opportunities for professional development, and the
criteria for accessing these are clear but not consistently applied
  3 – the agency provides ample opportunities for professional development of
staff that perform well or demonstrate strong potential for good perfor-
mance, and the criteria for accessing these are clear and consistently
applied

• Enforcement of code of professional conduct among agency staff
  0 – the agency does not have a code of professional conduct for staff
  1 – the agency has a code of professional conduct for staff but it is not
enforced
  2 – the agency has a code of professional conduct for staff but enforcement is
weak or selective
  3 – the agency has a code of professional conduct for staff which is strongly
and uniformly enforced

Data for these indicators may be obtained and triangulated from the agency's human
resources office; from key informants, including the agency's managers and staff; and from
published documents and public records, including the agency's annual reports.

An agency's aggregate score for indicators in the cluster of motivation, incentive and
professional conduct can serve as a broad indicator of the degree of agency staff motivation
and incentive to do jobs well and to abide by norms of professional behaviour. Agencies
that have a high score on each indicator in the cluster and have relatively high aggregate
scores are likely to be more effective than those with lower scores. Levels and quality of
staff performance in these agencies are also likely to be higher.

In this example, an aggregate score of 0–4 for this cluster would signal low levels of staff
motivation and incentive. An aggregate score of 5–8 would indicate moderate levels of
motivation and incentive. Aggregate scores of 9 or higher would suggest high levels of
staff motivation and incentive.

INFORMATION, TOOLS/TECHNOLOGY AND FINANCIAL RESOURCES

Timely information, appropriate tools and technology and adequate financial resources
for operations are needed to enable and support the decisions and action of agency staff.
The following indicators can be used to measure the degree to which these resources
are available to enable an agency's staff to perform its mandated functions effectively.
• Availability of timely information and appropriate tools and technology
  0 – timely information and appropriate tools and technology are not available
  1 – timely information and appropriate tools and technology are seldom available
  2 – timely information and appropriate tools and technology are often available
  3 – timely information and appropriate tools and technology are always available

• Agency budget compared to the level of financial resources required for effective operations
  0 – agency budget is grossly inadequate
  1 – agency budget is less than adequate
  2 – agency budget is just adequate
  3 – agency budget is more than adequate

Basic data to calibrate these indicators may be gleaned from an agency’s internal and public records. They could include information and records on the content and frequency of update of an agency’s data bases; inventories or documentation of purchases; update and deployment of equipment, tools, software, etc.; and budget and financial reports.

In the absence of detailed data or access to available records, agency scores for each of the indicators may be obtained by polling key agency managers, informed agency staff, analysts and agency watchers (researchers, activists, investors, regulators). This would require using pre-defined scales, such as the 4-point scales above, as the basis for their assessments. An agency’s level of financial resource requirements may be calculated and triangulated by polling its top management, budget officers and financial analysts.

In this example, a combined score of less than 3 would suggest resource deficiencies constraining the ability of agency staff to perform its functions and implement its work programme. Inevitably these deficiencies are bound to reflect on the agency’s effectiveness. A combined score of 3–4 would indicate that resources are appropriate and adequate for the agency’s current needs. A combined score of 5 or more would indicate the availability of sufficient resources to enable an agency’s staff to implement its work programme and perform its mandated functions. It would also suggest the existence of some slack that might be tapped for experimentation and innovation beyond the agency’s current needs and immediate work programme.

ADEQUACY OF STAFF CAPACITY

An indicator for the adequacy of an agency’s staff capacity to take effective action relative to the demands placed upon it may be calculated as the sum or a weighted sum of the agency’s aggregate scores in each of the three indicator clusters above.

The capacity for effective action of an agency’s staff is an important factor in an agency’s overall effectiveness, and may be used as a partial indicator of the agency’s effectiveness. Examples of other possible indicators are provided below.
AGENCY EFFECTIVENESS

An agency’s effectiveness is premised on the performance of its mandated functions and successful implementation of its work programme. The degree to which an agency successfully implements planned activities and meets work targets could serve as another indicator of an agency’s effectiveness.

However, getting its work done is not enough for an agency to be deemed effective. Its work programme and activities should result in the achievement of its mandate and contribute to bringing about the desired ultimate outcome. For purposes of this example, the desired ultimate outcome is assumed to be sustainable management of forests. Ascertaining the extent to which an agency has been effective in this sense will entail analysing the agency’s outcome and impact pathways which will require a lot of detailed data and information.

However in most cases, the data and information needed for outcome and impact analysis are not available or they require considerable expense and effort to collect. Thus, in lieu of outcome/impact analysis-based indicators of effectiveness, proxy indicators may be employed for an indirect measure of an agency’s effectiveness. Assessments of agency effectiveness from the perspective of key informants (agency staff, agency watchers, partners, stakeholders and clients) may be considered possible indirect indicators.

For example, an agency’s effectiveness may be inferred from informants’ assessments of the extent to which an agency’s work programme and activities deliver desired results in line with its mandate, and the extent to which an agency’s programme of work and activities ultimately contribute to sustainable management of forests. In scoring these indicators, the “desired results” an agency is supposed to deliver will have to be specified, and what it means to “deliver desired results” and “contribute to sustainable management of forests” will have to be operationally defined for the key informants.

The proposed indicators for agency effectiveness may be scored as follows:

- **Extent to which an agency’s work programme has been implemented**
  0 – less than 30% of the agency’s work programme has been implemented
  1 – between 30% and 60% of the agency’s work programme has been implemented
  2 – between 60% and 80% of the agency’s work programme has been implemented
  3 – more than 80% of the agency’s work programme has been implemented

- **Extent to which an agency’s work programme and activities are achieving desired results**
  0 – the agency’s work programme and activities are not delivering desired results
  1 – the agency’s work programme and activities are delivering little of the desired results
  2 – the agency’s work programme and activities are delivering a significant portion of
3 – the agency's work programme and activities are delivering most or all of the desired results

- Extent to which an agency's work programme and activities contribute to the sustainable management of forests
  0 – the agency's work programme and activities do not contribute to the sustainable management of forests
  1 – the agency's work programme and activities contribute little to the sustainable management of forests
  2 – the agency's work programme and activities contribute significantly to the sustainable management of forests
  3 – the agency's work programme and activities contribute greatly to the sustainable management of forests

An overall indicator for agency effectiveness may be constructed from these individual indicators of effectiveness. For example, a weighted or unweighted sum of these indicators’ scores along with the score for adequacy of agency’s staff capacity may be the basis for a composite indicator of overall agency effectiveness.

A composite indicator may also be constructed from these indicators by considering the interactions of two or more indicators. For example, an agency’s over-all effectiveness may be measured by multiplying the indicator scores for extent of work programme implementation by the indicator score for perceived effectiveness of the agency’s work programme. In this example, the resulting overall effectiveness indicator scored might be measured and interpreted as follows:

Over-all agency effectiveness score = score for extent of implementation of work programme X score for extent to which work programme/ activities deliver desired results

<table>
<thead>
<tr>
<th>Score</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 3</td>
<td>agency is not effective</td>
</tr>
<tr>
<td>3–4</td>
<td>agency is somewhat effective</td>
</tr>
<tr>
<td>Greater than 4</td>
<td>agency is very effective</td>
</tr>
</tbody>
</table>

MECHANISMS FOR SCORING INDICATORS

A variety of mechanisms can be used to generate measures or scores for indicators such as those proposed above. Indicator scores for individual agencies may be obtained, for example, by polling or interviewing key informants as identified above. An agency’s score for a given indicator may be calculated as the weighted or unweighted average of all the scores given by individual key informants and respondents. Indicator scores for each agency may also be obtained through focus groups of key informants that could, as a group, assign scores based on consensus, majority vote, averaging, etc.
CROSS-AGENCY COMPARISONS, AGGREGATING AND REPORTING RESULTS

Indicator scores for different agencies may be compared and agencies sorted and ranked according to their indicator scores.

Overall indicators for adequacy of staff capacity and effectiveness of agencies tasked with forest administration as a group may be calculated using the average (weighted or unweighted) scores of all agencies in the group. The biggest, most influential or most prominent agencies in the group may be given heavier weights in the calculation. Indicator scores and results of comparison and aggregation across agencies tasked with forest administration may be summarized and presented in tabular form. To facilitate interpretation and communication to different audiences, scores may be colour coded, for example using traffic light colors, to highlight areas that require attention and follow-up action.
FRAMEWORK FOR ASSESSING AND MONITORING FOREST GOVERNANCE
**Accountability**: Responsibility of political actors to all members of society for their actions and decisions.

**Adaptive management**: A systematic process for continually improving management policies and practices by learning from the outcomes of previously employed policies and practices.

**Administration**: The management of affairs based on a mandate or official appointment.

**Assessment**: Appraisal based on careful analytical evaluation.

**Civil society**: Groups acting voluntarily in their capacity as citizens to advance common goals and agendas. These include both formally registered organizations and non-registered, loosely organized cause-oriented groups.

**Components**: Essential elements of a pillar.

**Diagnosis**: Examination to identify or determine the nature and characteristics of a system or aspect of a system.

**Effectiveness**: Production of results meeting needs; production of desired results.

**Efficiency**: Maximal use of human, financial and other resources without unnecessary waste or delay.

**Equity**: Equal opportunities for all members of society to improve or maintain their well-being, including impartial application of rules.

**Externality**: A consequence of an action affecting others for which the actor is neither rewarded nor penalized through the markets.

**Indicator**: A quantitative, qualitative or descriptive attribute that, if measured or monitored periodically, could indicate the direction of change in a governance subcomponent.

**Institutions**: Customs, behavioural patterns and rules that define forest-related access, rights and duties, benefit sharing and decision-making.

**Monitoring**: Systematic tracking or scrutiny for the purpose of collecting specified data or information.

**Participation**: Involvement of citizens and stakeholders in decision-making, either directly or through legitimate intermediaries representing their interests.

**Pillars**: Fundamentals of good forest governance.
Private sector: Encompasses for-profit business entities that are not owned or operated by the government.

Procurement: Pertains to both the purchase and sale of goods and services, including the purchase and sale of forest-related rights.

Stakeholders: Any individuals or groups who are directly or indirectly affected by, or interested in, a given resource and have a stake in it.

Subcomponent: An identifiable element of a governance component and an important aspect of forest governance by which a component may be assessed.

Tenure: Agreement(s) held by individuals or groups, recognized by legal statues and/or customary practice, regarding the rights and duties of ownership, holding, access and/or usage of a particular land unit or the resources therein.

Transparency: Clarity and free flow of information enabling all members of society to access, understand and monitor processes, institutions and information.
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