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ASSESSING OPTIONS FOR EFFECTIVE MECHANISMS TO SHARE BENEFITS

INSIGHTS FOR REDD+ INITIATIVES

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PROFOR
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ACRONYMS

A/R	Afforestation/reforestation
BMCT	Bwindi Mgahinga Conservation Trust, Uganda
BSM	benefit sharing mechanism
CDM	Clean development mechanism
FCPF	Forest Carbon Partnership Facility
FIA	Forest Investment Account, Canada
FPIC	Free, prior, and informed consent
GHG	Greenhouse gases
GIS	Global information system
ICMS-E	Impostos Sobre Circulação de Mercadorias e Prestação de Serviços Ecológico, Brazil (Approximately equivalent to value-added tax)
IUCN	International Union for the Conservation of Nature
LCSC	Local community steering committee
MRV	Monitoring, reporting, and verification
NGO	Nongovernmental organization
NIB	National input-based (benefit sharing mechanism)
NPB	National performance-based (benefit sharing mechanism)
PES	Payments for Ecosystem Services
PSAH	Program for Hydrological Services, Mexico
REDD+	Reduced Emissions from Deforestation and Forest Degradation, plus conservation, sustainable management of forests, and enhancement of forest carbon stocks
RFA	Redevance Forestière Annuelle or Annual Forestry Fee, Cameroon
RUPES	Rewarding Upland Poor for Environmental Services, Philippines
SFM	Sustainable forest management
SNIB	Subnational input-based (benefit sharing mechanism)
SNPB	Subnational performance-based (benefit sharing mechanism)
TAU	Trust Administrative Unit
TMB	Trust Management Board
UNFCCC	United Nations Framework Convention on Climate Change
VCS	Verified carbon standard

GLOSSARY

Carbon credit	A certificate or instrument that represents the reduction of emissions of greenhouse gases by the equivalent of one tonne of carbon dioxide relative to an agreed baseline.
Carbon rights	The rights to carbon as property, and the associated rights to transfer and trade carbon (Peskett 2011a).
Forest rent	The difference between the market price for forest products and the costs of bringing them to market (Karsenty 2000).
Input-based benefit sharing mechanisms	Input-based mechanisms distribute benefits up front to partners (e.g., community groups) on the basis that these provide enabling conditions for adoption of targeted practices (e.g., those associated with avoided deforestation). The future performance of the recipients of these benefits is not monitored. No link is provided between the distribution of benefits and measurable performance in forest management.
Monitoring, reporting, and verification	In relation to REDD+, monitoring and reporting of carbon stock changes and the social and environmental impact of REDD+ at a project, subnational, or national level, and verification of reports by a designated third party.
National approach	A national carbon-accounting framework and MRV system, with nations being rewarded for emissions reductions relative to an established national reference level, rather than at a subnational or project level. Reductions may be rewarded through allocation of tradable carbon credits, by financial transfers from a global fund, or by other mechanisms.[1]
Nested approach	A national climate-change policy, carbon accounting framework, and MRV system, whereby emissions reductions at both the national and subnational or policy level are rewarded through allocation of tradable carbon credits. Under a nested approach the national government sets up a national accounting framework and establishes a nationwide monitoring system. The government is rewarded with incentives from an international system (or through a bilateral arrangement) for implementing policy reforms that would lead to verifiable emission reductions. Meanwhile, implementation of REDD+ activities also occurs at the subnational level led by local or regional governments, communities, NGOs, or private developers. These activities account for emission reductions at the subnational level and earn incentives directly from the international (or bilateral) system based on those reductions. This subnational accounting needs to be aligned to the national level (i.e., aggregate credits issued in any given year must be based on the performance of the nation as a whole relative to its reference emission level) (Cortez et al. 2010).
Performance-based benefit sharing mechanisms	Performance-based mechanisms distribute benefits on the condition that the partners receiving the benefits (e.g., community groups) have achieved a predefined, measurable, and verifiable standard of performance against a baseline (e.g., have restored or protected X number of forest hectares).

[1] Adapted from Angelsen et al. 2008.

Readiness	To be "REDD+ ready," a country, state, or province might aim to have in place the following: ■ A favorable policy environment that allows for the implementation of REDD+ programs in an efficient, effective, and equitable manner (the "Three Es") (CIFOR 2009) ■ An institutional structure that allows for effective decision making regarding REDD+ development at a government level ■ Adequate physical and human capacity within the government, nongovernmental, academic, and private sectors to effectively assess forest carbon stocks and measure carbon changes and leakage ■ Clear and transparent revenue and incentive-sharing mechanisms ■ A financial management system established for funds to flow to beneficiaries and stakeholders in an efficient, effective, and equitable manner
REDD	Reducing Emissions from Deforestation and Forest Degradation (REDD) is an effort to create a financial value for the carbon stored in forests, offering incentives for national and subnational actors to reduce emissions from forested lands and invest in low-carbon paths to sustainable development.
REDD+	"Policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries."[2]
Subnational approach	A national climate-change policy, carbon accounting framework, and MRV system, whereby emissions reductions are rewarded only at the subnational or project level. Using this approach, both REDD+ accounting and implementation would be focused on a defined geographic area or project site. Project development activities could be undertaken by individuals, communities, NGOs, private companies, and different levels of government. Forest CO_2 emission baselines; subsequent monitoring, reporting, verifying (MRV), and rewarding would only be for the sites in question. Projects would have to account for any "leakage" or displacement of destructive activities from the project site to other forest areas outside the project area (RECOFTC 2009).
Land rights	Land rights refer to both: ownership or other legally enforceable rights of an individual or a community over land (de jure rights), and occupancy and use rights (de facto rights).

[2] UNFCCC/CP/2007/6/Add.1,14 March2008; Decision 1/CP.13 [BAP], paragraph 1(b)(iii).

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1 INTRODUCING FOREST SECTOR BENEFIT SHARING MECHANISMS

Since the UNFCCC conference of the parties in Bali (COP13), discussions around the role of tropical forests in reducing emissions from deforestation and forest degradation (REDD+) have revolved around the need for financial incentives and compensation to involve countries in critical climate change mitigation measures. Most recently, during the COP 16 discussions in Cancun, parties committed to a Green Climate Fund, which is meant to be capitalized at US $100 billion by 2020, and used to help developing countries finance emission reduction and adaptation. There were also commitments to provide new and additional resources of approximately US $30 billion for 2010–12 for investments through international institutions (including in the area of forestry). While these numbers look significant and generate considerable optimism, different experts have estimated that approximately US $20 billion per year will be necessary to prevent 90 percent of deforestation and, therefore, reduce emissions.

Numerous challenges are associated with using these resources effectively. One of these is identifying the mechanism for the markets and development partners to make available financial resources for developing countries implementing REDD+. The second, and more critical, challenge is ensuring the financial resources are solely used to effectively deliver the specified goals of REDD+. The latter depends on ensuring financial resources associated with such initiatives translate into incentives for those who use and manage forest resources.

Recent work in this area has confirmed that achieving REDD+ objectives will require effective distribution of benefits from the national or subnational level to the local level. Experts have identified various models that offer insights into effectively transferring benefits (see, for example, Costenbader, 2011). These various models provide interesting findings for development partners and national REDD working groups regarding the challenges and lessons for designing benefit sharing schemes.

1.1 OBJECTIVES

One objective of this paper is to provide information and tools for policy makers and development partners engaged in developing arrangements for transferring REDD+ benefits. This paper is also intended to help key stakeholders design a mechanism that is appropriate for a country's context by taking into account these factors:

- The country's approach to REDD+
- Whether the national REDD+ program is donor funded, based on payment for performance,[3] or linked to the international compliance carbon market
- The range and type of recipients that the arrangement has to involve

3 Donor funds released according to stages depending on the partner country meeting carbon abatement (possibly also ecosystem service conservation and poverty alleviation targets) e.g., the Norway and Indonesia REDD+ funding program.

Another objective is to provide information and tools for assessing and structuring benefit sharing mechanisms at national and subnational levels (e.g., at the local government or project level) and at local community levels. This paper, however, does not address benefit sharing within communities, because this would depend on local circumstances.

This paper includes an Options Assessment Framework that would help REDD+ stakeholders identify nationally appropriate REDD+ benefit sharing mechanisms, and offers guidance on measures needed to successfully design and implement a selected mechanism.

This paper is based on a quick review of 12 existing forest benefit sharing mechanisms representing a spectrum of approaches. From the 12, five were selected and examined in detail using information from key informants and available materials.

1.2 APPROACH USED

A three-step research process was used for the case studies and for developing the framework. The three steps involved these actions:

1. Consolidating a list of more than 30 different benefit sharing arrangements and classifying them according to categories such as their scope, scale, country, and data availability. This list was then narrowed to 12 mechanisms that spanned a range of approaches and were known to be effective.
2. A desk-based research of the long list of 12 forest sector benefit sharing mechanisms that were selected to provide an appropriate range of geographies and mechanism types. A template was created to compile information on the mechanisms, including information on objective, how the benefit was administered, the number of beneficiaries, total value, strengths, type of benefit delivered, requirement with regard to clarity of rights, how benefits were transferred, engagement of local partners, institutional requirements, and country context. This research was used to derive lessons learned for the establishment and success of REDD+ benefit sharing mechanisms and to select a short list of benefit sharing mechanisms for further in-depth review.
3. Short listing five mechanisms for an in-depth review that includes an appropriate range of mechanism types and scales. Data collection on the five mechanisms involved interviewing stakeholders from government, NGOs, academia, and private and legal sectors to obtain primary data on the mechanism. These interviews provided direct insight into the critical establishment and success factors for these mechanisms, as well as their areas for potential improvement. The "critical success factors" identified during this analysis form the basis for the framework.

1.3 STRUCTURE OF THIS PAPER

This paper is divided into three sections to provide the reader with an introduction to forest sector benefit sharing mechanisms and their relevance for REDD+; guidance on establishing benefit sharing mechanisms; and Options Assessment Frameworks for four REDD+ benefit sharing mechanism categories.

Section 1: Introducing Forest Sector Benefit Sharing Mechanisms

- This section begins with an overview of forest benefit sharing and the mechanisms for transferring these benefits, benefit sharing mechanism participants, and the type of forest benefits the mechanisms distribute.
- It also highlights key lessons from existing forest sector benefit sharing mechanisms and describes their relevance to REDD+.

- Finally it provides a "typology" for forest sector benefit sharing mechanisms, with a description of each typology along with case study examples to illustrate how these different benefit sharing mechanisms may be applied in REDD+.

Section 2: Forest Sector Benefit Sharing Mechanisms and Their Relevance to REDD+

- This section provides a summary of the key lessons learned during the establishment of other forest sector benefit sharing mechanisms. The lessons are broken down among benefit sharing mechanism types, and may be worth policy makers' consideration when establishing REDD+ benefit sharing mechanisms in other countries.

Section 3: Options Assessment Framework for Identifying a Suitable Benefit Sharing Mechanism

- This section provides a high-level, step-by-step approach to establishing benefit sharing mechanisms. This approach includes methods to gain wider buy-in, the pre-establishment work needed, and the post-benefit sharing mechanism launch; ongoing management and review, including a short list of information sources for the further reference on forest sector; and REDD+ benefit sharing mechanisms.
- This section contains the Options Assessment Frameworks both for national and subnational benefit sharing mechanism types, together with guidance on their use.
- These Options Assessment Frameworks are designed to help decision makers and development partners make an initial assessment of one or more appropriate mechanisms for distributing REDD+ benefits in their countries, taking the following four "building blocks" into account:
  - Government, civil society, community, and private-sector institutional capacity
  - The national or subnational legal framework relevant to REDD+
  - Fund management capacity and experience
  - Monitoring capacity and experience.
- Linking the results from the options assessment to enabling actions for implementation, this section helps identify the next steps needed to establish an appropriate REDD+ benefit sharing mechanism in a country.

1.4 BENEFIT SHARING IN THE FOREST SECTOR

Forest benefit sharing mechanisms transfer monetary or nonmonetary benefits to individuals or organizations that have a stake in, or effect on, a forest asset. Figure 1.1 illustrates typical parties involved in these mechanisms.

1.4.1 What Do We Mean by Benefit Sharing in the Forest Sector?

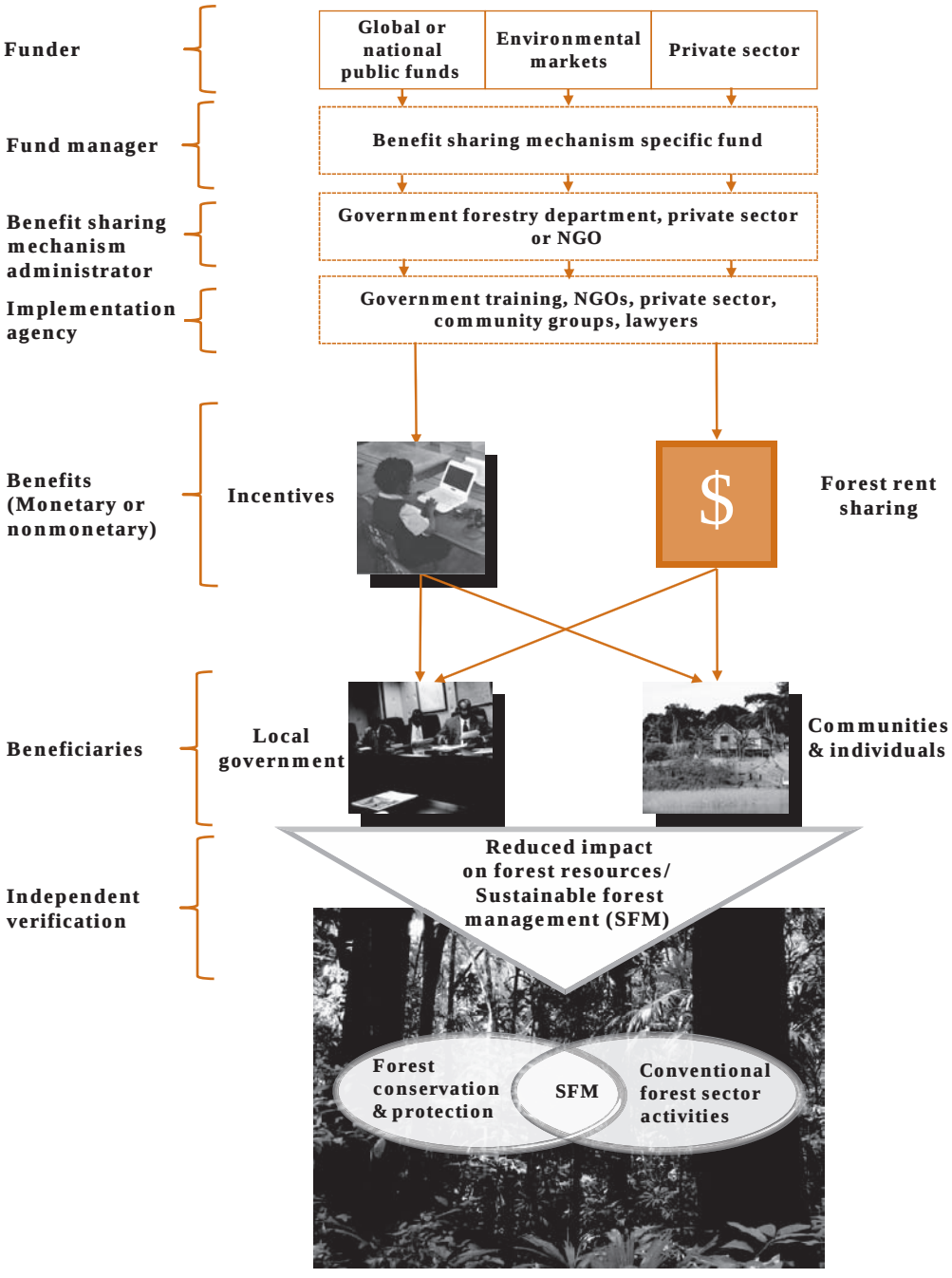
There are different ways in which benefits in the forest sector may be distributed. These can be grouped into two benefit sharing categories: forest rent and incentives.

1.4.1.1 Forest Rent[4]

Forest rent includes the distribution of money among stakeholders, from revenue or "rent" derived from the management of a forest resource. Forest rent benefits may be linked with an "action" on behalf of the recipient, or may not require an action at all:

4 The difference between the market price for a natural product (e.g., a forest product) and the costs of bringing it to market represents economic rent (Karsenty 2000).

FIGURE 1.1. PARTICIPANTS IN A FOREST SECTOR BENEFIT SHARING MECHANISM



Forest Rent Benefits Provided for Specific Actions

Rent is shared with subnational or local level forest rights holders according to the level of resource input provided by these rights holders. For example, if a community group owns the rights to a 30 percent share of a forest asset, and provides the labor required to manage and harvest this asset, they may be entitled to approximately 30 percent of the forest rent in return.

Forest Rent Benefits Provided Without Requiring Specific Actions

Rent is distributed to "affected stakeholders" who are disadvantaged in some way by the forest management activities. These stakeholders hold forest rights but do not participate in the management of the forest asset. The amount of forest rent transferred may be negotiated according to the perceived economic value of the damage or loss to the affected stakeholder or according to a preset benefit sharing model (see Case Study 1: RFA, Cameroon [Appendix I] for an example of this model). Rent may also be earmarked for distribution to subnational government agencies (at province or state level) as the forests are national resources.

1.4.1.2 Incentives

Incentives are not directly linked to forest rent, but are monetary or nonmonetary benefits transferred to a stakeholder to enable or motivate a particular behavior. Forest-based incentives may also be linked to an action or provided for forfeiting use of land in a certain way.

Incentives Provided for Specific Actions

In cases in which forestry activities have specific objectives, incentives to motivate activities are often described as benefits.

- **Support for sustainable land use and livelihoods:** Many forest activities are focused on forest conservation and restoration as a goal in its own right. To achieve this, funds from public or donor sources can be used to provide incentives and support for sustainable land use and livelihoods. For example, individual landowners may be offered incentive payments to restore or protect a forest on their land or offered support to establish fruit tree agro-forestry systems, with a goal of relieving pressure on natural forest resources.
- **Support for forest governance and institutional development:** Forest funding programs can support improved forest governance and institutional development for communities, civil society, and government. The immediate objective of this support may be to ensure the smooth and effective function of the program, but the resulting increase in institutional capacity and improved forest governance systems can create an important longterm benefit for forest stakeholders in the future.
- **Compensation for opportunity costs:** Forest rights holders may have to provide a monetary or nonmonetary transfer to other forest stakeholders (e.g., local communities) to refrain from an activity or to cover a loss. For example, a forest rights holder may need to provide a payment to a local community to give them incentive to refrain from their preferred economic activity, which, if carried out, would conflict with the rights owner's forest-management plan.

Theoretically, compensation covers opportunity costs, but in reality is usually a negotiated amount, formalized through an agreement between the forest rights holder and the stakeholder group receiving the compensation.

These compensation benefits are often transferred from the rights owner to stakeholders in accordance with the terms of a contractual agreement. For example, a forest conservation project owner may give a local community incentive to refrain from converting natural forest to cropland, using compensation payments equal to the opportunity cost.

1.4.2 Types of Benefits

The benefits distributed through benefit sharing mechanisms may not always involve a direct monetary payment, and the total benefit delivered may be a combination of many different forms of benefits. Table 1.1 provides a categorization of forest benefits between monetary and nonmonetary benefit types, with illustrative examples of each.

TABLE 1.1. TYPES OF FOREST SECTOR BENEFITS DISTRIBUTED THROUGH BENEFIT SHARING MECHANISMS

BENEFIT TYPE[a]	MONETARY/ NONMONETARY	FORM OF DISTRIBUTION
Rent		
Forest rent (i.e., direct profit from the sale of timber or nontimber forest products)	Monetary	■ Cash payments
	Nonmonetary	n.a.
Incentives		
Compensation of opportunity costs (e.g., forest landowners protect forest rather than convert to crop production and in return receive monetary or nonmonetary compensation value equal to the per hectare commercial value of the crop)	Monetary	■ Cash payments ■ Tax relief
	Nonmonetary	■ Goods and materials (e.g., seedlings and fertilizers) ■ Capacity building and training (e.g., forest management) ■ Social infrastructure and infrastructures (e.g., schools, rural irrigation) ■ Access to loans on preferential terms ■ Access to microfinance on preferential terms
Incentives and support for sustainable land use and livelihoods (e.g., funding and capacity building for the establishment of fruit tree agro-forestry for smallholder farmers)	Monetary	■ Salaries ■ Cash payments ■ Tax relief
	Nonmonetary	■ Formal land titles ■ Formal access or concession rights ■ Goods and materials (e.g., seedlings and fertilizers) ■ Capacity building and training (e.g., forest management) ■ Increased market access for premium products (e.g., forestry or agricultural commodity certification) ■ Price guarantees ■ Cost-sharing arrangements ■ Access to loans on preferential terms ■ Access to microfinance on preferential terms
Support for forest governance and institutional development (e.g., provision of training to district forestry officers in how to improve support services for communities and the enforcement of community forestry law)	Monetary	■ Improved salaries for government staff, NGOs, and community groups to increase retention and reduce relative appeal of bribes
	Nonmonetary	■ Capacity building and training (e.g., organizational development, financial management, anticorruption measures, community support) ■ Provision of capital inputs needed for more effective forest law enforcement (e.g., vehicles) ■ Formalization of forest governance working groups at national or subnational level ■ Organization of regular forest governance and community forestry workshops and consultations ■ Additional employment benefits for forest department staff

[a] Peskett 2011b.

1.4.3 Who Participates in Forest Sector Benefit Sharing Mechanisms?

Benefit sharing mechanism participants may be divided into the following categories:

- Funders
- Benefit sharing mechanism beneficiaries
- Managers or administrators
- Implementing agencies[5]
- Independent verifiers.

Table 1.2 provides a summary of these participant categories, the role they play within a benefit-sharing mechanism, and the stakeholder groups that may fall within each category.

TABLE 1.2. BENEFIT SHARING MECHANISM PARTICIPANTS

CATEGORY	ROLE	STAKEHOLDER TYPE
1. Funders	Provide funding to cover ■ Benefit sharing mechanism establishment costs ■ Administrative costs ■ Monitoring costs ■ Benefit payments ■ Funding expansion and replication	■ Bilateral or multilateral development partners or donors ■ International NGOs ■ Private foundations ■ Private sector (through donation, investment, purchase of ecosystem service rights, or tax contribution) ■ State-owned enterprises (in some countries)
2. Beneficiaries	Provide resource inputs, services, or access rights to forests in exchange for either ■ Forest rent ■ Compensation for opportunity costs ■ Incentives and support for sustainable land use and livelihoods ■ Support for forest governance and institutional development	■ Community groups ■ Individual households ■ Private landowners ■ Private sector business
3. Managers or administrators	■ Provide fund management services ■ Administer contractual arrangements with beneficiaries ■ Monitor, report, and possibly verify benefit sharing mechanism performance (verification may be carried out by independent party) ■ Continually improve benefit sharing mechanism governance and operations based on monitoring findings ■ Assess long-term effects of benefit sharing mechanism ■ Contract out parts of the benefit sharing mechanism management process to external providers where appropriate	■ National governments and ministries ■ Local and regional governments ■ Autonomous trust bodies ■ Private sector actors ■ NGOs

(*Continued*)

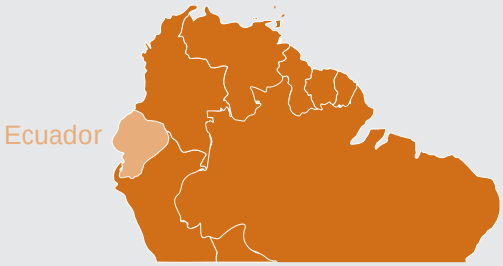
5 The key difference between implementing agencies and managers or administrators is that implementing agencies do not manage benefit sharing mechanism funds but do provide benefit transfer services such as capacity building, land tenure clarification, and construction of public infrastructure. For example, an implementation agency may be a national NGO that trains communities in small business management.

TABLE 1.2. BENEFIT SHARING MECHANISM PARTICIPANTS (*CONTINUED*)

CATEGORY	ROLE	STAKEHOLDER TYPE
4. Implementing agencies	■ Provide training and capacity-building services ■ Operate monitoring systems ■ Assist with mapping and demonstrating community land rights (e.g., through collaborative GIS mapping) ■ Capacity building and training ■ Develop public infrastructure for the good of benefit sharing mechanism beneficiaries	■ Government training and capacity building services ■ Municipal authorities ■ Lawyers ■ GIS specialists ■ Private sector ■ NGOs ■ Community groups
5. Independent verifiers	■ Verify monitoring and reporting of findings from fund manager or administrator ■ Potential training and capacity building role for fund manager or administrator, if required	■ Verification consultants or consultancies with a specialty in REDD+ or forest sector verification ■ NGOs with specialty in REDD+ or forest sector verification

Figure 1.1 provides an overview of the function of a generic forest benefit sharing mechanism and the role of each benefit sharing mechanism participant within the mechanism. This is followed by a case study of the Socio Bosque program in Ecuador (box 1.1), which provides an example of each of the forest sector benefit sharing mechanism participants described in table 1.2.

BOX 1.1. EXAMPLES OF BENEFIT SHARING MECHANISM PARTICIPANTS–SOCIO BOSQUE, ECUADOR



Background: The Ecuadorian government started the Socio Bosque (Forest Partners) program in September 2008 as a national incentive-based conservation program. It is a central component of the Ecuadorian proposal for REDD+. Through the scheme, the government provides biannual payments under a 20-year contract to private landholders and communities for the conservation of native forests and other native ecosystems in Ecuador. Payments are conditional on the verification of conservation activities, which is carried out through satellite monitoring and field visits by local ministry officials. Participants in the Socio Bosque can be categorized as follows:

Funders: Since its launch, the program has received 100 percent of its funding from the government of Ecuador. However the German development bank KfW has signed an agreement to support the program, providing EU 13 million over five years, starting at the end of 2011.

Beneficiaries: The principal beneficiaries are forest-dependent communities and private forest landowners.

Administrators: The Ministry of Environment is responsible for the overall coordination of the program, and the Ministry of Finance is in charge of transferring the incentives from the central bank account.

Implementing agencies: The Ministry of Environment has formed a specialist team to implement the Socio Bosque program. Team responsibilities include community engagement and capacity building, monitoring beneficiary performance through field assessment and GIS analysis, registration of community lands, and contracting with beneficiaries.

Local NGOs have provided additional implementation support. For example, Nature and Culture International provides beneficiaries with assistance for mapping and GIS (at a cost of about US $1.5 to US $2 per hectare), legal support to confirm land ownership, and land registration.

Independent verifiers: At present, verification of beneficiary performance is undertaken internally by the Socio Bosque monitoring team. If the program wishes to link to international REDD+ markets, or qualify for performance-based donor funding in the future, it is likely that independent verification by a third-party entity will be required.

1.5 BENEFIT SHARING MECHANISMS AND REDD+

1.5.1 Why Are Benefit Sharing Mechanisms Important for REDD+?

REDD+ encompasses a broad set of forest mitigation activities, including reducing emissions from deforestation and forest degradation, sustainable management of forests, and the enhancement of forest carbon stocks in tropically forested countries.

Depending on the detailed implementation of REDD+ at a national and international level, forest nations may be able to secure funding for reducing emissions from forest degradation and deforestation from a range of sources, including donors and multilateral funds (a funded approach) and the voluntary and compliance carbon markets (a carbon markets-based approach):

- **A nonmarket approach** to REDD+ may include monetary or nonmonetary compensation for the opportunity costs of implementing REDD+ activities; support for SFM, afforestation, or reforestation; improvements in forest governance; institutional capacity-building; and forest law enforcement. REDD+ funds are already being disbursed as part of donor nations' "Fast Start" commitment of US $4.5 billion made in Copenhagen.
- **A carbon market-based approach** is likely to require carbon credit rent to be disbursed among REDD+ stakeholders to ensure the long-term success of the REDD+ mechanism. This rent may be disbursed directly as monetary payments or may be used to provide nonmonetary benefits (see table 1.1 for more detail). A limited number of private, NGO, and government partnership REDD+ projects are already accessing funding through the voluntary carbon markets.

  A carbon-market approach may require the transfer of opportunity cost compensation with support for productive activities and institutional development (see table 1.1) for forest communities to complement the REDD+ rent they receive. This could be particularly important where communities receive only a fraction of REDD+ rent, which may not fully compensate for lost earnings from refraining from conventional forestry activities (Vickers 2009).

The success of both approaches is dependent on any monetary or nonmonetary REDD+ benefits being distributed effectively, equitably, and efficiently. IUCN's 2009 report "REDD-plus and Benefit Sharing" highlights two reasons for this:

- Benefits and incentives must be created that reward individuals, communities, organizations, government agencies, and business for actions that change land use and reduce emissions. These incentives must be at least equal to or in excess of the opportunity cost of legal REDD+ activities[6] to make it economically rational for these stakeholders to participate in the benefit sharing mechanism.
- Equitable benefit sharing mechanisms can build legitimacy for REDD+ programs at an international and national level by ensuring that both the people directly affected by REDD+ actions and the wider public are treated fairly and equitably.

1.5.2 Looking Forward

For national REDD+ systems to succeed, they must be based on appropriate and carefully designed benefit sharing mechanisms. These need to take into full account not only the country's REDD+ strategy but also the institutional, legal, and fund management realities locally.

The process of designing REDD+ benefit sharing mechanisms should involve all relevant governmental, private sector, civil society, and community actors to achieve legitimacy and achieve an equitable distribution of REDD+ development benefits.

6 Adapted and expanded from original source.

2 FOREST SECTOR BENEFIT SHARING MECHANISM TYPES AND THEIR RELEVANCE TO REDD+

2.1 DEFINING TYPES OF BENEFIT SHARING MECHANISM

Forest sector benefit sharing mechanisms can range from local-level arrangements among private companies and communities to national-level public-payment mechanisms. In the interests of practicality, we have classified benefit sharing mechanisms according to two distinguishing characteristics:[7]

- Scale of operation: National versus subnational
- The conditionality of benefit disbursement: Input-based versus performance-based.

Table 2.1 provides an overview of these characteristics and how they shape benefit sharing mechanisms

When the scale of a benefit sharing mechanism is taken into consideration alongside the conditionality of benefit disbursement, four benefit sharing mechanism types can be identified as shown in figure 2.1.

The following section provides a more detailed account of each of these four forest sector benefit sharing mechanism types and their relevance to REDD+, using a series of case study examples.

2.2 FOREST SECTOR BENEFIT SHARING MECHANISM TYPES AND THEIR RELEVANCE TO REDD+

National level benefit sharing mechanism types are applicable to national approaches to REDD+. In contrast, subnational benefit sharing mechanism types are applicable to subnational or nested approaches. Each is likely to have the greatest relevance to particular phases of REDD+. REDD+ initiatives involve three phases:

- Phase 1—Readiness and capacity building
- Phase 2—Implementation of policies and measures
- Phase 3—Payment for performance

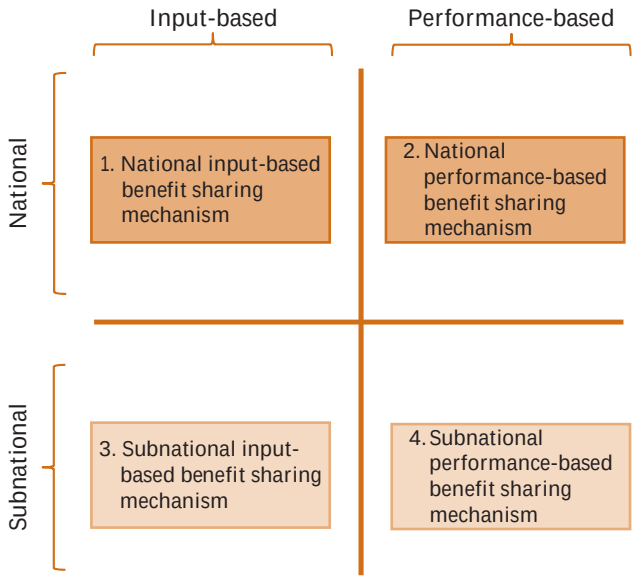
In this three-phase framework, input-based benefit sharing mechanisms are likely to be more prominent during the earlier phases of REDD+ (i.e., Phases 1 and 2). In contrast, performance-based

7 An alternative classification between National and Project approaches is offered by Peskett (2011), although the focus is on REDD+ rather than all forest sector benefit sharing mechanisms. National approaches involve sharing benefits with communities as a whole (often through infrastructure investments), community groups, or individuals. Under project approaches, benefits can also be transferred to whole communities, community groups, or individuals.

TABLE 2.1. CHARACTERISTICS FOR CLASSIFYING BENEFIT SHARING MECHANISM

BENEFIT SHARING MECHANISM CHARACTERISTICS		SCOPE
Scale of operation	National	Distribute benefits from a national to subnational or local level. Benefits may either be distributed directly to the end recipient (e.g., community groups) or through a subnational organization (e.g., local government institutions).
	Subnational, including both provincial and project level benefit sharing mechanisms	Distribute benefits from a subnational to local level (e.g., from a provincial government institution to community groups) or between subnational actors (e.g., benefits disbursed from provincial to municipal government).
Conditionality of benefit disbursement	Performance-based	Distribute benefits on the condition that the partners receiving the benefits (e.g., community groups) have achieved a predefined, measurable, and verifiable standard of performance against a baseline (e.g., have restored or protected X number of forest hectares).
	Input-based	Beneficiaries agree with the benefit sharing mechanism management body to carry out specified actions, or refrain from certain actions, in return for up-front monetary or nonmonetary inputs from the benefit sharing mechanism. No link is provided between the distribution of benefits and future measurable performance in forest management.

FIGURE 2.1. FOUR TYPES OF FOREST SECTOR BENEFIT SHARING MECHANISMS



benefit sharing mechanisms are likely to be more prominent in Phase 3. It is important to recognize that these benefit sharing mechanism types are not mutually exclusive and may be implemented simultaneously within REDD+ nations. This may allow for the transfer of input-based benefits to communities with lower monitoring capacity and performance-based benefits to communities where monitoring capacity is higher.

TABLE 2.2. SUITABILITY OF FOREST BENEFIT SHARING MECHANISM TYPES TO DIFFERENT PHASES OF REDD+

FOREST BENEFIT SHARING MECHANISM TYPE	PHASE 1	PHASE 2	PHASE 3
National input-based	●	●	
National performance-based		●	●
Subnational input-based	●	●	
Subnational performance-based		●	●

Table 2.2 summarizes the suitability mentioned above.

It is important to note that table 2.2 shows where each benefit sharing mechanism type is of *greatest* relevance, although subnational input-based benefit sharing mechanisms could be used for ongoing capacity building during the Phase 3 approach.

2.2.1 Relevance of National Input-Based Benefit Sharing Mechanisms to REDD+

National input-based benefit sharing mechanisms can support REDD+ programs in the following ways:

- **They provide a useful mechanism to build REDD+ readiness:** Both Phases 1 and 2 of REDD+ involve an upfront distribution of nonmonetary benefits. For example, benefits may be in the form of institutional and forest governance capacity building, or in the form of improvements to the implementation of community forestry laws and support for communities to demonstrate and access their land and forest carbon rights. This is also an important role of subnational input-based benefit sharing mechanisms (see below).
- **They may be appropriate in countries with low MRV capacity:** Many key REDD+ nations are some way from having the MRV coverage and precision needed to implement a national performance-based REDD+ benefit sharing mechanism. Even for proxy measures of carbon, such as hectares of forest protected or restored, many countries have inadequate MRV capacity. In these environments, it is perhaps more realistic to begin with a national input-based benefit sharing mechanism, which can migrate to a performance-based benefit sharing mechanism as a country's MRV capacity grows.

2.2 Relevance of National Performance-Based Benefit Sharing Mechanisms to REDD+

National performance-based benefit sharing mechanisms can support REDD+ programs in the following ways:

- **They are likely to be required for Phases 2 and 3 of REDD+ for which a national-level approach is taken, regardless of whether a nonmarket- or market-based approach is applied:** As REDD+ nations progress toward Phases 2 and 3 of REDD+ they will be required to monitor, report, and verify carbon abatement, poverty alleviation, and conservation results.

  In Phase 2, input-based benefit sharing mechanisms may transition to performance-based benefit sharing mechanisms using a blended approach of both input- and performance-based benefit transfers. This will be particularly important in facilitating and providing incentive toward the formation of REDD+ policies at a national and subnational level.
- **Performance-based benefit sharing mechanisms can provide an added level of accountability and assurance that benefits disbursed are having the desired effect:** Where verified carbon emissions are not required, linking funding to verifiable proxy measures of carbon

abatement (e.g., the number of forest hectares restored or protected) can provide benefit sharing mechanism beneficiaries with a clear performance target. Performance-based benefit sharing mechanisms can similarly be used to support poverty alleviation, conservation, and institutional and policy development goals.

An additional benefit is performance data that can add further accuracy to the benefit sharing mechanism review process, and can form the basis for strategic improvements in the design and function of the benefit sharing mechanism over time.

2.2.3 Relevance of Subnational Input-Based Benefit Sharing Mechanisms to REDD+

Subnational input-based benefit sharing mechanisms can support REDD+ programs in the following ways:

- **They can be designed to meet different provincial or state-level REDD+ readiness needs:** The difference in REDD+ readiness between provinces or states may be as great as the differences between readiness in REDD+ countries (e.g., Brazil, Indonesia). Subnational input-based benefit sharing mechanisms allow for REDD+ readiness benefits to be tailored to the exact political, economic, social, and geographic needs of local governments, civil societies, community groups, and the private sector.

  Subnational input-based benefit sharing mechanisms can provide local-specific institutional and forest governance capacity building. For instance, they can help address the specific challenges of provinces or municipalities in implementing community forestry laws and support communities to demonstrate and access their land and forest carbon rights.

- **They allow provinces or states to implement demonstration projects to trial concepts and address stakeholder concerns around REDD+:** Demonstration projects play an important complementary role for REDD+ policy development. They allow trial runs for REDD+ policies and benefit sharing arrangements with different stakeholder groups. Lessons learned from these trials can be taken into account before a performance-based national or subnational REDD+ system is begun.

2.2.4 Relevance of Subnational Performance-Based Benefit Sharing Mechanisms to REDD+

Subnational performance-based benefit sharing mechanisms can support REDD+ programs in the following ways:

- **They can link directly with national performance-based benefit sharing mechanisms, allowing the effective implementation of the nested approach to REDD+:** Subnational performance-based benefit sharing mechanisms may be of particular interest to those countries considering a nested approach because they can allow for verified carbon reductions at a subnational level to be included in a national REDD+ carbon accounting system. On the basis of these verified carbon reductions, performance payments from either a carbon fund or the international carbon market can then be transferred down to subnational benefit sharing mechanism beneficiaries.

- **They allow for states and provinces with higher MRV capacity to move forward to Phase 3 of REDD+ within the subnational approach to REDD+:** For countries considering a subnational or nested approach to REDD+, subnational performance-based benefit sharing mechanisms may allow the most REDD+–ready provinces to access international carbon funds or carbon market finances with appropriate leakage safeguards in place.

2.3 WHAT IS THE TIME LINE FOR SETTING UP A FOREST SECTOR BENEFIT SHARING MECHANISM?

The development time line for a benefit sharing mechanism can involve three phases—pre-establishment, establishment, and maturation. The activities associated with each of the phases are as follows:

- **Pre-establishment, which may include**
  - Consulting with all relevant stakeholders and potential recipients
  - Drafting a benefit sharing mechanism strategy with completed operational plans
  - Reviewing laws that may enable or, conversely, pose a challenge to, benefit sharing mechanism implementation
  - Drafting terms of reference for benefit sharing mechanism management and implementation
  - Funding for the first phase of benefit sharing mechanism establishment
- **Establishment, which may include**
  - Establishing new laws to enable a benefit sharing mechanism to function (if needed)
  - Hiring management and implementation teams and beginning operation
  - Creating a benefit sharing mechanism management board
  - Implementing the flow of monetary and nonmonetary benefits to beneficiaries
  - Taking the pilot phase, where a piloting approach is used, to full-scale operation, with appropriate monitoring, reporting, and verification systems under way.
- **Maturation, which may include**
  - Reviewing the monitoring and evaluation reports of the establishment phase by the benefit sharing mechanism management board and team
  - Recording the lessons learned and using the experience to revise the benefit sharing mechanism strategy when the evaluation reports demonstrate sufficient performance to continue and to expand the benefit sharing mechanism
  - Expanding the benefit sharing mechanism to full-scale implementation and beginning to distribute benefits to all intended beneficiaries
  - Continuing to monitor activities and regularly reporting to benefit sharing mechanism management and the board
  - Raising additional funding, based on the success of the benefit sharing mechanism, to use for continuing and expanding the benefit sharing mechanism

2.4 HOW DOES EACH FOREST SECTOR BENEFIT SHARING MECHANISM TYPE WORK?

The figures presented in this section provide a step-by-step account of how different benefit sharing mechanism may work in practice. Please note that although the diagrams include all potential actors and benefit flows that could form a fully functioning national input-based benefit sharing mechanism, in reality it would be unlikely that all of these would be present in any one given benefit sharing mechanism. In each diagram, each step is numbered, with each number corresponding to the explanatory text below the diagram.

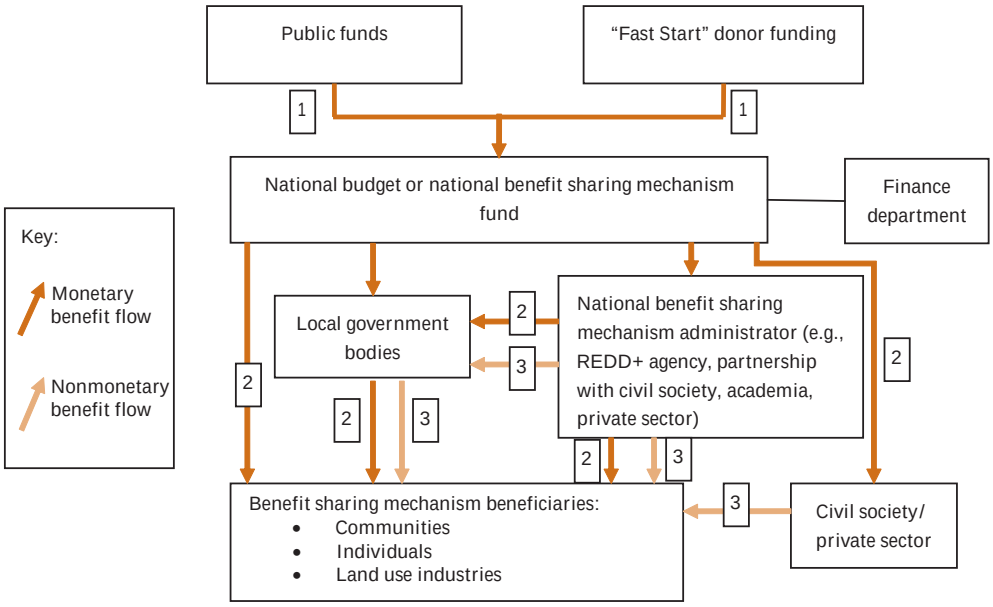
2.4.1 National Input-Based Benefit Sharing Mechanisms

Figure 2.2 and associated text describe how a national input-based benefit sharing mechanism may work.

Steps in a National Input-Based Benefit Sharing Mechanism

1. Potential funding sources for national input-based benefit sharing mechanisms include public funds (e.g., state-owned enterprise profits, tax revenues) and international "Fast Start" donor funding. Benefit sharing mechanism funding is likely to be directed toward the government finance department, which would manage the funding either within the national budget or as a separate fund.
2. There are then four potential options for disbursing the monetary benefits downward from the national level:
   i. Monetary benefits (e.g., cash payments, salaries, grants, loans, or tax relief) may be directed from the national budget or national benefit sharing mechanism fund directly to benefit sharing mechanism partners. In these circumstances, no step 3 benefit transfer is required. However, the potential of this approach is likely to be limited because without technical agency, civil society, or private sector involvement, there is little potential to disburse nonmonetary benefits to benefit sharing mechanism beneficiaries.
   ii. Monetary benefits may be directed to local government bodies.
   iii. The National REDD+ Agency or government agencies responsible for REDD+ (e.g., forestry department) may be appointed as a national fund administrator. This agency may then direct monetary benefits to benefit sharing mechanism partners. The administration body may also include representation from the civil society, academia, and the private sector.
   iv. The National REDD+ Agency or government agencies responsible for REDD+ (e.g., forestry department) may direct monetary benefits to local government bodies for disbursement to benefit sharing mechanism beneficiaries.

FIGURE 2.2. NATIONAL INPUT-BASED BENEFIT SHARING MECHANISM



It is important to note that these options are not mutually exclusive, and a REDD+ benefit sharing mechanism may incorporate a combination of a number of these options. Furthermore, the monetary and nonmonetary benefits could be disbursed jointly.

3. Using the financing received, nonmonetary benefits (e.g., capacity building and training in forest management, registration of community land titles, organized consultations) can be transferred to the benefit sharing mechanism beneficiaries from the national REDD+ administrator, local government bodies, the civil society, or the private sector. For the first two options, without the involvement of a technical intermediary, the potential to disburse nonmonetary benefits to benefit sharing mechanism beneficiaries is likely to be limited.

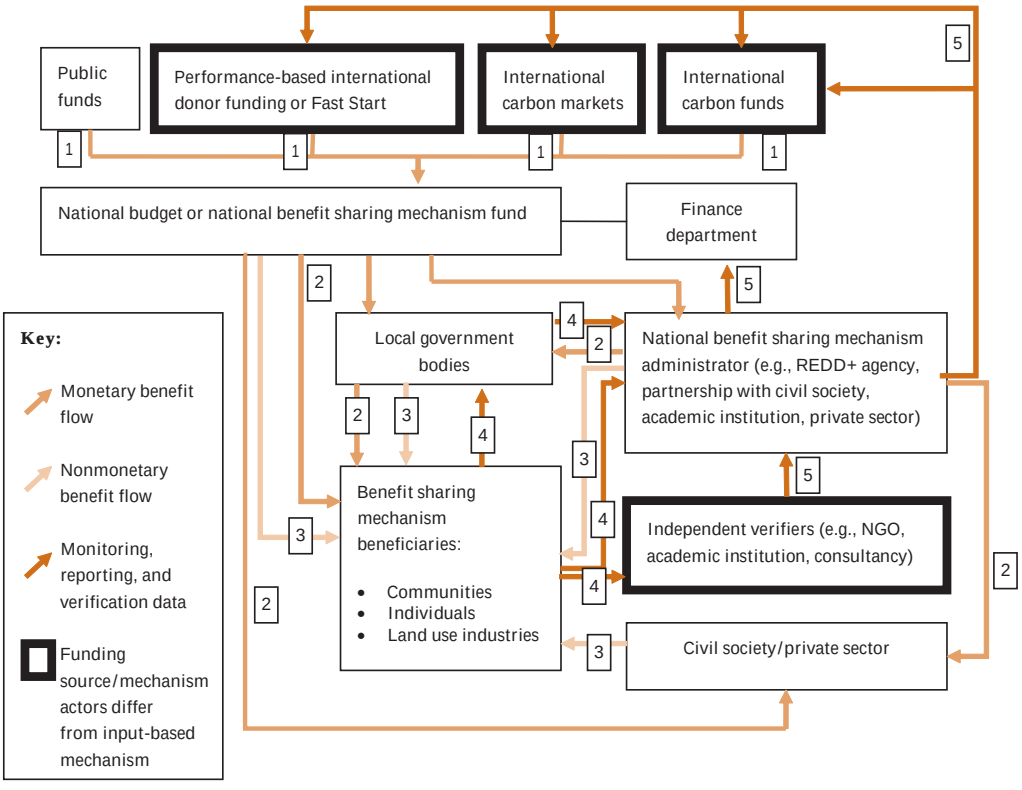
2.4.2 National Performance-Based Benefit Sharing Mechanisms

Figure 2.3 and associated text explain how a national performance-based benefit sharing mechanism may work. Key differences between this benefit sharing mechanism type and a national input-based benefit sharing mechanism, in terms of funding sources, processes, and actors, have been highlighted with either bold text or bold arrows.

Steps in a National Performance-Based Benefit Sharing Mechanism

1. Potential funding sources for national performance-based benefit sharing mechanisms include the following: public funds (e.g., state-owned enterprise profits, tax revenues) and international donor funding (this funding may be linked to national performance targets based on proxy measures for avoided deforestation). In the longer term, once sufficient MRV capacity exists and

FIGURE 2.3. NATIONAL PERFORMANCE-BASED BENEFIT SHARING MECHANISM



performance can be measured in terms of verifiable carbon emission reductions, funding could also be sought from national or international carbon markets.

2. Funding received by the government finance department may be disbursed to the following:
   i. A national benefit sharing mechanism administration body. This may be managed by the designated national REDD+ agency or in partnership with civil society, academia, or the private sector. If a trust fund model is used, the board may comprise representatives from all aforementioned stakeholder groups
   ii. Local government bodies
   iii. Civil society and the private sector.

   These options are not mutually exclusive, and a REDD+ benefit sharing mechanism may incorporate a combination of any number of these options. Additionally, monetary benefits could be disbursed with nonmonetary benefits.

   Monetary benefits (e.g., cash payments deposited in individual or community bank accounts) may be disbursed directly from the centralized benefit sharing mechanism fund, or they may be disbursed by decentralized government entities, together with civil society or private sector groups.

3. Using financing received, nonmonetary benefits may be transferred to benefit sharing mechanism beneficiaries by the national administration body, local government bodies, civil society, and the private sector (e.g., capacity building and training in forest management, formal land titles, FPIC [free, prior, and informed consent] consultations, or materials such as seeds and fertilizers) to create enabling conditions for their effective participation in a performance-based benefit sharing mechanism.

   For example, civil society organizations may hold training workshops in developing social investment plans; local government bodies may host public consultations and raise awareness of the benefit sharing mechanism; central government departments may assign land titles to beneficiaries; and private sector organizations may hold trainings in improved agricultural practices or forest-management techniques.

   Once sufficient enabling capacity is developed, a set of performance criteria may be agreed on through a contract between the beneficiary and the benefit sharing mechanism national administrator.

Steps four and five are different from those in input-based mechanisms.

4. Field-level performance data are monitored and reported to the benefit sharing mechanism national administrator. These data may be collected by one partner or a combination of benefit sharing mechanism partners depending on their respective capacities. For example, benefit sharing mechanism beneficiaries may be responsible for collecting periodic field data in line with preagreed methodologies on a monthly basis.
5. Decentralized government extension workers or external evaluation bodies may be charged with "ground-truthing" field data on a biannual or annual basis, and a centralized benefit sharing mechanism monitoring team, academic institution, or external consultancy may verify field results against remotely sensed images. The benefit sharing mechanism administrator verifies beneficiaries' performance against preagreed criteria and requests benefit sharing mechanism centralized fund management agents (e.g., the finance department) to release funding for benefit disbursal. In instances when donor funding is linked to national performance targets, the benefit sharing mechanism administrator may be required to present verified data to the international donor agency to trigger fund transfer into either the national budget or a specific benefit sharing mechanism fund. If the MRV system is sufficiently robust to accurately verify

BOX 2.1. SIMILARITIES BETWEEN NATIONAL INPUT AND PERFORMANCE-BASED BENEFIT SHARING MECHANISMS

1. Public funds represent a potential funding source for both national benefit sharing mechanism types.
2. During step 2, the national finance department or benefit sharing mechanism fund transfers benefits to the national benefit sharing mechanism administrator, local government bodies, civil society, and the private sector.
3. It is possible for a national input-based benefit sharing mechanism to migrate to a performance-based benefit sharing mechanism over time with sufficient monitoring resource input and with capacity-building support.

performance in terms of GHG emission reductions, the government may choose to sell credits into international carbon markets or seek funding through international carbon funds.

Box 2.1 highlights some of the commonalities between national performance and input-based benefit sharing mechanisms

2.4.3 Illustrative Examples of National Benefit Sharing Mechanisms

To demonstrate how national benefit sharing mechanisms may be applied in practice, illustrative examples of each of the two types of national benefit sharing mechanism are presented (boxes 2.2, 2.3). The examples contain summarized information about the background, the development time line, and key lessons the benefit sharing mechanisms may hold for the design of REDD+ benefit sharing mechanisms. Further information on the case studies is included in Appendix I.

BOX 2.2. EXAMPLE OF A NATIONAL INPUT-BASED BENEFIT SHARING MECHANISM– THE REDEVANCE FORESTIÈRE ANNUELLE (RFA), CAMEROON

Background

Established in national law in 1994, Cameroon's RFA is a fee forestry companies pay to benefit communities throughout the country. The fee is calculated according to the land area of the concession and the amount a company bid to acquire it.

The finance law of 1998 mandated that 50 percent of RFA demanded from Forest Management Units and Sales of Standing Volume should go to the state, 40 percent to local councils, and 10 percent to local communities that are adjacent to concessions. Following a June 2010 national decree (not yet fully implemented), the 40 percent fee for local councils is now split equally between the council that is adjacent to, or contains, the concession, and an equalization fund managed by a national agency called FEICOM. As such, the RFA should benefit local councils throughout Cameroon, including those in nonforested areas.

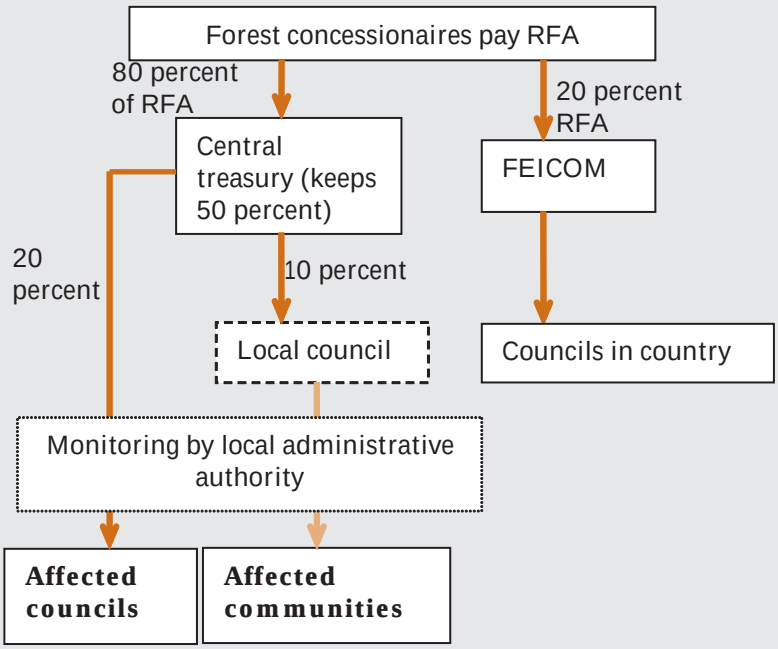
These public funds allocated for benefit sharing are distributed in three ways: Twenty percent is transferred from the forest company into a fund that is administered by FEICOM and used to harmonize

(*continued*)

the development of local government. Another 20 percent is paid from the central treasury directly to local councils. Ten percent of the collected royalties is to be distributed from the central treasury directly to community bank accounts for communities adjacent to the concessions. Currently the 10 percent is distributed to council bank accounts, and the council is distributing the funds to villages upon approving proposals for using the financial resources for community projects.

Three government ministries have distinct roles in administering these funds: Ministry of Forestry and Wildlife, Ministry of Economics and Finance (MINFI), and Ministry of Territorial Administration and Decentralization.

Community and council eligibility is based on geographic proximity to the concession. The use of the RFA funds is monitored at three levels: through local council committees, through local administrative authorities, and through government ministries. The monitoring of RFA use is at the council and community levels.

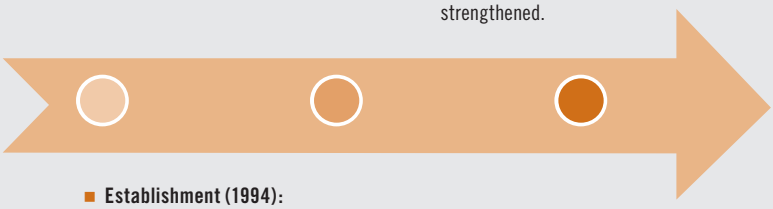


Benefits Distributed

Following the June 2010 decree, forestry companies transferred the relevant proportion of the RFA to the national treasury to be taxed; it was then transferred to recipient bank accounts. At the local level, the designated 10 percent of the RFA must be spent on approved community-development projects, while the 20 percent for the council must be spent on authorized activities (running costs and investments). Examples of the types of benefits that may be delivered include developing electricity and water supply projects, building and supplying health centers and schools, and constructing and maintaining the local infrastructure.

Time Line

- **Pre-establishment (circa: 1990 to 1994):**
  - Joint decision and commitment across key ministries to adopt a transparent system to share benefits from national forestry activities to communities.
  - A new law passed to implement the RFA and funds provided for local economic development programs.
- **Establishment (1994):**
  - Local management committees are established, with broad representation from a variety of local stakeholders.
  - Clear fund transfer mechanisms supported by national banking system that can be effectively accessed at local levels.
- **Maturation (1998 to present):**
  - A 1998 finance law clarifies the proportion of the fee to be received at different levels.
  - A 2010 decree formalized the roles of 3 key ministries for the administration and monitoring of RFA.
  - Requirement that communities receive funds on the basis of developing project proposals is strengthened.



Lessons from the Design of REDD+ Benefit Sharing Mechanisms

The lessons learned from the RFA can be divided into the following sections, which correspond directly to the four building blocks identified in chapter 3 under capacity building, legal framework, fund management, and monitoring capacity and experience. These lessons are not necessarily based on best practice and may instead be derived from what could be improved in the RFA.

Capacity building

- Distinct ministerial roles for administration of the RFA provide the necessary institutional framework for the RFA. Strong cross-ministerial oversight is important for REDD+ benefit sharing mechanisms.
- A central government secretariat or committee is needed to provide ongoing support for the operation of the RFA.
- The use of community management committees and project proposals is intended to help prioritize local development projects and align them with community development priorities.

Legal framework

- The implementation of a law mandating the forestry industry to pay an area fee to be redistributed to communities (and the subsequent 1998 finance law and 2010 national decree) has helped raise awareness within the beneficiary community of their monetary entitlements.
- The relative simplicity of the calculation of the "forestry fee" and the benefit transfer mechanism has helped gain broad public understanding of the mechanism. The fee is based on the area of the forestry concession and the value of the winning bid.

(*continued*)

- Policy reform on the use of revenues from logging, which links to the RFA, provides an opportunity for improved forest governance with greater public participation and rights. These improvements in forest governance are important for the success of REDD+ benefit sharing mechanisms.

Fund management

RFA fees paid by forestry companies are paid into the national treasury and, once taxed, are managed and transferred directly into beneficiary accounts by the Programme de Sécurisation des Recettes Forestières, which is responsible for the fiscal monitoring of the timber industry. The ability of government forestry agencies to transfer funds directly to beneficiaries may be needed in national REDD+ benefit sharing mechanisms.

- Forest sector benefit sharing mechanisms should include the design of an effective communications program through which all stakeholders can regularly understand the volumes and disbursement of available funds throughout the lifetime of the program.
- Benefit sharing mechanisms should be supported by a national banking system that can be successfully accessed at local levels.

Monitoring capacity and experience

- In the case of the RFA, overall responsibility for monitoring is held in one ministry. A similar allocation of monitoring responsibility to one government agency may help REDD+ benefit sharing mechanisms maintain accountable and consistent monitoring systems.

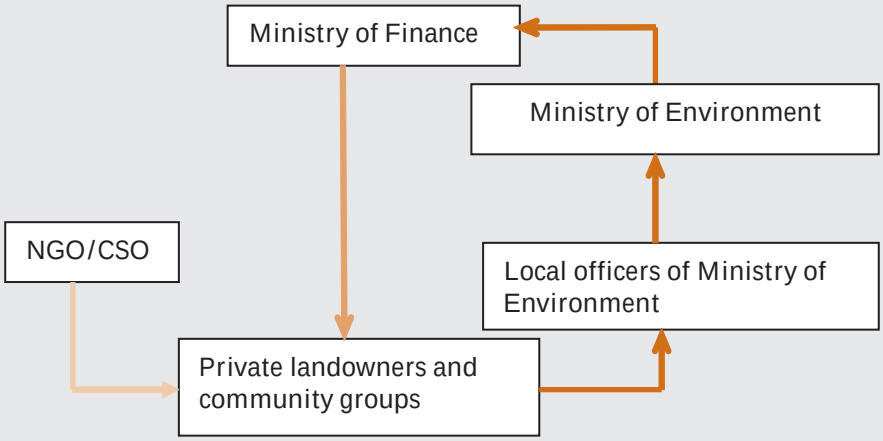
BOX 2.3. EXAMPLE OF A NATIONAL PERFORMANCE-BASED BENEFIT SHARING—SOCIO BOSQUE, ECUADOR

Background

The Socio Bosque is a national incentive-based conservation program in Ecuador. Its objective is to preserve native forests and other native ecosystems, and to increase the well-being of the forest-dependent population. The mechanism aims to protect 4 million hectares of native forest and other native ecosystems, significantly reducing greenhouse gas emissions caused by deforestation, and improving the living conditions of 1 million of the country's rural population. US $9.6 million has been invested under the program to date.

Public funds are used for the monetary benefits associated with this incentive program. The monetary benefits are transferred directly into individual or community bank accounts. Any nonmonetary benefits arising from the program result from the investment of incentives. Monitoring is done using GIS and annual field visits by local officials associated with the Ministry of Environment. The results from the monitoring exercise are what trigger payments.

NGOs are involved in delivering related nonmonetary benefits. NGOs are helping local parties register their land and gain legal tenure rights so they can enroll in the national program.



Benefits Distributed

Per hectare monetary payments (US $30 per hectare per year for plots up to 50 hectares, per hectare payments decrease for larger plots) and capacity building in the development of community investment plans, forest management practices, and monitoring techniques.

Time line

- **Pre-establishment (circa: 2008):**
  - Design phase with a group of experts from Government and NGOs
  - Operations manual sets out detailed procedures of the functioning of the programand the responsibilities of different actors
- **Establishment (circa 2008 to 2009):**
  - Funds can be transferred directly from Ministry of Finance to beneficiary accounts, with proof of land tenure
  - Increase in number of beneficiaries to approximately 40,000 and annual public funding to USD 3 million
- **Maturation (circa 2010 to present):**
  - NGOs help create a 'communication bridge' between local community groups and the Ministry of Environment
  - Further increase in public funding; USD 6 million in 2011
  - Use of GIS monitoring and ground-truthing
  - Additional external funding from KfW, partly for REDD+ readiness (to start last quarter 2011)

Lessons from the Design of REDD+ Benefit Sharing Mechanisms

The lessons learned from Socio Bosque can be divided into the following sections, which correspond directly to the four building blocks identified in chapter 3: capacity building, legal framework, fund management, and monitoring capacity and experience.

(*continued*)

Capacity building

- The pilot phase implemented between September and December 2008 in the three main provinces of Esmeraldas, Morona Santiago, and Sucumbíos helped to quickly and efficiently refine the design of the mechanism ready for national roll out in 2009.
- NGO alliances were important in building community capacity and participation. For example, the NGO NCI (Nature and Culture International) assists communities with identifying the status quo and gaining legal tenure rights through the Ministry of Agriculture and the land registry (although in cases for which land is in protected areas, the Ministry of Environment can recognize ancestral land rights).
- The program operations manual clearly sets out the roles of different ministries and the reporting procedures between the Ministry of Environment and the Ministry of Finance.
- The program has effectively used the Internet, newspaper, radio, and television communication channels to increase public engagement with the program, although there is still further communication work to do in the more remote parts of the country.

Legal framework

- The establishment of the program received high-level political support, which meant it took only three months for a ministerial decree to be in place for Socio Bosque. The speed at which the decree took place was criticized by the NGO community because of concerns over a perceived lack of consultation with civil society.
- An important reason for the political support given to Socio Bosque was that the program was linked in with Ecuador's new national development plan, which targeted deforestation, poverty, and protected areas for 2009–13.

Fund management

- The administration team of the Socio Bosque program in Ecuador made an agreement with a national bank to streamline the process for the establishment of beneficiary bank accounts. The scheme enabled participants to establish a bank account in a community's name upon presentation of legal documents, without the usual requirement of an up-front deposit, and with reduced transaction costs incurred on incoming performance-based payments.
- Communities had to submit an investment plan to the Ministry of Environment, helping to ensure that funds were used for locally appropriate economic and poverty-alleviation activities.
- The Ministry of Finance made payments directly to individual or community bank accounts. Legal documentation was required to set up a bank account. Agreements with the National Bank streamlined the process of setting up community bank accounts (e.g., removing the requirement for an up-front deposit).
- NGOs such as NCI helped Socio Bosque create a "communication bridge" between local community groups and the Ministry of Environment. This allowed for the effective communication of community concerns and helped communities comply with the government's due diligence procedures.

Monitoring capacity and experience

- Several communities hired forest keepers from among their members. They were responsible for control and surveillance activities.
- The use of GIS monitoring and a ground-truthing monitoring methodology meant that payments for verified carbon emission reductions may be feasible in the future.
- In the rare event of infringement of the conditions of the program (as stated in the operations manual) payment may be withheld or the return of previous payments may be demanded, depending on the severity of the infraction.
- The Socio Bosque is starting to assess the effects of incentive provision under the program on socioeconomic and gender groups.
- The operations manual made clear how monitoring information from the Ministry of Environment was linked to and triggers payments from the Ministry of Finance to program beneficiaries.

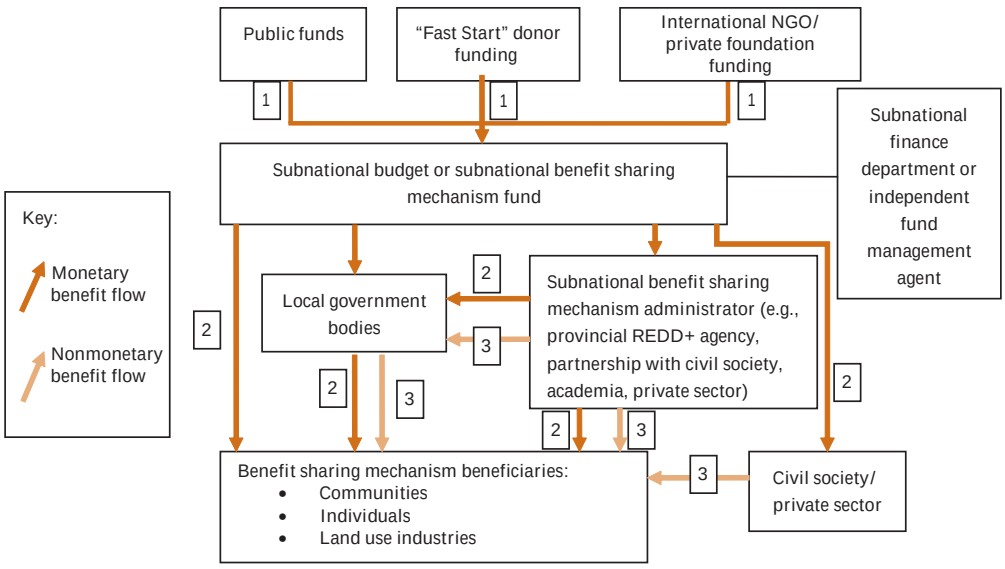
2.4.4 Subnational Input-Based Benefit Sharing Mechanisms

Figure 2.4 and associated text detail how a subnational input-based benefit sharing mechanism may work.

Steps in a Subnational Input-Based Benefit Sharing Mechanism

1. Potential funding sources for a subnational input-based benefit sharing mechanism include public funds (e.g., state-owned enterprise profits, or tax revenues collected at the subnational level or allocated from the national budget) and international "Fast Start" donor funding.

FIGURE 2.4. SUBNATIONAL INPUT-BASED BENEFIT SHARING MECHANISM



Because of the lower funding requirements of a subnational (versus national) approach, nongovernmental donor funding from international NGOs or private philanthropic foundations may also be applicable.

These funds are directed into a subnational (e.g., provincial government) budget or benefit sharing mechanism fund.

2. A subnational benefit sharing mechanism administration body may be managed by a provincial national REDD+ agency or in partnership with civil society, academia, and the private sector. If a trust fund model is used, the board may be composed of representatives from all the aforementioned stakeholder groups.

   Funding is disbursed to the subnational benefit sharing mechanism administration body and/or local government bodies for further disbursement to the benefit sharing mechanism beneficiaries.

   Alternatively, monetary benefits may be disbursed directly from the subnational budget or benefit sharing mechanism fund to benefit sharing mechanism beneficiaries. In this scenario, step 3 may not be needed

3. Nonmonetary benefits (e.g., capacity building and training in forest management, FPIC, or construction of public infrastructure) could be disbursed directly from the subnational benefit sharing mechanism administration body, local government bodies, civil society, or private sector. For the first two options, without the involvement of a technical intermediary, the potential to disburse nonmonetary benefits to benefit sharing mechanism beneficiaries is likely to be limited. If the civil society or private sector is disbursing the nonmonetary benefits, funding for their activities would be provided either by the subnational benefit sharing mechanism administration body or by local government bodies.

2.4.5 Subnational Performance-Based Benefit Sharing Mechanisms

Figure 2.5 provides a step-by-step account of how a subnational performance-based benefit sharing mechanism may work in practice. Key differences between this benefit sharing mechanism type and a subnational input-based benefit sharing mechanism in terms of funding sources, processes, and actors have been highlighted. Although this diagram includes all the potential actors, the benefit and MRV flows that may form a fully functioning subnational input-based benefit sharing mechanism are, in reality, unlikely to all be present in any one given benefit sharing mechanism. Each step is numbered, with each number corresponding to the explanatory text below the diagram.

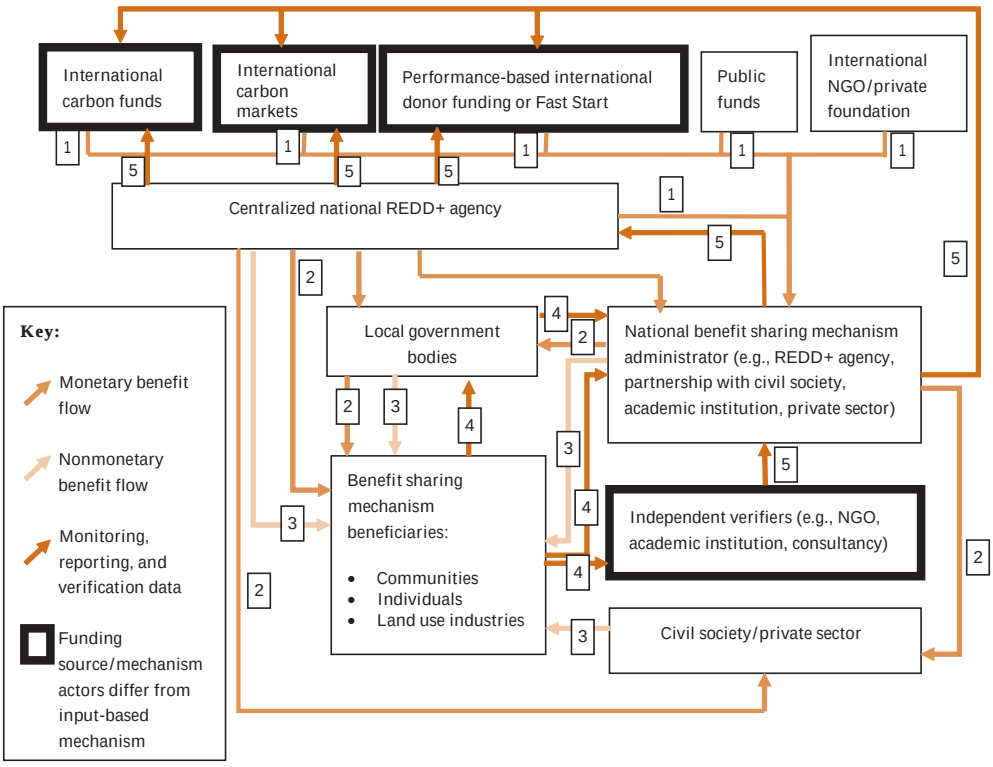
In a Subnational Performance-Based Benefit Sharing Mechanism

1. Initial funding sources for subnational performance-based benefit sharing mechanisms may include public funds (e.g., state-owned enterprise profits, or tax revenues collected at the provincial level or allocated from the national budget) and international Fast Start donor funding. Because of the proportionally lower funding requirements of a subnational approach, nongovernmental donor funding from international NGOs or private philanthropic foundations may also be applicable.

   Once sufficient MRV capacity exists and performance can be measured in terms of verifiable carbon emission reductions, funding could also be sought from the domestic or international carbon markets. This could be undertaken in two ways:

   - A nested approach, whereby subnational project-level activities are aggregated and "converted" into a source of revenue through a national REDD+ agency. The agency then disburses the carbon revenues to the subnational benefit sharing mechanism administrator.
   - A state- or provincial-level approach whereby the subnational benefit sharing mechanism administrator receives carbon revenue directly from counterparties in the carbon markets.

FIGURE 2.5. SUBNATIONAL PERFORMANCE-BASED BENEFIT SHARING MECHANISM



2. Management responsibility for benefit sharing mechanism funding could lie with a subnational benefit sharing mechanism administration body. This may be managed by the designated national REDD+ agency or in partnership with civil society, academia, and the private sector. If a trust fund model is used, the board may comprise representatives from all the aforementioned stakeholder groups.

   Funding may be disbursed to the subnational benefit sharing mechanism administrator and local government bodies for the disbursement of monetary benefits to the benefit sharing mechanism beneficiaries.

3. Nonmonetary benefits (e.g., capacity building and training in forest management, formal land titles, or FPIC consultations) can be transferred through one or a combination of local government departments, civil society groups, or private-sector organizations, depending on their relationship with benefit sharing mechanism partners and their respective capacities. For example, civil-society organizations may hold training workshops in the development of social investment plans; local municipality governments may host public consultations and raise awareness of the benefit sharing mechanism; and private sector organizations may hold trainings in improved agricultural practices or forest-management techniques. Once sufficient enabling capacity is developed, a set of performance criteria is mutually agreed on through a contract between beneficiaries and the benefit sharing mechanism subnational administrator. If the civil society and private sector are providing nonmonetary benefits, the funding could be from the subnational benefit sharing mechanism administrator or local government.

Steps four and five are different from those in input-based mechanisms.

4. Field-level performance data are monitored and reported to the benefit sharing mechanism subnational administrator. These data may be collected by one or a combination of benefit sharing mechanism partners depending on their respective capacities. For example, beneficiaries may be responsible for the collection of periodic field data in line with preagreed methodologies on a monthly basis.
5. Decentralized government extension workers or external evaluation bodies ground-truth field data on a biannual or annual basis, and a benefit sharing mechanism monitoring team, academic institution, or external consultancy verifies the field results against remotely sensed images. The subnational benefit sharing mechanism administrator verifies beneficiaries' performance against preagreed criteria and requests subnational benefit sharing mechanism fund management agents (e.g., provincial finance department or benefit sharing mechanism trust management board) to release funding for benefit disbursal.

   If the MRV system is sufficiently robust to accurately verify performance in terms of GHG emission reductions, subnational project developers may seek to sell carbon credits on either international carbon markets or though an international carbon fund. This could be achieved through either of these two approaches:

   - A nested approach, in which MRV data of all project level activity would be aggregated by a centralized national REDD+ agency
   - A provincial- or state-level approach whereby MRV data are reported directly to international counterparties by the subnational benefit sharing mechanism administrator

2.4.6 Illustrative Examples of Subnational Benefit Sharing Mechanisms

To demonstrate how subnational benefit sharing mechanisms may be applied in practice, illustrative examples of each of the two types of subnational benefit sharing mechanism are presented (boxes 2.4, 2.5). The examples contain summarized information about the background, the development time line, and key lessons the benefit sharing mechanisms may hold for the design of REDD+ benefit sharing mechanisms. Further information on the case studies is included in Appendix I.

BOX 2.4. SIMILARITIES BETWEEN SUBNATIONAL INPUT- AND PERFORMANCE-BASED BENEFIT SHARING MECHANISMS

1. Public funds, fast start donor funds, and international NGO or private foundations represent a potential funding source for both subnational benefit sharing mechanism types.
2. During step 3, above, local government departments, civil society groups, and private-sector organizations may play a role in disbursal of nonmonetary benefits.
3. It is possible for a subnational input-based benefit sharing mechanism to migrate to a performance-based benefit sharing mechanism over time with sufficient MRV resource input and capacity building support.

BOX 2.5. EXAMPLE OF A SUBNATIONAL INPUT-BASED BENEFIT SHARING MECHANISM: BWINDI MGAHINGA CONSERVATION TRUST (BMCT), UGANDA

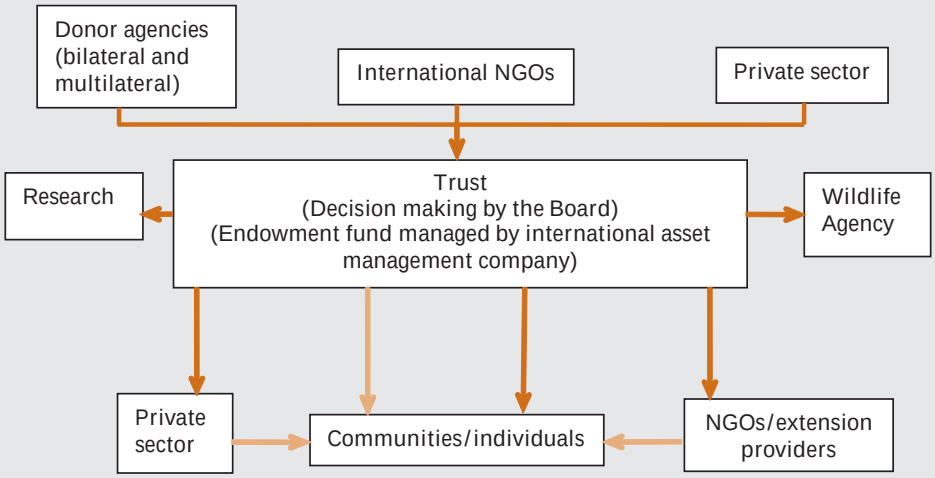
Background

The BMCT is a US $6.7 million conservation endowment trust fund set up in 1994 under the Uganda Trust Act operating with autonomy from government. The BMCT was established to support the conservation of biodiversity in two national parks in southwest Uganda. The scope of activities supported by the fund fall under three categories:

1. Support to community livelihoods and public infrastructure projects in the parishes (local administrative areas) surrounding the two parks (60 percent of funds)
2. Support to park management through the Uganda Wildlife Authority (20 percent of funds)
3. Support for socio-economic and ecological research activities linked to conservation efforts (20 percent of funds)

The BMCT functions around an autonomous institutional structure. Overall decision-making authority lies with a Trust Management Board (TMB) with representatives from government, the private sector, local communities, NGOs, and research institutes. The TMB is supported by a Local Community Steering Committee (LCSC), Trust Administrative Unit (TAU), and Trust Advisory Committee (TAC).

The trust is financed by multilaterals, bilateral, international NGOs, and the private sector. The trust provides grants directly to communities and funding to build the capacity of the Wildlife Agency. The trust also pays for local experts and researchers to provide advice on how to use grant allocations.



Benefits Distributed

Livelihood grants, livelihood training activities, public infrastructure development, and organizational capacity building.

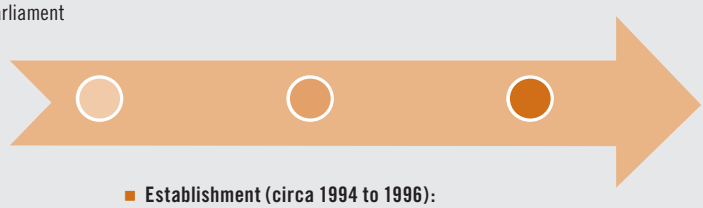
(*continued*)

Time line

- **Pre-establishment (circa: 1993 to 1994):**
  - Socio-economic assessments undertaken and benefit sharing ratio between local interest groups agreed
  - Operational manual developed including BMCT institutional design
  - Trust law presented and approved in parliament

- **Establishment (circa 1994 to 1996):**
  - Formation of a Trust Management Board and a committee that represented local community and conservation interests
  - An international asset management company identified to manage and invest BMCT endowment capital
  - Community outreach and capacity building

- **Maturation (circa 1996 to present):**
  - Livelihood grant application and award process operationalized
  - On-going livelihood training activities
  - On-going public infrastructure development
  - Supplementary fundraising activities



Lessons for the Design of REDD+ Benefit Sharing Mechanisms

The lessons learned for BMCT can be divided into the following sections, which correspond directly to the four building blocks identified in chapter 3: capacity building, legal framework, fund management, and monitoring capacity and experience.

Capacity building

- Socioeconomic assessments guided the choice of which public services and infrastructure would best meet the needs of the communities. These services and infrastructure developments proved to be an effective way of distributing benefits to broad stakeholder groups in the absence of defined land rights.
- Five expert working groups (the local community, conservation, legal and governance, investment, and administration groups) spent three months designing the institutional structures and developing an operational manual for the BMCT before its establishment.
- In the absence of decentralized government capacity, the institutional structure for the BMCT was developed from scratch. Key to the success of the formation of the TMB, TAU, LCSC, and TAC was the selection of expert representatives with an understanding of local context from government, civil society organizations, local community groups, the private sector, and international donor community.

- BMCT administrative and field staff hired had a track record of working with local community groups on development and conservation projects.
- The BMCT hired expert community extension workers to provide livelihood development training to local beneficiaries in areas such as agro-forestry, agriculture, livestock management, and bookkeeping. This helps ensure that livelihood grant allocations are effectively used.
- The BMCT collaborated with local NGOs such as CARE International and the International Gorilla Conservation Program (IGCP) during the early years of establishment. This allowed the BMCT to benefit from existing community networks and the local knowledge these NGOs had accrued through years of working in the area.
- The provision of public infrastructure can be an effective way of distributing benefits to a broad stakeholder group in the absence of undefined land rights.

Legal framework

- Trust legislation was developed by a policy lawyer appointed within the BMCT design team and approved in parliament. This provided sufficient legal safeguards for establishing the BMCT.
- The introduction of BMCT by-laws has provided a robust foundation for key institutional structures of the benefit sharing mechanism to operate effectively in the local context.

Fund management

- Endowment fund models can be incorporated in the design of national or subnational benefit sharing mechanisms. Also see the Eastern Arc Mountains Conservation Endowment Fund (www.easternarc.or.tz/).
- The representation of nongovernmental stakeholder groups at the decision-making level provides an effective safeguard against the mismanagement of funds and inequitable benefit allocation.
- Proportional allocation of benefits to be disbursed through BMCT were agreed by stakeholders from local interest groups during a three-day workshop (researchers–20 percent of funding, local communities–60 percent of funding, and park management–20 percent of funding).
- An international asset management company was identified with responsibility for the investment of BMCT endowment capital.

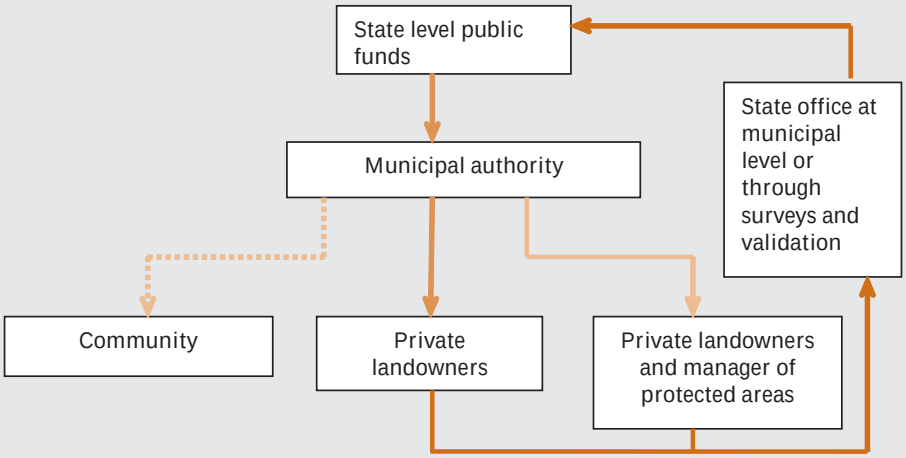
Monitoring capacity and experience

- The Local Community Steering Committee (LCSC) plays a crucial role in the two-way dissemination of information between the TMB and BMCT beneficiaries.
- Presence of local research institutions with sufficient technical capacity to undertake monitoring assessments of conservation activities in the national park areas.
- Livelihood grant beneficiaries are required to develop implementation plans with the assistance of community extension workers as a prerequisite to receive grants, and to submit periodic update reports to trigger the release of subsequent tranches of funding. This acts as a safeguard against the misappropriation of funding, and helps ensure grants are spent in an effective and equitable manner.

BOX 2.6. EXAMPLE OF A SUBNATIONAL PERFORMANCE-BASED BENEFIT SHARING MECHANISM–ICMS ECOLÓGICO (ICMS-E), BRAZIL

Background

Established in Paraná state in 1992 by the state government, this initiative allocates a percentage of revenue from the state's ICMS tax (Imposto sobre Circulação de Mercadorias e Serviços), which is similar to value-added tax, to municipalities on the basis of performance against ecological criteria. The tax returns aim to compensate municipal authorities with large protected areas for the land-use restrictions they face, while providing incentives for conservation. ICMS-E is now being implemented, developed, or discussed in 24 out of 27 Brazilian states. Thirteen states are implementing the use of ecological criteria to transfer approximately US $600 million of tax returns to municipalities containing protected areas or that are investing in a range of environmental improvements.



Benefits Distributed

Direct monetary transfers are made to municipal authorities on the basis of meeting required ecological criteria. In certain states, the returns are used to create, maintain, and monitor public and private protected areas. Returns are also used for benefits not linked to ecological conservation depending on municipality preference. For example, the returns may be used to develop improved sanitation infrastructure.

Lessons from the Design of REDD+ Benefit Sharing Mechanisms

The lessons learned from ICMS-E can be divided into the following sections, which correspond directly to the four building blocks identified in chapter 3: capacity building, legal framework, fund management, and monitoring.

Capacity building

- In the states where ICMS-E has been successful, such as Paraná, individual municipalities have high capacity and the mandate to manage protected areas. A strong legal mandate for local government to manage protected forest areas, accompanied with capacity building, could help strengthen the

effectiveness of subnational REDD+ benefit sharing mechanisms. This is not currently the case in many REDD+ nations that have centralized protected-area authorities.

- During pre-establishment, the existing state level capacity for monitoring and reporting technical ecological conservation data was identified. Gaps in capacity were identified and appropriate capacity-building actions taken to increase the technical monitoring capacity within the state government.
- When municipalities do not have this capacity, they can partner with NGOs to increase their ability to successfully implement protected area and environmental projects (e.g., in Sao Paulo state).
- Capacity building is provided to landowners and managers of protected areas by local authorities to maintain the environmental quality of managed land and to help prepare the necessary registration documentation to engage with ICMS-E.
- Direct cash transfers are made to private landowners if distinct arrangements are made at the municipal level to reward owners of privately protected land, such as Private Natural Patrimony Reserves (RPPNs). Mutually beneficial arrangements have been made in some states to allocate up to 50 percent of ICMS-E returns attributed to individual RPPNs to the RPPN owner. A similar system could be considered as a means of redistributing REDD+ funds to private developers under a nested approach to REDD+.
- Local authorities prioritize indirect benefits to communities (e.g., drilling wells, cleaning and landscaping urban areas, collecting rubbish, establishing landfills, and providing environmental education).
- There is strong coordination between state-level finance and environment institutions. This allows for the clear connection of ICMS-E funds to well-managed protected areas.

Legal framework

- Brazilian legislation clearly supports the process for the allocation of ICMS returns to the municipal level, with ecological criteria clearly specified. If REDD+ benefit sharing mechanisms intend to use existing tax distribution systems to transfer REDD+ funding on a performance basis, there may be a need for legal reform to include REDD+ performance as a criteria in determining tax distribution to local government.

Fund management

- For government to government REDD+ benefit transfer, policy makers should consider using existing benefit transfer channels, e.g., tax or other forms of revenue sharing.
- The use of a relatively simple direct cash transfer system from state to municipal authorities allows for higher levels of transparency.
- ICMS-E builds on existing institutional structures for the administration of the ICMS tax system making transaction costs moderate.

(*continued*)

Monitoring capacity and experience

- A frequently updated web portal on revenue transfers to municipalities has helped maintain transparency and engendered wide public support for the ICMS-E. The use of a similar publically available information source may be important for REDD+ benefit sharing mechanisms.
- Increasingly qualitative data, in addition to quantitative data, is being collected on the effectiveness of the ICMS-E. Including qualitative factors in monitoring has proven useful, forming a decision-making tool for municipalities and allowing deeper engagement with local stakeholders.
- The addition of a quality index for protected areas is being developed across several states to increase the accuracy of the municipality's ecological index. This is strengthening the incentive for protected areas to be managed for increased conservation value.
- Capacity for verification of indices at the municipal level varies, but in some states there are decentralized state offices to regularly collect and evaluate data to support ICMS-E.

2.5 THE COSTS OF MANAGING FOREST SECTOR BENEFIT SHARING MECHANISMS

The costs of managing forest sector benefit sharing mechanisms vary considerably based on the country context, the scale, and whether the mechanism is input or performance-based. Below are three examples of national or subnational level benefit sharing mechanisms that have been in operation long enough and have the data necessary to give an indication of administration and management costs. All examples are from Latin America, which reflects the higher number of established benefit sharing mechanisms (in this case, payment for ecosystem service benefit sharing mechanisms) in this region.

Socio Bosque, Ecuador

The program disbursed US $0.95 million in its first year of operation, with administrative costs at approximately 30 percent of this amount. These costs moved up to US $2.7 million in 2009, with a similar percentage for administration. In 2011, the amount disbursed was set to rise to approximately US $6 million, with 30 percent administration costs of US $2 million. Administration costs include the additional research costs to ascertain the program's effectiveness (against historic maps of deforestation), remote sensing, field verification, and socioeconomic assessments of the social investments made with Socio Bosque payments. The long-term goal is to reduce administrative costs to 12 percent (see Appendix I for further details).

The Amazon Fund, Brazil

During the set up of this fund, the Brazilian government mandated that the fund manager, the development bank, BNDES, could only retain 3 percent of donations to cover management costs. Donations up until March 2011 have been US $51 million in total (PwC et al. 2011), which would suggest fund management costs of around US $1.53 million since 2008 (see Appendix II for further details).

Program for Hydrological Environmental Services (PSAH), Mexico

This program was established in 2003 and by 2005 had disbursed US $80 million, with 4 percent (approximately US $3 million) being used for administration costs (see Appendix II for further details).

From these data it is apparent that in recent years the management costs of national and large subnational Payments for Ecosystem Services (PES) benefit sharing mechanisms in Latin America have been approximately US $1 to US $2 million a year, for mechanisms which aim to disburse between US $6 and US $40 million a year. There is wide variation in the percentage dedicated to mechanism management, which appears to be largely dependent on the level and detail of monitoring and evaluation activities.

2.6 LESSONS FOR ESTABLISHING FOREST SECTOR BENEFIT SHARING MECHANISMS

The review of benefit sharing mechanisms provides insights into key lessons that are of value for establishing other forest sector benefit sharing mechanisms. Several of these lessons reinforce considerations that have been raised in the context of benefit sharing for other purposes (e.g., community-based natural resource management), as well as other sectors. Main lessons follow this paragraph. Where relevant, the benefit sharing mechanism types for which a particular lesson is worth considering are in bold text; otherwise, the lessons are of relevance for all benefit sharing mechanism types. Further details on lessons learned from each case study can be found in Appendices I and II.

- **A clear, legal mandate or framework should underpin benefit sharing arrangements** (see Socio Bosque, Ecuador [Case Study 2 in Appendix I]; ICMS Ecológico [ICMS-E], Brazil [Case Study 4 in Appendix I]; Forest Investment Account [FIA], Canada [Case Study 5 in Appendix I]).
- The most successful forest benefit sharing mechanisms use an **appropriate system for allocating benefits to forest rights holders, taking into account the challenges presented by unclear or unrecognized land rights.** Where rights are unclear, the initial transfer of benefits can be linked to an agreement that safeguards against misappropriation, and the clarification of rights can be an important benefit (see Bwindi Mgahinga Conservation Trust Uganda, [Case Study 3 in Appendix I]; Green Resources Uchindile and Mapanda VCS Project, Tanzania [Appendix II]; Nile Basin Reforestation Project, Uganda [Appendix II]).
- **Using existing benefit transfer channels or institutional arrangements** can help keep transaction costs moderate and reduce the need to build a new arrangement (see ICMS-E, Brazil [Case Study 4 in Appendix I]; FIA, Canada [Case Study 5 in Appendix I]).
- Where there is no pre-existing institutional structure for benefit sharing, **a process that involves experts and representatives from key stakeholder groups** should be used to design a suitable institutional arrangement (see Bwindi Mgahinga Conservation Trust Uganda, [Case Study 3 in Appendix I]).
- Having **an effective mechanism to safeguard against mismanagement of funds or misappropriation** is important to prevent inequitable benefit allocation (see Bwindi Mgahinga Conservation Trust Uganda, [Case Study 3 in Appendix I])
- Forest benefit sharing mechanisms are most **successful where local governments have sufficient technical forest management, community development, and planning capacity** to support beneficiaries effectively, and resources are made available for the entity providing this support (see Socio Bosque Program, Ecuador [Case Study 2 in Appendix I]; ICMS-E, Brazil [Case Study 4 in Appendix I]).
- **Effective use of partnerships with civil society organizations, NGOs, and extension units regarding communication and capacity building, as well as to draw on local knowledge and networks**, can play an important role in the success of forest benefit sharing mechanisms

(see RFA, Cameroon [Case Study 1 in Appendix I]; ICMS-E, Brazil [Case Study 4 in Appendix I]; Socio Bosque, Ecuador [Case Study 2 in Appendix I]; Oddar Meanchey, Cambodia [Appendix II]; Rewarding Upland Poor for Environmental Services [RUPES], the Philippines [Appendix II]).

- **In low governance and monitoring capacity environments, the most effective initial benefits may be in capacity building and land tenure assistance**, building up to performance-based benefits later (see RUPES, the Philippines [Appendix II]; Amazon Fund, Brazil [Appendix II]).
- Using a **third-party monitoring and audit organization within a benefit sharing mechanism encourages good governance, transparency, and better financial controls** (see FIA, Land Base Investment Program [LBIP], Canada [Case Study 5 in Appendix I]).
- **Simplicity in calculating and monitoring and making benefit transfers** helps with public understanding (see RFA, Cameroon [Case Study 1 in Appendix I]; Socio Bosque, Ecuador [Case Study 2 in Appendix I]).
- **Alignment of a benefit sharing mechanism with a national strategy, especially poverty alleviation**, can help galvanize political support. Fitting a benefit sharing arrangement with national economic development plans can assist with scaling up an effective pilot scheme (see Socio Bosque, Ecuador [Case Study 2 in Appendix I]).
- **Strong cross-ministerial oversight and clarity regarding the roles of each ministry and stakeholder** helps ensure that all aspects of the benefit sharing mechanism are given due attention (e.g., keeping the monitoring in one ministry). When multiple entities are responsible for a particular aspect, different standards and passing of responsibilities can result (see RFA, Cameroon [Case Study 1 in Appendix I]; FIA, Canada [Case Study 5 in Appendix I]).
- For national-level benefit sharing mechanisms, **having the ability to directly transfer from a national treasury to beneficiaries' accounts** helps reduce misappropriations and transaction costs (see RFA, Cameroon [Case Study 1 in Appendix I]; Socio Bosque, Ecuador [Case Study 2 in Appendix I]).
- For performance-based benefit sharing mechanisms, **a clear and strong link between monitoring and payment is important as is clarity regarding the consequences when an infringement of the conditions of a program occurs** (see Socio Bosque, Ecuador [Case Study 2 in Appendix I]; ICMS-E, Brazil [Case Study 4 in Appendix I]).
- **Effective communication using appropriate channels** is important to increase awareness of and public engagement in the program (see Socio Bosque, Ecuador [Case Study 2 in Appendix I]; ICMS-E, Brazil [Case Study 4 in Appendix I]; FIA, Canada [Case Study 5 in Appendix I]).
- To effectively achieve REDD+ objectives, **benefits from REDD+ financial resources will need to reach relevant entities involved with research, monitoring, and enforcement in addition to the local communities** (see Bwindi Mgahinga Conservation Trust Uganda, [Case Study 3 in Appendix I]).
- **Using a public or private third-party fund manager to control the financial resources** can provide confidence to fund donors that the money will be well managed and financially sustainable (see Bwindi Mgahinga Conservation Trust Uganda, [Case Study 3 in Appendix I]).

3 OPTIONS ASSESSMENT FRAMEWORKS FOR IDENTIFYING A SUITABLE BENEFIT SHARING MECHANISM

In recent years there has been substantial analysis of benefit sharing best practice in the forest sector. However, the best practice models described in these analyses are not always applicable in every country context.

We have developed an Options Assessment Framework that helps forest sector stakeholders and development partners determine which benefit sharing mechanism models are most appropriate to their country context. The Options Assessment Framework is based on the premise that there are four key building blocks to a benefit sharing mechanism:

- Government, civil society, community, and private-sector institutional capacity
- The national or subnational legal OAF relevant to REDD+
- Fund management capacity and experience
- Monitoring capacity and experience

It enables users to assess what components of the selected benefit sharing mechanism are already in place, and identify what needs to be addressed to implement the benefit sharing mechanism model successfully.

The Options Assessment Framework can be used in three different ways, depending on the stage that the REDD+ process has reached in the relevant country:

- By decision-makers when there is the need to identify and select **the most appropriate benefit sharing mechanism type to be applied in their country.** In this case, the options assessment helps to compare and select which benefit sharing mechanism types may be most suited to the institutional capacity, legal framework, fund management, and monitoring capacity of the country.
- By decision-makers when there is **a clear view of which REDD+ benefit sharing mechanism type should be used in their country.** Here the Options Assessment Framework helps identify a set of enabling actions needed for a country to successfully implement the chosen benefit sharing mechanism type.
- By development partners who wish to ascertain the viability of delivering the REDD+ benefit sharing mechanism already chosen by a partner country, and to identify areas for supporting the country in successfully delivering this benefit sharing mechanism.

The Options Assessment Framework is designed for use as an integral component of the REDD+ decision-making and political processes in-country. The application of the Options Assessment Framework should be nested in the participatory and consultative processes associated with REDD+ readiness, and it should use input from experts drawn from all different stakeholder groups of relevance to benefit sharing mechanisms both inside and outside of government (e.g., civil society and community groups, donors, the private sector). These are discussed in section 1.4.3 of this report.

In this paper, the Options Assessment Framework is presented twice—the first presentation has the questions for national level input- and performance-based mechanisms, and the second presentation has questions for subnational input- and performance-based mechanisms. This is justified because there are key components that are required for both input-based and performance-based benefit sharing mechanisms. Some key components are shared by both presentations of the Framework. Such components are considered fundamentally important to the successful implementation of both national and subnational benefit sharing mechanisms (e.g., presence of third-party organizations with experience in providing financial and nonfinancial auditing of fund management processes).

Carrying out the assessment for both types of national or subnational benefit sharing mechanisms can help participating stakeholders determine whether their country context best suits an input- or performance-based benefit sharing mechanism type. It also helps identify the enabling actions needed to migrate from input- to performance-based benefit sharing mechanisms or to implement both simultaneously.

The outputs from the options assessment will vary depending on the purpose the assessment is serving. For determining the feasibility of establishing input-based or performance-based REDD+ benefit sharing mechanisms in the country, the assessment will generate scores that indicate the level of action required to establish a particular type of mechanism. These scores will help make an initial decision on which type of REDD+ benefit sharing mechanism to pursue. To determine what is needed to make a particular type of benefit sharing mechanism work, the assessment will provide two useful outputs. The first is a prioritized list of enabling actions necessary to successfully establish a chosen type of benefit sharing mechanism. This list will help create a roadmap needed to deliver the benefit sharing mechanism type(s) selected. The second output is an initial blueprint that indicates the specific groups or organizations that would be involved in delivering different aspects of the benefit sharing mechanisms (similar to those found in table 1.2 and figure 1.1) and how the

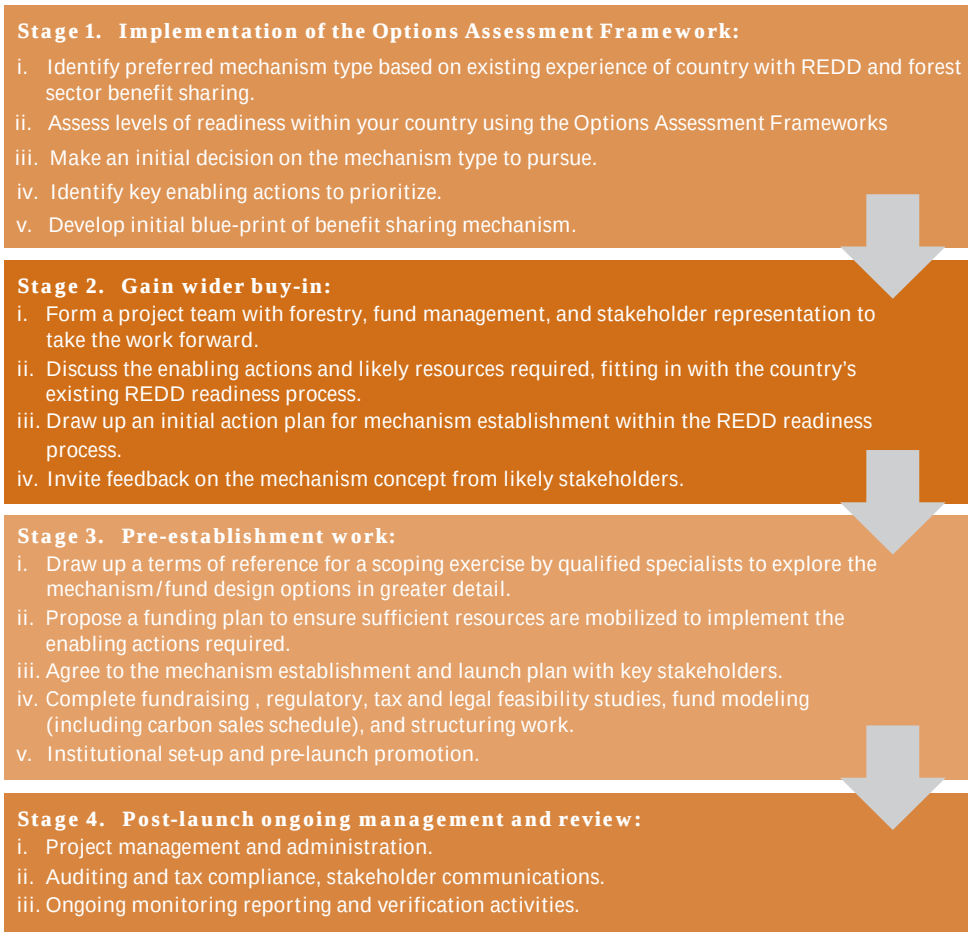
BOX 3.1. SIMULTANEOUS IMPLEMENTATION OF INPUT- AND PERFORMANCE-BASED BENEFIT SHARING MECHANISMS

Input- and performance-based benefit sharing mechanism types can be implemented simultaneously as part of either a national or subnational REDD+ approach. The migration to a performance-based benefit sharing mechanism linked to international funding may enhance the long-term financial viability of REDD+ benefit sharing mechanisms. However, in many instances there may be important advantages in simultaneously implementing input-based benefit sharing mechanisms alongside performance-based objectives to ensure that lower capacity forest communities are not excluded from participating.

Evidence suggests that the poorest demographic groups may face disproportionate barriers in accessing the benefit of performance-based PES schemes. Because of this, the simultaneous implementation of pro-poor input-based benefit sharing mechanisms can enhance the effects of poverty alleviation from national or subnational REDD+ programs.

In other instances, input-based benefit sharing mechanisms may support performance-based benefit sharing mechanisms by providing benefit transfers to participants or geographical regions where MRV and capacity are inadequate to use a payment-for-performance approach.

FIGURE 3.1. ESTABLISHING A FOREST SECTOR BENEFIT SHARING MECHANISM



monetary and nonmonetary benefits would flow to the local level (similar to what is illustrated in figures 2.1–2.4).

3.1 USING THE OPTIONS ASSESSMENT FRAMEWORK

Figure 3.1 shows how the Options Assessment Framework can be used as a starting point before embarking on the key activities needed to establish REDD+ benefit sharing mechanisms in a country. The country REDD+ working group or designated REDD+ secretariat should promote the use of the Options Assessment Framework. The application of this tool should be led by a technical group or subcommittee within the REDD+ working group that is tasked with developing suitable benefits sharing arrangements. The application of the Options Assessment Framework should involve a participatory process in which all key stakeholders are well represented. After the use of the Options Assessment Framework, wider support should be sought for the benefit sharing mechanism types chosen, pre-establishment work, and post-launch management and review.

3.1.1 Prior to the Assessment: Necessary Background Information

To complete the Options Assessment Framework successfully, participants working with the Options Assessment Framework should have access to an up-to date report that captures objective information about their country. The report should draw on recently completed work and new information regarding the following:

1. **Government, civil society, community, and private-sector institutional capacity** This information includes the level of institutional capacity across the relevant government, civil society, and private-sector organizations that may be involved in the operation of the REDD+ benefit sharing mechanism. Institutional capacity should include the organizations' human resource capacity; the knowledge, experience levels, and technical skills of personnel within these organizations; the physical presence of these organizations; and the strength of working relationships among these organizations across sectors.
2. **The national or subnational legal OAF relevant to REDD+**

   This information includes national legislation and regulations relating to forest land ownership and tenure, the allocation of forest rents, the relationship between forest and carbon ownership, the mandate of forest-relevant government agencies, the national development plans, the ease of public access to information, and law enforcement.
3. **Fund management capacity and experience**

   This information includes the fund management capacity and experience of organizations in the country, anticorruption mechanisms, the strength and extent of fund distribution networks (e.g., bank branch networks), the existence of third parties with the ability to monitor fund management, and the presence of organizations with experience in providing long-term, risk-tolerant loan financing to rural communities.
4. **Monitoring capacity and experience**

   This information includes the presence of organizations with sufficient capacity and experience to monitor national or subnational programs, a demonstrated ability of government to provide frequent and publicly available monitoring reports about environmental spending programs, the ability of government to decentralize monitoring systems to a local level, the use of third-party monitoring agencies in government spending programs, the use of monitoring data to continually improve forest programs, and experience in GIS monitoring and the ground-truthing of GIS data within the intended benefit sharing mechanism management agency.

   Each member of the options assessment group should also be familiar with sections 1 and 2 of this report. This will help form a shared understanding of the definition and function of forest sector benefit sharing mechanisms, the different types of forest sector benefit sharing mechanisms that exist, and the relative merits and shortcomings of each. This latter point will be particularly important in selecting the benefit sharing mechanism types to be assessed using the Framework.

3.1.2 Conducting the Options Assessment

Step 1: Select the Benefit Sharing Mechanism Type to be Assessed

The first step in the options assessment process is to select whether the national (OAF_1) or subnational (OAF_2) assessment framework should be assessed, given the agreed-upon national

or subnational approach to REDD+ in the country. If there is no strong policy preference, it is recommended that both national and subnational benefit sharing mechanisms be assessed.

Section 2 of this report provides more information about determining which benefit sharing mechanism type best fits a country's REDD+ policies and readiness.

Step 2: Characterize the Components for the Country

A country may have an existing structure, law, or needed level of capacity to meet the requirements of a particular component associated with each of the building blocks of the options assessment framework. For each of the components, the group working with the framework should elaborate on how the country meets the requirements of each component.

For illustration purposes, take the component on "capacity of CSOs [civil society organizations]." This component refers to the presence and capacity of CSOs to support community groups and indigenous peoples in engaging in local forest-related planning, decision-making, and program implementation. If in a country there are large numbers of CSOs, but only a small portion of them have the technical and financial capacity to support community groups and indigenous peoples in planning, several CSOs are in place to assist the same groups with implementation, this distinction should be made when characterizing this component. To make the process even more useful, the group should indicate specifically the CSO groups that are well placed to deliver on all or some of the requirements associated with this component in an optimal way (e.g., by geographic region or ethnic group).

For each key component, a case study example is provided from existing benefit sharing mechanisms. Where possible, these have been selected according to their national or subnational "scale." In many cases, however, the lessons learned from national programs have direct relevance to subnational programs and vice versa. Therefore there is some crossover in examples used for national and subnational OAFs. For example, in Uganda, in the early years of operation, the BMCT collaborated with local NGOs having working relationships with local community groups in the BMCT catchment area. The need for cooperation and collaboration with local NGOs is equally applicable for both national and subnational benefit sharing mechanisms.

Additional considerations have been included under each of the four building blocks where relevant. These considerations provide additional guidance regarding what is needed for specific or niche forest sector benefit sharing mechanisms to function (e.g., whether funding for the benefit sharing mechanism is likely to be linked to forest concession revenue streams through taxes). Although these provide additional guidance to the reader, their absence does not fundamentally compromise the viability of the benefit sharing mechanism type. Participants are therefore not required to score their own country status for these components.

This step of the assessment would draw heavily on the background paper and participating stakeholders opinions

Step 3: Generate Scores for Each Benefit Sharing Mechanism Building Block of the Options Assessment Frameworks

The next step is to generate a score for each component associated with the building blocks in the framework and aggregate the scores for each building block.

As mentioned earlier, the building blocks are composed of key components that are necessary for successfully establishing the benefit sharing mechanism being assessed. For each key component

participants are required to score their own country's status based on their assessment of whether the key component is

- Absent
- Partially present
- Present

To demonstrate, if the key component is *"Existence and enforcement of community forestry laws which give community groups renewable management rights over forest land,"* then the following would apply:

- *No existence of community forestry laws* = Absent
- *Existence of community forestry laws without extensive enforcement* = Partially present
- *Existence of extensively enforced community forestry laws* = Present

Once this status has been decided, a score is allocated to the key component according to Table 3.1:

TABLE 3.1. KEY COMPONENT SCORING

STATUS	SCORE
Absent	0
Partially present	1
Present	2

In the Options Assessment Frameworks in this report, there are two scoring columns—one for an input-based benefit sharing mechanism and the other for performance-based benefit sharing mechanism.

Scoring can be done in several ways. Each participant could score their own framework and average scores for each component would serve as the component score for the country. Alternatively, the participants could be formed into groups that are tasked with scoring all the components or components specific to a building block. For the former approach, the average of all the groups for each component would be used as the national score. For the latter approach the group scores would be provided for each component.

Once a score has been allocated to each component, the total score for each building block and for the whole framework is calculated. These scores are then converted into percentage scores in order to facilitate comparison between the different types of mechanisms. For example, a country may get a score of 70 percent for the feasibility of establishing an input-based benefit sharing mechanism versus a score of only 40 percent for establishing a performance-based benefit sharing mechanism. It is expected that most countries would gain a lower score for the feasibility of establishing a performance-based version of the benefit sharing mechanism versus an input-based version, because of the extra number of key monitoring components needed for performance-based benefit sharing mechanisms.

For applications of the Options Assessment Framework where the participants have not agreed on the most appropriate benefit sharing mechanism type to be applied in their country, table 3.2 provides a guide for interpreting and comparing the scores generated by the assessment.

TABLE 3.2. INTERPRETING PERCENTAGE SCORES FROM THE ASSESSMENT

SCORING RANGE (PERCENT)	BENEFIT SHARING MECHANISM TYPE FEASIBILITY	LEVEL OF ENABLING ACTION REQUIRED
0–25	■ REDD+ benefit sharing mechanism type not currently feasible given the country context.	■ Very high level of enabling action required across all building blocks.
26–50	■ REDD+ benefit sharing mechanism type not currently feasible but may become so over the long term (3–5+ years) if appropriate enabling actions are undertaken.	■ Very high level of enabling action required for a selection of building blocks **or** ■ Level of enabling action required across all building blocks.
50–75	■ REDD+ benefit sharing mechanism type may become feasible over the medium term (2–3 years) if appropriate enabling actions are undertaken.	■ High level of enabling action required for a selection of building blocks **or** ■ Moderate level of enabling action required across all building blocks.
75–90	■ REDD+ benefit sharing mechanism type may become feasible over the short term (1–2 years) if appropriate enabling actions are undertaken.	■ Moderate level of enabling action required for a selection of building blocks **or** ■ Low level of enabling action required across all building blocks.
90+	■ REDD+ benefit sharing mechanism appears ready to be feasible.	■ Low level of enabling action required across a small number of building blocks.

Step 4: Analyze the Results

There are two levels at which the results can be analyzed by stakeholders who already have a clear view of which REDD+ benefit sharing mechanism type should be used in their country. The first is for determining the actions needed to establish the selected type of benefit sharing mechanism(s). The second is to help create or modify an initial blueprint of what the mechanism(s) may look like given the existing institutions and country context. Both of these are discussed here.

Analysis to Determine Necessary Actions for Developing the Selected Mechanism

The Options Assessment Framework has a corresponding set of recommended enabling actions for each component. The scoring process above allows the participants to determine which components need to be developed or further strengthened. The recommended enabling actions identify actions needed to address the absence or partial absence of key components. The participants, upon reviewing these actions, should modify them to suit the country context. The revised list of enabling actions will be the basis for prioritization and determining next steps (discussed in step 5).

Analysis for Developing or Modifying an Initial Blueprint for the Benefit Sharing Mechanism

Assuming the scoring indicates the proposed mechanism would be feasible in the near term, the characterization of the components will form the basis of putting together or modifying an initial blueprint of the mechanism. The blueprint would include details about the participants in the benefit sharing mechanisms (as indicated in table 1.2 and figure 1.1) and how the steps discussed in figures 2.1–2.4 would be implemented. This analysis would also show how the enabling actions associated with the components that are absent or partially present would feed into the initial blueprint.

Step 5: Identify Next Steps

Using the enabling actions from step 4, the participants should prioritize the next steps. The scores associated with the building block and each individual component can help in this process—as components with a score of 0 (absent) or 1 (partial presence) should be given importance.

Another characteristic of the Options Assessment Framework that can help the prioritization exercise is the color coding system used to indicate whether the key component is necessary for the pre-establishment or establishment phase of benefit sharing mechanism implementation (see table 3.3).

TABLE 3.3. COLOR CODING USED IN THE OPTIONS ASSESSMENT FRAMEWORK

RELEVANT STAGE	COLOR
Pre-establishment	
Establishment	

Key components needed for pre-establishment should be in place prior to investing resources into developing a blue-print for a REDD+ benefit sharing mechanism. An example of a key component that needs to be in place pre-establishment is: the proposed benefit sharing mechanism implementation agencies (e.g., the Forestry Department and the Ministry of Environment) have sufficient technical forest management, community development, and technical capacity to design and support national level benefit sharing mechanism programs and forest conservation activities.

Key components needed for establishment of the benefit sharing mechanism should be fully present in order to effectively implement the mechanism, but need not delay the design or establishment phase, as this phase can include outreach, capacity building, and policy reform to address gaps or weaknesses in these components. An example of a key component for establishment is: forest communities have sufficient technical forest management, conservation, and technical capacity to support, monitor, and report on local level REDD+ programs and conservation activities in line with user-friendly guidance.

Once the list of enabling actions has been collated in priority order, users are then ready to move to Stage 2 as identified in figure 3.1.

4 OPTIONS ASSESSMENT FRAMEWORKS

These options assessment frameworks have been developed from information gathered by stakeholder interview, desk-based research and the *Framework for Assessing and Monitoring Forest Governance,* by PROFOR and FAO (2011).

4.1 OPTION ASSESSMENT FRAMEWORK FOR NATIONAL BENEFIT SHARING MECHANISMS

BUILDING BLOCK 1: GOVERNMENT, CIVIL SOCIETY, COMMUNITY, AND PRIVATE-SECTOR INSTITUTIONAL CAPACITY

KEY COMPONENTS	EXAMPLES OF COMPONENTS FROM EXISTING BENEFIT SHARING MECHANISMS	NIB SCORE	NPB SCORE
Capacity of proposed benefit sharing mechanism implementing agencies			
1. Proposed benefit sharing mechanism implementation agencies (e.g., The Forestry Department and The Ministry of Environment) have sufficient technical forest management, community development, and technical REDD+ capacity to design and implement national-level benefit sharing mechanism programs and associated activities.	■ Experience in national-level technical forest management and community engagement is of great importance for a national REDD+ benefit sharing mechanism implementation agency. ■ In Mexico, the National Forestry Commission (CONAFOR) is the implementation agency for the national Program for Hydrological Environmental Services (PSAH). As part of this, CONAFOR uses satellite-based monitoring information to track increases or decreases in forest cover and applies its technical forest management capacity to support PSAH participants.		
2. Existing and effective cooperation between national and subnational governments on sustainable forest management and conservation.	■ National and subnational forest agencies can use jointly agreed upon work programs to coordinate and achieve their shared objectives. For example, federal officials worked closely with the British Columbia Ministry of Forests, Lands and Natural Resource Operations to develop the Mountain Pine Beetle (MPB) spread control project. ■ On a separate basis, the Federal Government in Canada contributed a total of CAN $60 million to the British Columbian government as part of the Forest Investment Account (FIA) Land Base Investment Program.		

BUILDING BLOCK 1: GOVERNMENT, CIVIL SOCIETY, COMMUNITY, AND PRIVATE-SECTOR INSTITUTIONAL CAPACITY (*CONTINUED*)

KEY COMPONENTS	EXAMPLES OF COMPONENTS FROM EXISTING BENEFIT SHARING MECHANISMS	NIB SCORE	NPB SCORE
3. Existing and effective coordination among all national agencies with mandates relevant to the proposed benefit sharing mechanism (e.g., other sector agencies such as Department of Agriculture).	■ Effective coordination between government agencies is likely to be required to address the multiple drivers of deforestation, forest degradation, or unsustainable forest management in REDD+ countries. In British Columbia, Canada, this coordination is achieved through the Forest Investment Council (FIC), which provides strategic direction and makes recommendations on all FIA programs. The council membership includes deputy ministers from the Ministry of Forests, Lands and Natural Resource Operations; Ministry of Environment; Ministry of Agriculture and Lands; three industry representatives; and a representative from the forest research and technology sector. In Ecuador, the Ministry of Environment is responsible for the administration of Socio Bosque and works with the Ministry of Agriculture to confirm the land titles of beneficiaries. This cross-agency coordination is vital because beneficiaries of the Socio Bosque program are required to hold legal land titles to qualify for participation.		
4. Proven capacity of government to engage effectively with CSOs and private sector for forest policy development and implementation at a centralized level.	■ One way for government agencies to engage with CSOs and the private sector to develop and implement policy is through multistakeholder working groups comprising membership from across the public and private sector. For example, the Kenya Forests Working group was formed in 1995 as a forum of individuals, organizations, institutions (government and nongovernment, local and international), private-sector representatives, and grass-root community organizations concerned with forests. These groups work together to promote sound forest management and conservation practices in Kenya.[1]		

BUILDING BLOCK 1: GOVERNMENT, CIVIL SOCIETY, COMMUNITY, AND PRIVATE-SECTOR INSTITUTIONAL CAPACITY (*CONTINUED*)

KEY COMPONENTS	EXAMPLES OF COMPONENTS FROM EXISTING BENEFIT SHARING MECHANISMS	NIB SCORE	NPB SCORE
5. Physical presence and capacity of government offices with staff to engage and work effectively on forest policy and decision-making with community groups and the private sector.	■ Effective engagement with community groups can be delivered through participatory planning exercises facilitated by government extension staff. For example, in Ecuador, government extension workers facilitate community consultations to develop "social investments plans" outlining how they will spend income generated through the Socio Bosque program. ■ Government engagement with the private sector and community groups can also be achieved through co-implementing REDD+ demonstration projects. For example, the Forestry Administration of Cambodia has joined with the international NGOs Community Forestry International, PACT, and private-sector organizations such as Terra Global Capital to implement the Oddar Meanchey REDD+ project. Community groups are active participants in the project design and development and are represented through community forest management committees.		
6. Intended benefit sharing mechanism implementation agencies have the capability to store and process financial, proprietary and legal information needed to effectively administer a national scheme at a scale of millions of individuals and thousands of organizations. This includes tracking payment disbursals between different actors and beneficiaries in the benefit sharing mechanism.	■ The capacity to store and process proprietary and legal information for a benefit sharing mechanism can be enhanced through the use of bespoke IT systems. For example, the Cameroon Government procured an IT system that will collate forestry information from different government departments, including records of tax payments and infringements of forest laws. Information will be collected by the Forest Department and used to validate the legality of timber before issuing FLEGT licenses.		

BUILDING BLOCK 1: GOVERNMENT, CIVIL SOCIETY, COMMUNITY, AND PRIVATE-SECTOR INSTITUTIONAL CAPACITY (*CONTINUED*)

KEY COMPONENTS	EXAMPLES OF COMPONENTS FROM EXISTING BENEFIT SHARING MECHANISMS	NIB SCORE	NPB SCORE
7. Strong working relationship between Department of Finance or Treasury and benefit sharing mechanism implementation agencies. Alignment of strategy and mandate among these bodies.	■ The design of clear operational guidelines outlining responsibilities and working relationships among relevant benefit sharing mechanism agencies can improve the operating efficiency of a benefit sharing mechanism. For example, during the design phase of the Socio Bosque Program in Ecuador, the Ministry of Environment and the Ministry of Finance worked together to develop clear roles and responsibilities for implementation of the program. ■ CSOs can also become part of the benefit sharing mechanism implementing agency through the creation of a benefit sharing mechanism management board comprising multiple stakeholder groups. For example, in Peru, the Peruvian Trust Fund for National Parks and Protected Areas (PROFONANPE) is administered by a board of directors comprising representatives from the private sector, government, and civil society organizations.[2]		
8. Previous experience of intended benefit sharing mechanism implementation agency in communicating the purpose and function of national environmental programs and eligibility criteria to the public in a timely and comprehensive manner.	■ Communication channels such as the Internet, press, radio, and television can inform large target audiences about the purpose and function of benefit sharing mechanism programs. These communication channels have been employed to great effect by several national payments for environmental services (PES) programs in Latin America, including CONAFOR (Mexico) and FONAFIFO (Costa Rica).		
Capacity of CSOs			
9. Presence and capacity of CSOs to support community groups and indigenous peoples in engaging in local forest-related planning, decision-making, and implementation.	■ Some CSOs may be better placed than local government organizations to engage with and train forest communities because of their stronger links and presence within these communities. These CSOs may also help facilitate the engagement of forest communities with national-level benefit sharing mechanism policy development processes. For example, in Cameroon, CSOs have supported the government as facilitators in cross-departmental and local council REDD+ dialogues and in providing training for forest communities in the technical and legal aspects of REDD+.		

BUILDING BLOCK 1: GOVERNMENT, CIVIL SOCIETY, COMMUNITY, AND PRIVATE-SECTOR INSTITUTIONAL CAPACITY (*CONTINUED*)

KEY COMPONENTS	EXAMPLES OF COMPONENTS FROM EXISTING BENEFIT SHARING MECHANISMS	NIB SCORE	NPB SCORE
10. CSOs have a track record of working together with forest communities and helping those communities without formal land titles to access forest benefits.[3]	■ CSOs can play a crucial role in identifying eligible benefit sharing mechanism beneficiaries in instances where formal communal land rights are absent. For example, in Uganda, the BMCT identified eligible beneficiaries as those living within a two-parish[4] buffer surrounding the park border. In the early years of operation, the BMCT collaborated with local NGOs with existing working relationships with local community groups in the BMCT catchment area.		
11. CSOs have the track record and capacity to assist forest communities with mapping, demonstrating, and registering their land rights.[5]	■ CSOs can provide technical and legal support to community groups that enable the successful registration of land rights. For example, in Brazil, the Amazon Fund provides funding for the CSO IMAZON to work collaboratively with local municipalities and community groups to define land boundaries using GIS technology. In Ecuador, the CSO Nature and Culture International (NCI) assists communities through the provision of mapping and legal support to confirm land ownership and registration as part of the Socio Bosque program.		
12. CSOs have sufficient forest management, community development, and technical knowledge and capacity to assist local communities to generate forest carbon, biodiversity, and socioeconomic baselines and to monitor against these baselines.[6]	■ CSOs may have experience in community-based socioeconomic and ecological monitoring. They may have the capacity to train local communities to participate in monitoring forest carbon, biodiversity, and socioeconomic gains against baseline values. For example, in Ecuador's Socio Bosque program, CSOs such as NCI play a role in collecting socioeconomic data used to assess program effectiveness. However, in this instance, a socioeconomic baseline was not established before program implementation.		

BUILDING BLOCK 1: GOVERNMENT, CIVIL SOCIETY, COMMUNITY, AND PRIVATE-SECTOR INSTITUTIONAL CAPACITY (*CONTINUED*)

KEY COMPONENTS	EXAMPLES OF COMPONENTS FROM EXISTING BENEFIT SHARING MECHANISMS	NIB SCORE	NPB SCORE
13. CSOs have sufficient technical forest management, community development, and technical benefit sharing mechanism knowledge and capacity to assist national benefit sharing mechanism administrators distribute REDD+ benefits at the community level.	■ The co-implementation of benefit sharing mechanism programs with CSOs can increase the efficacy of benefit disbursal by using the community relationships and development skills held by these organizations. For example, the Amazon Fund in Brazil distributes grants to national and international NGOs to support communities and local governments in the Amazon Basin to implement REDD+ projects. For instance, ■ The Nature Conservancy assists rural producers with environmental registration of their agricultural products. ■ The Ouro Verde Institute works with family farmers to develop agro-forestry systems. ■ The CSO IMAZON works with local municipalities to improve institutional capacities in land registration.		
Capacity of forest communities			
14. Forest communities have sufficient technical forest management, conservation, and technical capacity to support, monitor, and report on local-level REDD+ programs and related activities in line with user-friendly guidance.[7]	■ Technical capacity at a community level can be developed through training programs delivered through either government extension officers or local NGOs. For example, in the Socio Bosque program, training is provided on forest monitoring techniques, and some communities hire forest keepers from among their members who are responsible for control and surveillance activities.		
Capacity of private sector			
15. Presence of a community of private-sector REDD+ project developers with sufficient technical knowledge and capacity to generate forest carbon, biodiversity and socioeconomic baselines, and monitor against these baselines.[8]	■ Private-sector actors may possess the technical capacity to develop community-linked REDD+ demonstration projects in line with internationally approved standards. For example, in Tanzania, Green Resources, a Norwegian plantation and carbon offset company, has successfully developed and implemented procedures for monitoring the carbon, biodiversity, and socioeconomic performance of its operations against CDM, CCB, and FSC accreditation standards.		
	SUBTOTAL SCORES		

Additional considerations (please see "Using the Options Assessment Framework")	
1. *If funding for a proposed national benefit sharing mechanism is linked to forest concession revenue streams (i.e., forest concession taxes or license fees).*	■ The forestry department already has a transparent system for allocating forest-community and private-sector rights and has the capability to protect and enforce these rights.
2. *If private-sector actors are identified as having a direct implementation role under a national approach to REDD+.*	■ Private-sector forestry companies regularly meet financial, environmental, health and safety, and community impact reporting requirements as set by the central or provincial government. ■ National government has a track record of encouraging forestry companies to comply with recommended international codes of conduct, standards, and safeguards for engaging with local communities.

1 Kenya Forests Working Group website. www.kenyaforests.org (Accessed 8th June 2011).

2 PROFONANPE website: www.profonanpe.org.pe/index.html (Accessed 8th June 2011).

3 This is more important for input-based benefit sharing mechanisms for two reasons. First, one of the up-front input benefits may be assisting forest communities without formal land title to access and exercise their rights to secure future forest benefits. Second, it is likely that communities would need to already be able to demonstrate formal land title to demonstrate forest management performance on their land, and to engage in performance-based forest benefit sharing mechanisms.

4 A parish is the smallest administrative unit in the Ugandan administrative system.

5 The ability of benefit recipients to demonstrate and register land rights is regarded as more important for performance rather than input-based benefit sharing mechanisms, as this allows them to demonstrate forest management performance on their land. It is more feasible for input-based benefit sharing mechanisms to operate without recipients having these land rights in place.

6 The ability to monitor against forest carbon, biodiversity, and socioeconomic baselines is a requirement for performance-based benefit sharing mechanisms but not necessarily so for input-based benefit sharing mechanisms.

7 Community monitoring and reporting capacity is more important for performance-based benefit sharing mechanisms than input-based benefit sharing mechanisms.

8 The ability to monitor against forest carbon, biodiversity and socioeconomic baselines is a requirement for performance-based benefit sharing mechanisms but not necessarily so for input-based benefit sharing mechanisms.

BUILDING BLOCK 2: THE NATIONAL AND SUBNATIONAL LEGAL FRAMEWORK RELATED TO REDD+

KEY COMPONENTS	EXAMPLES OF COMPONENTS FROM EXISTING BENEFIT SHARING MECHANISMS	NIB SCORE	NPB SCORE
1. Recognition and enforcement of customary or traditional forest rights of indigenous peoples, local communities, and traditional forest users in national legislation.	■ In the Philippines, Certificates of Ancestral Domain Claim (CADC) recognize indigenous peoples' rights to occupy, manage, and benefit from forests and natural resources (RECOFTC 2011). This provides a legal basis for communities to effectively demonstrate their rights to forest benefits.		
2. Existence and enforcement of community forestry laws that give community groups management rights of forest land.	■ The existence and enforcement of community forestry laws improve the scope for community groups to become fully engaged in forest enterprise project development and implementation (including REDD+ projects). For example, in the Philippines under Community-based Forest Management Agreements, communities can use forest resources for livelihood purposes for a renewable 25-year period (RECOTFC 2011).		

BUILDING BLOCK 2: THE NATIONAL AND SUBNATIONAL LEGAL FRAMEWORK RELATED TO REDD+ (*CONTINUED*)

KEY COMPONENTS	EXAMPLES OF COMPONENTS FROM EXISTING BENEFIT SHARING MECHANISMS	NIB SCORE	NPB SCORE
3. National forestry legislation clearly defines allocation of forest rents to a forest rights holder dependent on the underlying land holding category (e.g., private land title, community land title, concessionary land title); this legislation was formulated through a participatory approach.[1]	■ The clear allocation of forest rents to rights holders provides a basis for the allocation of carbon revenues generated from REDD+ to key stakeholder groups. For example, between 2008 and 2009, Indonesia established the world's first national laws relating to REDD+. Key provisions of the regulations describe the revenue-sharing arrangements between different actors for specific categories of eligible land areas for REDD+ projects. The legislation states that REDD+ project developers would have to share between 20 and 70 percent of profits with local communities, depending on the type of forest and type of license held, while between 10 and 50 percent of the profits would be shared with the government. However, it has been commented that this process has not involved sufficient participation from NGOS, community groups, and the private sector (CFA and PwC 2010).		
4. Clear and mutually supportive mandates given for all agencies involved with the proposed benefit sharing mechanism.	Clear and mutually supportive mandates issued from senior government positions can accelerate the design and implementation of benefit sharing mechanisms. For example, the President of Ecuador gave his full backing to the design and implementation of the Socio Bosque pilot program, tasking a team to develop an operational manual outlining the role of all relevant ministries in the program.		
5. Existence of effective coordination mechanisms to harmonize national development plans with the objectives of the proposed benefit sharing mechanisms.	■ Although not directly related to a benefit sharing mechanism, the following example shows how cross-sector coordination mechanisms can be used to bring together national development plans with forest conservation objectives. In Brazil during the formulation of a regional sustainable development plan for the BR-163 Cuiabá-Santarém Highway in the Amazon, the federal government established an Inter-ministerial Working Group (IWG) to address concerns from the Ministry of the Environment that this infrastructure investment, although necessary for the whole population, should not aggravate environmental problems such as deforestation and social and land tenure issues (UNEP 2006).		

BUILDING BLOCK 2: THE NATIONAL AND SUBNATIONAL LEGAL FRAMEWORK RELATED TO REDD+ (*CONTINUED*)

KEY COMPONENTS	EXAMPLES OF COMPONENTS FROM EXISTING BENEFIT SHARING MECHANISMS	NIB SCORE	NPB SCORE
6. National legal framework fully supports public access to information, promotes debate relating to forest policies, and imposes sanctions for failure to meet obligations to disclose information.	■ The requirement for benefit sharing mechanism administrators to publish periodic reports on benefit sharing mechanism financing can enhance accountability of the mechanism. For example, in Canada, the FIA LBIP is required to publish quarterly reports with updated information about how much money has been allocated and approved through the program, and where this money has been directed.[2]		
7. Land rights legislation provides a clear definition of how forest carbon rights are assigned according to land ownership.[3]	■ A clear definition of the designation of forest carbon rights is likely to make the establishment of REDD+ performance-based benefit sharing mechanisms more straightforward. For example, in Australia, New South Wales became the first State to develop a legislative scheme for the proprietary validation of forestry carbon sequestration rights under *Conveyancing Act 1919* (NSW) s 87A (Hepburn 2009).		
8. Existence and enforcement of a legal requirement in forest law to consult with and gain consent from communities for land-use decisions and benefit sharing arrangements that affect the forest land for which they have customary or formal entitlement.	■ Under Canadian law, First Nations (aboriginal) information sharing requirements must be met prior to implementing a project on Crown lands within their recognized traditional territory. Under the FIA LBIP for all project activities planned within a given year, recipients need to notify affected First Nations of planned project activities and provide the District Manager with a record of correspondence, including details of issues discussed and outstanding issues. If necessary, this can be reviewed by the BC Ministry of Forests, Lands and Natural Resource Operations.		

BUILDING BLOCK 2: THE NATIONAL AND SUBNATIONAL LEGAL FRAMEWORK RELATED TO REDD+ (*CONTINUED*)

KEY COMPONENTS	EXAMPLES OF COMPONENTS FROM EXISTING BENEFIT SHARING MECHANISMS	NIB SCORE	NPB SCORE
9. National legislation defines benefit sharing arrangements between national, subnational, and local-level government institutions.[4]	■ A clear legal definition of benefit sharing arrangements between national, subnational and local-level government institutions helps provide a shared and undisputed understanding of these arrangements from the outset of benefit sharing mechanism establishment. For example, the Federal Constitution of Brazil decrees that 25 percent of the revenues raised by ICMS tax are to be allocated from state to municipal governments, and 75 percent of the total amount to be passed on to the municipalities is distributed according to the share of the state ICMS that has been collected within that municipality. This type of principle in tax revenue allocation could be applied to performance-based REDD+ revenues achieved under a national program.		
	SUBTOTAL SCORES		

Additional considerations (please see "How to Use Options Assessment Frameworks")	
1. *If wider sector tax or concession revenues will finance the proposed benefit sharing mechanism.*	■ Consistency and coordination between forest policies, laws, and regulations and the policies, laws, and regulations of other sectors. ■ Concession management or forest-licensing systems (where applicable) require formal benefit sharing arrangements with surrounding communities.
2. *If the proposed benefit sharing mechanism is established under a trust fund model.*	■ National legislation in place to allow for the establishment and protection of subnational REDD+ trust funds. ■ Experience of potential benefit sharing mechanism administrators in drafting by-laws that provide a robust legislative framework for institutional structures to function in an efficient, effective, and equitable capacity.

1 The ability of benefit recipients to demonstrate and register land rights is regarded as more important for performance rather than input-based benefit sharing mechanisms, as this allows them to demonstrate forest management performance on their land. It is more feasible for input-based benefit sharing mechanisms to operate without recipients having these land rights in place.

2 See this website for an example of the range of publicly information available for the FIA LBIP: www.fialicensees.com/Login/login.asp.

3 The ability to clearly allocate forest carbon rights to forest rights owners is considered important for performance-based REDD+ benefit sharing mechanisms as this then allows for the allocation of forest carbon-credit benefits based on forest management performance by recipients.

4 This is important for determining the potential distribution of performance-based REDD+ funding in the future.

BUILDING BLOCK 3: FUND MANAGEMENT CAPACITY AND EXPERIENCE

KEY COMPONENTS	EXAMPLES OF THESE COMPONENTS FROM OTHER COUNTRIES	NIB SCORE	NPB SCORE
1. Presence of either national government institutions or NGOs or private with past experience of managing national environmental funds.	■ El Fondo de las Americas (FONDAM) is a private, not-for-profit organization with several Peruvian ministries, and USAID, represented on its board. The organization has experience with managing approximately US $45 million to fund community environmental projects and childhood health and education projects. FONDAM works mainly with NGOs, which reach communities and disburse money locally in an effective manner (CFA and PwC 2010).		
2. Ability of community groups to open local bank accounts without onerous requirements (e.g., allows community groups to open bank accounts without deposits) or other means of fund transfer.	■ The administration team of the Socio Bosque program in Ecuador made an agreement with a national bank to streamline the process for establishing beneficiary bank accounts. The scheme enabled participants to establish a bank account in the community's name upon presentation of legal documents, without the usual requirement of an up-front deposit, and with reduced transaction costs incurred on incoming performance-based payments.		
3. Presence of suitable fund management agencies with track record of managing forest revenue collection, budgeting, expenditure, accounting, redistribution, and audit.	■ The FIA in Canada is a forest sector investment model, led by the government, that delivers the province's forest investment in an accountable, efficient manner and assists government with developing a globally recognized, sustainably managed forest industry.		
4. National codes of conduct and anticorruption measures are in place to safeguard against fund mismanagement.	■ Brazil's Amazon Fund has put in anticorruption measures to safeguard its funds. The Fund is externally audited, and if the fund manager BNDES fails to produce reports and audits on time, or if there is evidence of financial mismanagement, the donor (Norwegian government) has the right to withdraw funds (Zadek, Forstater, and Polacow 2010).		
5. Track record of previous or existing environmental programs of disbursing funds to community groups or individuals at a national scale in a timely manner.	■ Timeliness in benefit distribution will be a key factor for the long-term success of a subnational benefit sharing mechanism. This requires effective expectation management with recipients, and if time lines are adhered to, the relationship between implementation agencies and communities is likely to improve over time. In the National Program of Payment for Hydrological Services (PSAH) benefit sharing mechanism in Mexico, timeframes and funding periods are agreed on in advance with community members. This allows for effective expectation management for disbursement and better relations with communities.		

BUILDING BLOCK 3: FUND MANAGEMENT CAPACITY AND EXPERIENCE (*CONTINUED*)

KEY COMPONENTS	EXAMPLES OF THESE COMPONENTS FROM OTHER COUNTRIES	NIB SCORE	NPB SCORE
6. Presence of third-party organizations with experience in providing financial and nonfinancial (e.g., governance) auditing of fund-management processes.	■ The Forest Fee Rural Council Committees in Cameroon include a third-party auditor from the committee's majority village to monitor and report incidences of financial mismanagement. This has a knock-on deterrent effect to discourage mismanagement in the future.		
7. Existence of effective and adequate standards against which the conduct of civil servants, political appointees, and community representatives can be held accountable, coupled with effective channels for reporting corruption and protecting whistleblowers.	■ In Ecuador, NGOs such as Nature and Culture International (NCI) help to present community concerns directly to the Ministry of Environment so that these concerns can be addressed and dealt with before the relationship between the Program and communities risks possible damage.		
8. Presence of a national level government agency with experience in transferring monetary or nonmonetary benefits to beneficiaries linked to measurable and verifiable performance against predefined targets.[1]	■ The Ministry of Finance in Ecuador's Socio Bosque program is responsible for fund disbursal from the central bank to beneficiaries' bank accounts. Payments are only made once the Ministry of Environment verifies conservation performance.		
9. Existence of a government or a public or private organization with experience in managing environmental revolving[2] funds.[3]	■ Revolving funds, with finances provided from the sale of carbon credits, could be a useful model to integrate into REDD+ environmental fund structures. This could encourage private-sector engagement in REDD+ project development by reducing investment risk and providing fiscal incentives for placing contributions to a pooled fund. The Fondo para Accion Ambiental y la Niñez (FPAA) is a private Colombian not-for-profit organization created in 2000 under the Bilateral Agreement with the government of the United States of America. The fund has formed a strategic partnership with the National Centre for Cleaner Production and Environmental Technologies to promote access to the Clean Development Mechanism (CDM) and to facilitate the participation of industry in clean-technology development and carbon markets. This arrangement includes the provision of technical assistance, carbon market information, and financial incentives to stimulate technological change in industry and mass transportation. Once a reduction in greenhouse gas emissions is achieved because of the introduction of new technologies financed by industry, the avoided CO_2 emissions can be traded as carbon credits in the market.		

BUILDING BLOCK 3: FUND MANAGEMENT CAPACITY AND EXPERIENCE (*CONTINUED*)

KEY COMPONENTS	EXAMPLES OF THESE COMPONENTS FROM OTHER COUNTRIES	NIB SCORE	NPB SCORE
	Up to 30 percent of the returns obtained from the transaction are voluntarily donated to a revolving fund set up by Fondo Acción and the National Centre to finance new industry partnerships and further reduce emissions. This "donation" of financial returns to the revolving fund is also attractive to private companies because of the fiscal benefits that can be gained from such donations (CFA and PwC 2010).		
10. Existence of a government or a public or private organization with experience in providing low-interest, long-term horizon, risk-tolerant loans to community groups, members of the public, social enterprises, and the private sector.	■ The provision of low-interest, risk-tolerant loans can help benefit sharing mechanisms to effectively support community environmental projects on a financially sustainable basis, while encouraging local-level economic development. For example, the Tany Meva Foundation was created in 1996 by the Government of Madagascar as a national endowment fund that provides microcredit loans for local communities to initiate and develop environmental enterprises and projects.		
	SUBTOTAL SCORES		

[1] The ability to measure and verify performance against predefined targets is necessary for performance-based benefit sharing mechanisms but not necessarily for input-based benefit sharing mechanisms.

[2] Income from taxes, fees, fines, or Payments for Ecosystem Services (PES) that are specially earmarked are used to regularly replenish revolving funds.

[3] Environmental revolving funds are likely to be only applicable to performance-linked REDD+ carbon revenue, and therefore not necessary for input-based benefit sharing mechanisms.

BUILDING BLOCK 4: MONITORING CAPACITY AND EXPERIENCE

KEY COMPONENTS	EXAMPLES OF THESE COMPONENTS FROM OTHER COUNTRIES	NIB SCORE	NPB SCORE
1. Presence of organizations at a national level with a sufficient combination of experience monitoring forestry, social-orientation, and ecological conservation projects.	■ In many countries, central government agencies have received support and technical assistance from NGOs for forest monitoring. These NGOs have also often provided a bridge between local government and communities, providing socioeconomic and ecological monitoring services in conjunction with local government agencies (CFA and PwC 2010). For example, the national NGO Guyra Paraguaya provides GIS data and support to the Government of Paraguay to assist with monitoring deforestation rates.		

BUILDING BLOCK 4: MONITORING CAPACITY AND EXPERIENCE (*CONTINUED*)

KEY COMPONENTS	EXAMPLES OF THESE COMPONENTS FROM OTHER COUNTRIES	NIB SCORE	NPB SCORE
2. Demonstrated ability of government to provide frequent and publicly available monitoring evaluation reports on government environmental spending programs.	■ The provision of publicly available monitoring evaluation reports helps to demonstrate transparency and maintains support from the public and participants of a benefit sharing mechanism. For example, in Canada, quarterly reports on the performance of the FIA LBIP are provided on the Internet.[1]		
3. Demonstrated ability to decentralize monitoring systems and transfer them to local or nongovernmental institutions to assist with benefit sharing mechanisms and socioeconomic impact monitoring.	■ NGOs with strong community links can provide a communication bridge between local community groups and the benefit sharing mechanism implementation agency and provide monitoring data about the socioeconomic impact of the benefit sharing mechanism. For example, the NGO NCI provides this bridging function for the Socio Bosque in Ecuador and helps communities express their concerns more effectively to the Ministry of Environment.		
4. Prior and effective use of third-party monitoring agencies within national government environmental programs.	■ Regular third-party monitoring and review allows benefit sharing mechanisms to track any potential performance-related issues at an early stage and take swift, corrective action before these issues grow into larger challenges. For example, the FIA LBIP in British Columbia, Canada, uses a third-party administrator to review fund performance on an annual basis and report on key performance indicators. Additionally, recipient-monitoring data (i.e., audit reports) are used for performance improvement.		
5. Proposed REDD+ benefit sharing mechanism implementation agencies have experience with incorporating monitoring and evaluation data into forest management planning, and using evaluation results to continually improve program implementation.	■ The National Forestry Commission in Mexico (CONAFOR) uses GIS-linked photography backed up by random-sample site visits to assess how well the PSAH program is working "on-the-ground." Findings from these visits provide detailed information about how the program management plan may need to be changed and improved in the future.		
6. The proposed benefit sharing mechanism implementation agencies have experience with using GIS data to monitor changes in forest cover, or have an existing partnership with a national-level organization with this capacity.[2]	■ Public and private partnerships can help maximize the coverage and accuracy of monitoring forest data. For example, in Mexico, the National Institute of Statistics, Geography and Informatics (INEGI) is responsible for developing land-use and land-cover maps for use by CONAFOR, which has also partnered with a number of academic institutions to assist with the analysis of monitoring data.		

BUILDING BLOCK 4: MONITORING CAPACITY AND EXPERIENCE (*CONTINUED*)

KEY COMPONENTS	EXAMPLES OF THESE COMPONENTS FROM OTHER COUNTRIES	NIB SCORE	NPB SCORE
7. The proposed benefit sharing mechanism agency has experience in using GIS data to monitor changes in forest cover and in using these data to calculate and monitor changes in bio-carbon stocks and abatement, or has an existing partnership with a national-level organization that has this capacity.[3]	■ The ability of the benefit sharing mechanism implementation agency to calculate and monitor changes in bio-carbon stocks and abatement is important for the monitoring and verification of REDD+ performance. Although these data are not currently used at a national level for REDD+, Brazil's National Space Research Institute (INPE) has four programs using different sensors to monitor deforestation and can be used to calculate resulting changes in bio-carbon stocks and flows. These data are publicly available and include annual high-resolution analysis to measure annual deforestation; provide monthly mid-resolution monitoring of clearings over 25 hectares (63 acres) to detect new deforestation for enforcement purposes; present yearly analysis of forest degradation; and provide daily monitoring of fires, using low-resolution satellites.		
8. The proposed benefit sharing mechanism agency has experience in ground-truthing GIS data on forest-cover change, or has an existing partnership with a national level organization that has this capacity.[4]	■ The ground-truthing of higher level carbon data is important to check for smaller scale forest degradation and to verify the accuracy of GIS data. In Ecuador, Socio Bosque's monitoring system combines GIS images with site visits to "ground-truth" GIS data. Doing so also helps verify that smaller scale degradation is not being missed in the monitoring process.		
	SUBTOTAL SCORES		

1 Examples can be found here: https://www.fialicensees.com/static_content/documents.asp?ID=BE864485).

2 GIS monitoring capacity is more important for performance-based benefit sharing mechanisms than for input-based benefit sharing mechanisms.

3 GIS monitoring capacity is more important for performance-based benefit sharing mechanisms than for input-based benefit sharing mechanisms.

4 GIS monitoring capacity is more important for performance-based benefit sharing mechanisms than for input-based benefit sharing mechanisms.

4.1.1 Total Scores for a National Benefit Sharing Mechanism

BUILDING BLOCK	NATIONAL INPUT-BASED BENEFIT SHARING MECHANISM			NATIONAL PERFORMANCE-BASED BENEFIT SHARING MECHANISM		
	MAXIMUM SCORE (M)	ACTUAL SCORE (A)	PERCENTAGE SCORE (A/M 100 PERCENT)	MAXIMUM SCORE (M)	ACTUAL SCORE (A)	PERCENTAGE SCORE (A/M 100 PERCENT)
1. Government, civil society, community, and private-sector institutional capacity	22			28		
2. The national or subnational legal framework relevant to REDD+	12			18		
3. Fund management capacity and experience	16			20		
4. Monitoring capacity and experience	10			16		
OVERALL TOTALS:	**60**			**82**		

4.2 SUGGESTED ENABLING ACTIONS FOR NATIONAL BENEFIT SHARING MECHANISMS

This section provides a suggested list of enabling actions for each key component, organized in the same order as the four building blocks in the Options Assessment Framework.

BUILDING BLOCK 1: GOVERNMENT, CIVIL SOCIETY, COMMUNITY, AND PRIVATE-SECTOR INSTITUTIONAL CAPACITY

KEY COMPONENTS	SUGGESTED ENABLING ACTIONS
Capacity of proposed benefit sharing mechanism implementing agencies	
1. Proposed benefit sharing mechanism implementation agencies (e.g., The Forestry Department and The Ministry of Environment) have sufficient technical forest management, community development, and technical REDD+ capacity to design and implement national-level benefit sharing mechanism programs and associated activities.	■ Ensure adequate funding is available to support capacity building for REDD+ implementation agencies for training in forest management, community development, and technical REDD+ issues. ■ Undertake a stakeholder mapping exercise of potential civil society and private-sector implementation partners, assessing each against criteria of key competencies. ■ Where appropriate capacities exist, the national benefit sharing mechanism administrator should form partnerships with civil society partners and private-sector organizations for collaboration in implementation.

BUILDING BLOCK 1: GOVERNMENT, CIVIL SOCIETY, COMMUNITY, AND PRIVATE-SECTOR INSTITUTIONAL CAPACITY (*CONTINUED*)

KEY COMPONENTS	SUGGESTED ENABLING ACTIONS
2. Existing and effective cooperation between national and subnational governments on sustainable forest management and conservation.	■ Direct a proportion of REDD+ funding toward regular, multilevel government communication and training workshops.
3. Existing and effective coordination among all national agencies with mandates relevant to the proposed benefit sharing mechanism (e.g., other sector agencies such as Department of Agriculture).	■ Create a cross-departmental committee (i.e., REDD+ taskforce) that includes Department of Finance or Treasury and proposed REDD+ benefit sharing mechanism implementation agencies. This will improve working relationships and cooperation between these agencies in relation to national REDD+ strategy, and provide a forum to define roles and responsibilities regarding operation of REDD+ benefit sharing mechanisms.
4. Proven capacity of government to engage effectively with CSOs and private sector for forest policy development and implementation at a centralized level.	■ Create local-level multistakeholder platforms that will allow consultation with national, subnational, and local stakeholders and representatives from CSOs. ■ Facilitate formation of a CSO benefit working group to support the proposed REDD+ benefit sharing mechanism implementation agency.
5. Physical presence and capacity of government offices with staff to engage and work effectively on forest policy and decision-making with community groups and the private sector.	■ Allocate a proportion of funds toward financial and logistical (e.g., transport and equipment) support for government outreach staff.
6. Intended benefit sharing mechanism implementation agencies have the capability to store and process financial, proprietary, and legal information needed to effectively administer a national scheme at a scale of millions of individuals and thousands of organizations. This includes tracking payment disbursals between different actors and beneficiaries in the benefit sharing mechanism.	■ Undertake an assessment of data management systems being used by best practice international benefit sharing mechanism programs. ■ Identify key data parameters (e.g., GIS coordinates that demarcate beneficiary land titles) and benefit-disbursement metrics (e.g., number of community training workshops held by region per year) that will need to be collated at a centralized level. ■ Procure and implement an IT system that can collate and process information from relevant government departments, and civil society or private-sector partners, including tax revenues, land titles, benefit disbursal data, and impact assessment data. ■ Develop an operational manual assigning data collection and handling responsibilities among proposed benefit sharing mechanism implementation stakeholders.
7. Strong working relationship between Department of Finance or Treasury and benefit sharing mechanism implementation agencies. Alignment of strategy and mandate among these bodies.	■ Hold a regular meeting of the REDD+ taskforce to assess effectiveness of ongoing cooperation, identify improvements in operational coordination and ensuring the alignment of mandates with REDD+ objectives.
8. Previous experience of intended benefit sharing mechanism implementation agency in communicating the purpose and function of national environmental programs and eligibility criteria to the public in a timely and comprehensive manner.	■ Consider formation of a dedicated communications team within the proposed benefit sharing mechanism implementation agency. ■ Develop a clear mandate for communications responsibility at a provincial and local level. ■ Design a communications plan based on lessons learned from public health campaigns or other wide-scale public information campaigns, taking into account international best practice case studies.

BUILDING BLOCK 1: GOVERNMENT, CIVIL SOCIETY, COMMUNITY, AND PRIVATE-SECTOR INSTITUTIONAL CAPACITY (*CONTINUED*)

KEY COMPONENTS	SUGGESTED ENABLING ACTIONS
Capacity of CSOs	
9. Presence and capacity of CSOs to support community groups and indigenous peoples in engaging in local forest-related planning, decision-making, and implementation.	■ Undertake stakeholder mapping and capabilities assessment of CSOs operating with community groups in targeted forest regions. Evaluation criteria may include the CSO's track record of working with community groups and indigenous peoples on forestry comanagement projects; presence of legal experts within CSOs actively working on forest rights issues; presence and capacity of GIS team within CSO; and track record of working with community groups and indigenous peoples in implementation of forest livelihood programs. ■ Hold multistakeholder workshops with civil society representatives to identify opportunities for joint implementation of benefit sharing mechanism programs. ■ Increase logistical (e.g., transport and equipment) and financial support to CSOs.
10. CSOs have a track record of working together with forest communities and helping those communities without formal land titles to access forest benefits.	■ Undertake stakeholder mapping and capabilities assessment of CSOs operating with community groups in targeted forest regions. Evaluation criteria may include the CSO's track record of working with community groups and indigenous peoples on forestry comanagement projects; presence of legal experts within CSOs actively working on forest rights issues; presence and capacity of GIS team within CSO; and track record of working with community groups and indigenous peoples in implementation of forest livelihood programs. ■ Hold multistakeholder workshops with civil society representatives to identify opportunities for joint implementation of benefit sharing mechanism programs. ■ Increase logistical (e.g., transport and equipment) and financial support to CSOs.
11. CSOs have the track record and capacity to assist forest communities with mapping, demonstrating, and registering their land rights.	■ Undertake stakeholder mapping and capabilities assessment of CSOs operating with community groups in targeted forest regions. Evaluation criteria may include the CSO's track record of working with community groups and indigenous peoples on forestry comanagement projects; presence of legal experts within CSOs actively working on forest rights issues; presence and capacity of GIS team within CSO; and track record of working with community groups and indigenous peoples in implementation of forest livelihood programs. ■ Hold multistakeholder workshops with civil society representatives to identify opportunities for joint implementation of benefit sharing mechanism programs. ■ Increase logistical (e.g., transport and equipment) and financial support to CSOs.

BUILDING BLOCK 1: GOVERNMENT, CIVIL SOCIETY, COMMUNITY, AND PRIVATE-SECTOR INSTITUTIONAL CAPACITY (*CONTINUED*)

KEY COMPONENTS	SUGGESTED ENABLING ACTIONS
12. CSOs have sufficient forest management, community development, and technical knowledge and capacity to assist local communities to generate forest carbon, biodiversity, and socioeconomic baselines and to monitor against these baselines.	■ Undertake stakeholder mapping and capabilities assessment of CSOs operating with community groups in targeted forest regions. Evaluation criteria may include the CSO's track record of working with community groups and indigenous peoples on forestry comanagement projects; presence of legal experts within CSOs actively working on forest rights issues; presence and capacity of GIS team within CSO; and track record of working with community groups and indigenous peoples in implementation of forest livelihood programs. ■ Hold multistakeholder workshops with civil society representatives to identify opportunities for joint implementation of benefit sharing mechanism programs. ■ Increase logistical (e.g., transport and equipment) and financial support to CSOs. ■ Provide funds to CSOs to procure monitoring hardware and implement baseline assessment studies.
13. CSOs have sufficient technical forest management, community development, and technical benefit sharing mechanism knowledge and capacity to assist national benefit sharing mechanism administrators distribute REDD+ benefits at the community level.	■ Undertake stakeholder mapping and capabilities assessment of CSOs operating with community groups in targeted forest regions. Evaluation criteria may include the CSO's track record of working with community groups and indigenous peoples on forestry comanagement projects; presence of legal experts within CSOs actively working on forest rights issues; presence and capacity of GIS team within CSO; and track record of working with community groups and indigenous peoples in implementation of forest livelihood programs. ■ Hold multistakeholder workshops with civil society representatives to identify opportunities for joint implementation of benefit sharing mechanism programs. ■ Increase logistical (e.g., transport and equipment) and financial support to CSOs. ■ Use results from stakeholder mapping and capabilities analysis to guide the design of targeted technical training programs.
Capacity of forest communities	
14. Forest communities have sufficient technical forest management, conservation, and technical capacity to support, monitor, and report on local-level REDD+ programs and related activities in line with user-friendly guidance.	■ Consider formation of a working group with government and CSO representation tasked with development of user-friendly monitoring guidelines for use by forest communities. ■ Ensure funds are available for capacity building in carbon, biodiversity, and socioeconomic monitoring in line with developed guidelines.
Capacity of private sector	
15. Presence of a community of private-sector REDD+ project developers with sufficient technical knowledge and capacity to generate forest carbon, biodiversity, and socioeconomic baselines and monitor against these baselines.	■ Hold a workshop with potential private-sector actors to identify key opportunities for and barriers to using their capabilities in developing relevant baselines for the benefit sharing mechanism. ■ Government or donor agencies consider providing grants or conditional loans to prospective private-sector REDD+ developers to encourage REDD+ project development. ■ Review the possibility of providing tax incentives and improvements to the regulatory and forest governance environment to encourage REDD+ project establishment.

BUILDING BLOCK 2: THE NATIONAL AND SUBNATIONAL LEGAL FRAMEWORK RELEVANT TO REDD+

KEY COMPONENTS	SUGGESTED ENABLING ACTIONS
1. Recognition and enforcement of customary or traditional forest rights of indigenous peoples, local communities, and traditional forest users in national legislation.	■ Create a multistakeholder process to gather relevant stakeholders and clarify laws relating to community and indigenous people ownership. This may include multistakeholder consultations and mapping of community land and ownership rights. ■ Review current barriers to effective enforcement of community and traditional forest rights at a local level. On the basis of this review, consider allocation of funding for capacity building and implementation support to local forestry departments or agencies. ■ Develop systems of land registry which are publicly available and accessible.
2. Existence and enforcement of community forestry laws that give community groups management rights of forest land.	■ Review community forest law and determine whether it allows communities to manage forests under a renewable license equal to the timeframe of REDD+ projects (circa 30 years). ■ Conduct a formal review of the effectiveness of community forestry law enforcement and consider best ways in which to improve law enforcement.
3. National forestry legislation clearly defines allocation of forest rents to a forest rights holder dependent on the underlying land holding category (e.g., private land title, community land title, concessionary land title); this legislation was formulated through a participatory approach.	■ Review existing rent allocation systems (including survey of forest land rights holders) to identify areas where further guidance and clarity are needed on rent distribution. ■ As a result of this review, revise criteria or the means of qualification for forest rent allocation. For example, allocations may be apportioned to customary rights holders living within a certain distance of the concession boundary.
4. Clear and mutually supportive mandates given for all agencies involved with the proposed benefit sharing mechanism.	■ Review and re-evaluate current government mandates relevant to REDD+, noting gaps, synergies, and overlaps in mandates between agencies. ■ Develop an overarching government mandate for REDD+, including individual agency mandates and responsibilities.
5. Existence of effective coordination mechanisms to harmonize national development plans with the objectives of the proposed benefit sharing mechanisms.	■ Establish cross-departmental working groups with a clear mandate and financing. This should include departments of forestry, financing, agriculture, energy, and infrastructure to assess synergies among national development plans and the proposed objectives of the benefit sharing mechanism.
6. National legal framework fully supports public access to information, promotes debate relating to forest policies, and imposes sanctions for failure to meet obligations to disclose information.	■ Establish formal public consultation periods for all new forest policies being introduced. ■ Review and clarify the legal framework and sanctions for nondisclosure of information or publication of misinformation.
7. Land rights legislation provides a clear definition of how forest carbon rights are assigned according to land ownership.	■ Establish a government review process, led by the land planning agency, to determine and clarify the legal definition and allocation of carbon rights with regards to land ownership.

BUILDING BLOCK 2: THE NATIONAL AND SUBNATIONAL LEGAL FRAMEWORK RELEVANT TO REDD+ (*CONTINUED*)

KEY COMPONENTS	SUGGESTED ENABLING ACTIONS
8. Existence and enforcement of a legal requirement in forest law to consult with and gain consent from communities for land-use decisions and benefit sharing arrangements that affect the forest land for which they have customary or formal entitlement.	■ Consider revision of existing land use legislation to include requirements for the free, prior, and informed consent (or an equivalent) of affected community groups. ■ Develop guidelines for use by government, private-sector, and civil society actors outlining an approved, equitable process for gaining consent from affected community groups.
9. National legislation defines benefit sharing arrangements between national, subnational, and local-level government institutions.	■ Review the process used in other countries for establishing carbon revenue legislation (e.g., Australia) and begin a legal review for carbon revenue allocation. ■ Develop legislation and clear criteria for how funds are to be allocated based on ownership rights and uses of the forest area. ■ Develop a fair and equitable separation of funds between the relevant interest groups.

BUILDING BLOCK 3: FUND MANAGEMENT CAPACITY AND EXPERIENCE

KEY COMPONENTS	SUGGESTED ENABLING ACTIONS
1. Presence of either national government institutions or NGOs or private with past experience of managing national environmental funds.	■ Increase institutional capacity through the development and implementation of accounting methodologies and practices, and governance structures to manage environmental funds. ■ Increase staff capacity through training in accounting methodologies and relevant fund-management skills.
2. Ability of community groups to open local bank accounts without onerous requirements (e.g., allows community groups to open bank accounts without deposits) or other means of fund transfer.	■ Analyze the potential opportunities and risks faced by local banks through participation in the benefit sharing mechanism. ■ Where risks are identified, consider providing incentives (e.g., risk guarantees) to participating banks. ■ Invite a bank with local presence in targeted regions to participate in benefit sharing mechanism implementation. ■ Hold participatory workshop to identify opportunities in establishment of specialist benefit sharing mechanism-linked financial services for beneficiary groups.
3. Presence of suitable fund management agencies with track record of managing forest revenue collection, budgeting, expenditure, accounting, redistribution, and audit.	■ Identify fund management agencies outside the forestry sector that may have the capability to adapt to or expand to manage forest sector revenue collection, budgeting expenditure, accounting, redistribution, and audit. ■ If these agencies are not present, consider the use of multilateral institutions with a track record of in-country fund management to manage the proposed benefit sharing mechanism, or the formation of a multistakeholder benefit sharing mechanism fund management board.

BUILDING BLOCK 3: FUND MANAGEMENT CAPACITY AND EXPERIENCE (*CONTINUED*)

KEY COMPONENTS	SUGGESTED ENABLING ACTIONS
4. National codes of conduct and anticorruption measures are in place to safeguard against fund mismanagement.	■ Review codes of conduct and anticorruption measures operating in international best practice benefit sharing mechanism programs. ■ Based on the results of this review, appoint a legal advisor to design codes of conduct and anticorruption measures that would support a benefit sharing mechanism. ■ Consider the formation of a benefit sharing mechanism oversight committee that includes representatives from civil society, government, and the private sector.
5. Track record of previous or existing environmental programs of disbursing funds to community groups or individuals at a national scale in a timely manner.	■ Invest in the training of fund managers to be able to evaluate, disseminate, and monitor funds at an appropriate scale. ■ Support local stakeholders who are eligible for benefits to write project proposals by providing direct government extension services or supporting CSOs to provide such services.
6. Presence of third-party organizations with experience in providing financial and nonfinancial (e.g., governance) auditing of fund-management processes.	■ Procure an internationally or nationally recognized and technically proficient fund audit body. ■ Develop systemic procedures for tracking the receipt and expenditure of funds that can be audited by a third party. ■ Increase the capacity and resources to ensure there are sanctions and appropriate enforcement for the detection of embezzlement (see above).
7. Existence of effective and adequate standards against which the conduct of civil servants, political appointees, and community representatives can be held accountable, coupled with effective channels for reporting corruption and protecting whistleblowers.	■ Review sanctions and standards for the conduct of relevant groups in the forestry sector. ■ Establish an independent body or watchdog that regularly investigates monitors, and evaluates and reports on compliance with regulations and standards within the forest sector. ■ Ensure prosecuting bodies are aware of the penalties and sanctions for infringements. ■ Make information about the scope of the sanctions and penalties publicly available.
8. Presence of a national level government agency with experience in transferring monetary or nonmonetary benefits to beneficiaries linked to measurable and verifiable performance against predefined targets.	■ Invest in the training of government staff to be able to evaluate and verify forest monitoring data from the proposed benefit sharing mechanism implementation agencies. ■ Ensure the presence of local government officers to verify the REDD+ performance of the planned benefit sharing mechanism and ground-truth forest carbon abatement data.
9. Existence of a government or a public or private organization with experience in managing environmental revolving funds.	■ Consult with other governments with experience in revolving environmental funds to define a Terms of Reference for an independent organization or national bank to establish REDD+ revolving funds.
10. Existence of a government or a public or private organization with experience in providing low-interest, long-term horizon, risk-tolerant loans to community groups, members of the public, social enterprises, and the private sector.	■ Propose a benefit sharing mechanism implementation agency to consider consulting and collaborating with private microcredit institutions or development banks with experience in providing higher risk, long-term loans.

[1] Income from taxes, fees, fines, or Payments for Ecosystem Services (PES) that are specially earmarked are used to regularly replenish revolving funds.

BUILDING BLOCK 4: MONITORING CAPACITY AND EXPERIENCE (*CONTINUED*)

KEY COMPONENTS	SUGGESTED ENABLING ACTIONS
1. Presence of organizations at a national level with a sufficient combination of experience monitoring forestry, social-orientation, and ecological conservation projects.	■ Undertake a stakeholder mapping exercise of potential civil society and private-sector implementation partners, assessing each against criteria of key competencies required for effective impact monitoring. Evaluation criteria may include track record in development of socioeconomic or forest carbon or ecological baseline assessments; presence of field staff in key forested regions of the country; technical capacity of field staff in data-collection techniques; capacity in data aggregation; and reporting. ■ If insufficient capacity exists, appoint internationally recognized monitoring organizations to assume short-term responsibility for impact monitoring activities while providing on-the-job training to local stakeholders.
2. Demonstrated ability of government to provide frequent and publicly available monitoring evaluation reports on government environmental spending programs.	■ Consider including a user-friendly reporting function within any commissioned benefit sharing mechanism data-management system This is linked to the suggested enabling actions for component 6 of Building Block 1: Government, civil society, community, and private-sector institutional capacity. ■ Task a communications team with the regular submission of benefit-disbursal reports through accessible communication channels (e.g., information in local press, published on benefit sharing mechanism specific websites). This is linked to the suggested enabling actions for component 8 of Building Block 1: Government, civil society, community and private-sector institutional capacity.
3. Demonstrated ability to decentralize monitoring systems and transfer them to local or nongovernmental institutions to assist with benefit sharing mechanisms and socioeconomic impact monitoring.	■ Assess strengths and weaknesses of decentralized monitoring agents (e.g., local CSOs, private-sector organizations, local government agents, and targeted beneficiaries). Evaluation criteria may include capacity of community field officers of the institution; strength of relationship with targeted beneficiary groups; competency in data aggregation; and analysis techniques. ■ Using the results of this report, develop standardized monitoring processes and an operational manual that clearly details roles and responsibilities among implementation partners. ■ Allocate funding to deliver targeted training programs addressing specific capacity constraints identified through the capacity assessment.
4. Prior and effective use of third-party monitoring agencies within national government environmental programs.	■ Undertake a stakeholder mapping exercise and capabilities evaluation of potential third-party monitoring agencies. Evaluation criteria may include proven track record of monitoring national government spending programs, as well as a multidisciplinary team, including expertise in forest conservation, sustainable forest management, and social development. ■ Based on findings, consider appointing third-party monitoring agents.

BUILDING BLOCK 4: MONITORING CAPACITY AND EXPERIENCE (*CONTINUED*)

KEY COMPONENTS	SUGGESTED ENABLING ACTIONS
5. Proposed REDD+ benefit sharing mechanism implementation agencies have experience with incorporating monitoring and evaluation data into forest management planning, and using evaluation results to continually improve program implementation.	■ Establish procedures to regularly monitor and evaluate forest management activities, including ecological and social impact assessments. ■ Ensure procedures include a regular review of forest management plans and adaptation of plans, where appropriate, to account for social and ecological changes.
6. The proposed benefit sharing mechanism implementation agencies have experience with using GIS data to monitor changes in forest cover, or have an existing partnership with a national-level organization with this capacity.	■ Undertake a stakeholder mapping and capabilities assessment of government departments, academic institutions, civil society organizations, and private-sector organizations with GIS analysis capabilities and relevant data sets. ■ Consider South-South partnership opportunities with REDD+-ready country governments to enable best practice learning. ■ Allocate a portion of dedicated benefit sharing mechanism financing to ongoing technical training in GIS-analysis techniques. ■ Increase funding for recruitment and training of staff with GIS expertise. ■ Explore the opportunities to partner with academic institutions or other groups who have the necessary technical expertise. ■ Invest in the relevant GIS equipment or procure the services of organizations that have the existing capability in relevant technologies such as satellite monitoring and LIDAR.
7. The proposed benefit sharing mechanism agency has experience in using GIS data to monitor changes in forest cover and in using these data to calculate and monitor changes in bio-carbon stocks and abatement, or has an existing partnership with a national-level organization that has this capacity.	■ Increase funding for recruitment and training of staff with GIS expertise and carbon stock analysis. ■ Invest in the relevant GIS equipment or procure the services of organizations that have an existing capability in relevant technologies. ■ Explore South-South collaboration opportunities with other REDD+ nations in a more advanced state of monitoring readiness. This may involve international monitoring training secondments.
8. The proposed benefit sharing mechanism agency has experience in ground-truthing GIS data on forest-cover change, or has an existing partnership with a national level organization that has this capacity.	■ Increase funding for recruitment and training of local forest officers or community representatives in forest-monitoring techniques and in carbon stock analysis.

4.3 OPTIONS ASSESSMENT FRAMEWORK FOR SUBNATIONAL BENEFIT SHARING MECHANISMS

BUILDING BLOCK 1: GOVERNMENT, CIVIL SOCIETY, COMMUNITY, AND PRIVATE-SECTOR INSTITUTIONAL CAPACITY

KEY COMPONENTS	EXAMPLES OF THESE COMPONENTS FROM OTHER COUNTRIES	SNIB SCORE	SNPB SCORE
Capacity of proposed benefit sharing mechanism implementing agencies			
1. Proposed benefit sharing mechanism implementation agencies (e.g., the state or provincial environmental department) have sufficient forest-management, community development, and technical REDD+ capacity, or can collaborate with civil society or private-sector organizations to oversee implementation of a subnational-level REDD+ benefit sharing mechanism program.	■ In Canada, British Columbia's Forest Investment Account (FIA) ensures that the appropriate technical forest-management capacity is being applied to the program as the Ministry of Forests, Lands and Natural Resource Operations, and the Ministry of Environment make available technical specialists who advise on specific project activities funded under the FIA. Technical specialists work closely with program managers to ensure that funded activities are consistent with established work standards best management practices and provide the greatest contribution to SFM. ■ The implementation agency may also have community development capacity as seen in Uganda where the BMCT (Bwindi Mgahinga Conservation Trust) hires expert extension workers to provide livelihood-development training to communities.		
2. Political will of the national government to support the establishment of subnational institutions to manage forest benefit sharing mechanisms.	■ It is not always the case that national government will be supportive of the establishment of new subnational institutions, but this political will is an important early step for the establishment of subnational benefit sharing mechanisms. For example, in Uganda, as a prerequisite to establishing the BMCT, the Ugandan government made an agreement with the Global Environment Facility to support the trust fund's establishment as an autonomous body.		
3. Existing and effective coordination among the subnational offices of government agencies mandates relevant to the proposed benefit sharing mechanisms (e.g., Department of Agriculture, Department of Planning).	■ The success of the Socio Bosque Program is partly due to a clear definition of responsibilities between participating ministries, and defined working arrangements. During the design phase of the program, the Ministry of Environment and the Ministry of Finance worked together to develop clear roles and responsibilities for implementing the program.		

BUILDING BLOCK 1: GOVERNMENT, CIVIL SOCIETY, COMMUNITY, AND PRIVATE-SECTOR INSTITUTIONAL CAPACITY (*CONTINUED*)

KEY COMPONENTS	EXAMPLES OF THESE COMPONENTS FROM OTHER COUNTRIES	SNIB SCORE	SNPB SCORE
4. Proven capacity of subnational government to engage effectively with CSOs and private sector for forest policy development and implementation at a subnational level.	■ One way for subnational government agencies to engage with CSOs and the private sector is through multistakeholder management boards or working groups containing membership from both the public and private sector. For example, in Uganda, the BMCT's Trust Management Board (TMB) comprises representatives from local NGOs, local community members, donors, private-sector representatives, and government representatives. The TMB is charged with designing and overseeing the implementation of programs under the BMCT.		
5. Physical presence and capacity of government offices with staff to engage and work effectively on forest policy and decision-making with community groups and the private sector in forested subnational administrative areas.	■ Government engagement with the private sector and community groups can be achieved through co-implementing REDD+ demonstration projects. For example, the Forestry Administration of Cambodia has joined with the international NGOs Community Forestry International, PACT, and private-sector organizations such as Terra Global Capital to implement the Oddar Meanchey REDD+ project. Community groups are active participants in project design and development and are represented through Community Forest Management Committees.		
6. Intended subnational benefit sharing mechanism implementation agencies have the capability to store and process financial, proprietary, legal, and monitoring information needed to effectively administer a subnational scheme at a scale of tens to hundreds of thousands of individuals or hundreds of organizations. This includes tracking payment disbursals between different actors and beneficiaries in the benefit sharing mechanism.	■ Implementation agencies with previous experience of managing large financial, proprietary, legal, and monitoring datasets are more likely to be successful in administering a subnational benefit sharing mechanism. For example, in Parana State, Brazil, the State Environmental Institute is responsible for administering the ICMS-E program. This involves distribution of ICMS tax revenues to municipal governments based on their recorded performance against selected ecological criteria. Managing this information for each municipality in the state in an organized and effective manner has been keen to the success of ICMS-E in Parana.		

BUILDING BLOCK 1: GOVERNMENT, CIVIL SOCIETY, COMMUNITY, AND PRIVATE-SECTOR INSTITUTIONAL CAPACITY (*CONTINUED*)

KEY COMPONENTS	EXAMPLES OF THESE COMPONENTS FROM OTHER COUNTRIES	SNIB SCORE	SNPB SCORE
7. Existence of a formalized, collaborative relationship among different levels of national and subnational government to co-implement forest-conservation programs.	■ Close cooperation among different levels of national and subnational government will be needed to successfully implement subnational benefit sharing mechanisms because national-level decisions and actions are likely to influence, support, or constrain their operations. For example, The Federal Constitution of Brazil decrees that 25 percent of the revenues raised by ICMS tax are to be allocated downwards from state to municipal governments. Then, 75 percent of the total amount passed on to the municipalities is distributed according to the share of the state ICMS that has been collected within that municipality. National legislation allows individual states to select their own criteria for disbursal of the remaining 25 percent of revenues, including ecological criteria.		
8. Previous experience of proposed subnational benefit sharing mechanism implementation agencies in communicating the purpose and function of subnational environmental programs and eligibility criteria to the public in a timely and comprehensive manner.	■ Communication channels such as the Internet, press, radio, and television can inform large target audiences of the purpose and function of benefit sharing mechanism programs. For example, in Mozambique, Green Resources, a Norwegian plantation and carbon offset company, uses radio programs to broadcast upcoming news on public consultations and to provide basic information about their projects to the wider public.		
Capacity of CSOs			
9. Presence and capacity of CSOs to support community groups and indigenous peoples in engaging in forest-related planning, decision-making, and implementation in targeted subnational areas.	■ Some CSOs may be better placed than local government organizations to engage with and train forest communities because of their stronger links and presence within these communities. For example, in Oddar Meanchey in Cambodia, the NGOs Community Forestry International, PACT, the Children's Development Association (CDA), and the Monk's Community Forestry Association have helped provide capacity building and training in governance and financial management for community groups.		
10. CSOs have a track record of working with forest communities and helping those forest communities without a formal land title to access forest benefits.[1]	■ CSOs can play a crucial role in identifying eligible benefit sharing mechanism beneficiaries in instances where formal communal land rights are absent. For example, in Uganda, the BMCT identified eligible beneficiaries as those living within a two-parish[2] buffer surrounding the border of the park. In the early years of operation, the BMCT collaborated with local NGOs that had existing working relationships with local community groups in the BMCT catchment area.		

BUILDING BLOCK 1: GOVERNMENT, CIVIL SOCIETY, COMMUNITY, AND PRIVATE-SECTOR INSTITUTIONAL CAPACITY (*CONTINUED*)

KEY COMPONENTS	EXAMPLES OF THESE COMPONENTS FROM OTHER COUNTRIES	SNIB SCORE	SNPB SCORE
11. CSOs have track record and capacity to assist forest communities with mapping, demonstrating, and registering their land rights.[3]	■ CSOs can provide technical and legal support to community groups that enable the successful registration of land rights. For example in Brazil, the Amazon Fund provides funding for the CSO IMAZON to work collaboratively with local municipalities and community groups to define land boundaries using GIS technology. In Ecuador, the CSO Nature and Culture International (NCI) helps communities, through provision of mapping and legal support, confirm land ownership and registration as part of the Socio Bosque Program.		
12. CSOs have sufficient forest management, community development, and technical knowledge and capacity to assist local communities to generate forest carbon, biodiversity, and socioeconomic baselines and monitoring against these baselines.[4]	■ CSOs may have experience in community-based socioeconomic and ecological monitoring. They may have the capacity to train local communities to participate in monitoring against forest carbon, biodiversity, and socioeconomic baselines. For example, in Ecuador's Socio Bosque Program, CSOs such as NCI play a role in collecting socioeconomic data used to assess program effectiveness. However, in this instance, a socioeconomic baseline was not established before program implementation.		
13. CSOs have sufficient technical forest management, community development, and technical benefit sharing mechanism knowledge and capacity to assist subnational benefit sharing mechanism administrators distribute REDD+ benefits at the community level.	■ The co-implementation of benefit sharing mechanism programs with CSOs can increase the efficacy of benefit disbursal by using the community relationships and development skills held by these organizations. For example, the Amazon Fund in Brazil distributes grants to national and international NGOs to support communities and local government in the Amazon Basin implement REDD+ projects. For instance ■ The Nature Conservancy assists rural producers with environmental registration of their agricultural products. ■ The Ouro Verde Institute works with family farmers to develop agro-forestry systems. ■ The CSO IMAZON works with local municipalities to improve institutional capacities in land registration.		

BUILDING BLOCK 1: GOVERNMENT, CIVIL SOCIETY, COMMUNITY, AND PRIVATE-SECTOR INSTITUTIONAL CAPACITY (*CONTINUED*)

KEY COMPONENTS	EXAMPLES OF THESE COMPONENTS FROM OTHER COUNTRIES	SNIB SCORE	SNPB SCORE
Capacity of forest communities			
14. Forest communities have sufficient technical forest management, conservation, and technical capacity to support, monitor, and report on local-level REDD+ programs and related activities in line with user-friendly guidance.[5]	■ Technical capacity at community level can be developed through training programs delivered through either government extension officers or local NGOs. For example, in the Socio Bosque Program, training is provided on forest monitoring techniques, and some communities hire forest keepers from among their members who are responsible for control and surveillance activities.		
Capacity of private sector			
15. Presence of a community of private-sector REDD+ project developers with sufficient technical knowledge and capacity to generate forest carbon, biodiversity, and socioeconomic baselines and monitor against these baselines.[6]	■ Private-sector actors may possess the technical capacity to develop community-linked REDD+ demonstration projects in line with internationally approved standards. For example, in Tanzania, Green Resources, a Norwegian plantation and carbon offset company, has successfully developed and implemented procedures for monitoring the carbon, biodiversity, and socioeconomic performance of its operations against CDM, CCB, and FSC accreditation standards.		
	SUBTOTAL SCORES		

Additional considerations (please see "Using the Options Assessment Framework")	
1. *If funding for a proposed subnational benefit sharing mechanism is linked to centralized public funds.*	■ Strong working relationship between Department of Finance or Treasury and subnational REDD+ implementation agencies. Alignment of strategy and mandate between these bodies.
2. *If funding for the proposed subnational benefit sharing mechanism is linked to forest concession revenue streams (i.e., forest concession taxes or license fees).*	■ Forestry department already has a transparent and observer-approved system for allocating forest-community and private-sector rights, and has the capability to protect and enforce rights.
3. *If private-sector actors are identified as having a direct implementation role under a subnational or nested approach to REDD+.*	■ Private-sector forestry companies regularly meet financial, environmental, health and safety, and community impact reporting requirements as set by the central or provincial government. ■ Subnational government has a track record of encouraging forestry companies to comply with recommended international codes of conduct, standards, and safeguards for engaging with local communities.

1 This is more important for input-based benefit sharing mechanisms for two reasons. First, one of the up-front input benefits may be assisting forest communities with formal land title to access and exercise their rights to secure future forest benefits. Second, it is likely that communities would need to already be able to demonstrate formal land title to demonstrate forest management performance on their land, and to engage in performance-based forest benefit sharing mechanisms.

2 A parish is the smallest administrative unit in the Ugandan administrative system.

[3] The ability of benefit recipients to demonstrate and register land rights is regarded as more important for performance-based rather than input-based benefit sharing mechanisms, as this allows them to demonstrate forest management performance on their land. It is more feasible for input-based benefit sharing mechanisms to operate without recipients having these land rights in place.

[4] The ability to monitor against forest carbon, biodiversity, and socioeconomic baselines is a requirement for performance-based benefit sharing mechanisms but not necessarily so for input-based benefit sharing mechanisms.

[5] Community monitoring and reporting capacity is more important for performance-based benefit sharing mechanisms than for input-based benefit sharing mechanisms.

[6] The ability to monitor against forest carbon, biodiversity, and socioeconomic baselines is a requirement for performance-based benefit sharing mechanisms but not necessarily so for input-based benefit sharing mechanisms.

BUILDING BLOCK 2: THE NATIONAL AND SUBNATIONAL LEGAL FRAMEWORK RELEVANT TO REDD+

KEY COMPONENTS	EXAMPLES OF THESE COMPONENTS FROM OTHER COUNTRIES	SNIB SCORE	SNPB SCORE
1. Recognition and enforcement of the customary and traditional forest rights of indigenous peoples, local communities, and traditional forest users in subnational or national legislation.	■ In the Philippines, Certificates of Ancestral Domain Claim (CADC) recognize indigenous peoples' rights to occupy, manage, and benefit from forests and natural resources (RECOFTC 2011). This provides a legal basis for communities to effectively demonstrate their rights to forest benefits.		
2. Existence and enforcement of community forestry laws at a subnational level that give community groups management rights of forest lands.	■ The existence and enforcement of community forestry laws improve the scope for community groups to become fully engaged in forest enterprise project development and implementation (including REDD+ projects). For example, in the Philippines under Community-based Forest Management Agreements, communities can use forest resources for livelihood purposes for a renewable 25-year period (RECOFTC 2011).		
3. Existing forestry legislation applied at a subnational level that clearly defines allocation of forest rents to forest right holders dependent on their underlying land holding category (e.g., private land title, community land title, concessionary land title); this legislation was formulated through a participatory approach.	■ The clear allocation of forest rents to rights holders provides a basis for the allocation of carbon revenues generated from REDD+ to key stakeholder groups. For example, between 2008 and 2009, Indonesia established the world's first national laws relating to REDD+ that are also applicable at a subnational level. Key provisions of the regulations describe the revenue-sharing arrangements between different actors for specific categories of eligible land areas for REDD+ projects. The legislation states that REDD+ project developers would have to share between 20 and 70 percent of profits with local communities, depending on the type of forest and type of license held, while between 10 and 50 percent of profits would be shared with the government. However, observers have commented that this process has not involved sufficient participation from NGOs, community groups, and the private sector (CFA and PwC 2010).		

BUILDING BLOCK 2: THE NATIONAL AND SUBNATIONAL LEGAL FRAMEWORK RELEVANT TO REDD+ (*CONTINUED*)

KEY COMPONENTS	EXAMPLES OF THESE COMPONENTS FROM OTHER COUNTRIES	SNIB SCORE	SNPB SCORE
4. Existence of an effective coordination mechanism to harmonize subnational development plans with the objectives of the proposed benefit sharing mechanisms.	■ It is of great importance that benefit sharing mechanism implementation agencies have an opportunity to coordinate with subnational policy makers so that the benefit sharing mechanism operates to support rather than contradict subnational development plans. For example, in Uganda, the Trust Management Board (TMB) of the BMCT comprises representatives from government, donor agencies, local NGOs, local research institutions, and the private sector. TMB meetings, which take place three to four times per year, provide a forum for coordination of BMCT programs and objectives with activities implemented by partners from government, other civil society organizations, and the private sector.		
5. A subnational legal framework fully supports public access to information, promotes debate relating to forest policies, and imposes sanctions for failure to meet obligations to disclose information.	■ The requirement for benefit sharing mechanism administrators to publish periodic reports on benefit sharing mechanism financing can enhance the accountability of the mechanism. For example, in Canada, the FIA LBIP is required to publish quarterly reports with updated information on how much money has been allocated and approved through the program and where this money has been directed.[1]		
6. Land rights legislation provides a clear definition of how forest carbon rights are assigned according to land ownership, which is accepted and applied at a provincial level.[2]	■ A clear definition on the designation of forest carbon rights is likely to make the establishment of REDD+ performance-based benefit sharing mechanisms much more straightforward. For example, in Australia, New South Wales became the first state to develop a legislative scheme for the proprietary validation of forestry carbon sequestration rights under the Conveyancing Act 1919 (NSW) s 87A (Hepburn 2009).		
7. Existence and enforcement of a legal requirement in forest law to consult with and gain consent from communities for land-use decisions and benefit sharing arrangements that affect the forest land for which they have customary or formal entitlement.	■ Under Canadian Law, First Nations (aboriginal) information sharing requirements must be met prior to implementing a project. Where identified, there is public involvement in sustainable forest management planning through the use of public advisory groups. Under the FIA LBIP for all project activities planned within a given year, recipients need to notify affected First Nations of planned project activities and provide the District Manager with a record of correspondence, including details of issues discussed and outstanding issues. If necessary, this can be reviewed by the BC Ministry of Forests, Lands and Natural Resource Operations.		

BUILDING BLOCK 2: THE NATIONAL AND SUBNATIONAL LEGAL FRAMEWORK RELEVANT TO REDD+ (*CONTINUED*)

KEY COMPONENTS	EXAMPLES OF THESE COMPONENTS FROM OTHER COUNTRIES	SNIB SCORE	SNPB SCORE
8. National or subnational legislation defines carbon revenue sharing arrangements between national, subnational, and government institutions and REDD+ project developers.[3]	■ A clear legal definition of benefit sharing arrangements between national, subnational and local-level government institutions helps provide a shared and undisputed understanding of these arrangements from the outset of benefit sharing mechanism establishment. For example, between 2008 and 2009, Indonesia established the world's first national laws relating to REDD+. Key provisions of the regulations describe the revenue-sharing arrangements between different actors for specific categories of eligible land areas for REDD+ projects. The legislation states that REDD+ project developers would have to share between 20 and 70 percent of profits with local communities, depending on the type of forest and type of license held, while between 10 and 50 percent of the profits would be shared with the government. However, it has been commented that this process has not involved sufficient participation from NGOS, community groups, and the private sector (CFA and PwC 2010).		
	SUBTOTAL SCORES		

Additional considerations (please see "Using the Options Assessment Frameworks")	
1. If wider sector tax or concession revenues will finance the proposed benefit sharing mechanism.	■ Consistency and coordination between forest policies, laws, and regulations and the policies, laws, and regulations of other sectors. ■ Concession management or forest-licensing systems (where applicable) require formal benefit sharing arrangements with surrounding communities.
2. If the proposed benefit sharing mechanism is established under a trust fund model.	■ National legislation in place to allow for the establishment and protection of subnational REDD+ trust funds. ■ Experience of potential benefit sharing mechanism administrators in drafting by-laws that provide a robust legislative framework for institutional structures to function in an efficient, effective, and equitable capacity.

1 See this website for an example of the range of publicly available information for the FIA LBIP: www.fialicensees.com/Login/login.asp

2 The ability to clearly allocate forest carbon rights to forest rights owners is considered important for performance-based REDD+ benefit sharing mechanisms as this then allows for the allocation of forest carbon-credit benefits based on forest management performance by recipients.

3 This is important for determining the potential distribution of performance-based REDD+ funding in the future from the national to the subnational level.

BUILDING BLOCK 3: FUND MANAGEMENT CAPACITY AND EXPERIENCE

KEY COMPONENTS	EXAMPLES OF THESE COMPONENTS FROM OTHER COUNTRIES	SNIB SCORE	SNPB SCORE
1. Presence of either subnational government institutions or private or NGOs with past experience managing subnational environmental funds.	■ Ideally, subnational governments will already have experience managing environmental funds. However, this is unlikely to be the case in many REDD+ nations. In this case it may be important that subnational benefit sharing mechanism implementation agencies can partner with external fund-management agencies to successfully administer a REDD+ benefit sharing mechanism. For example, in Uganda, to maximize the endowment capital of the BMCT, the Trust Management Board decided to hire an international asset-management company to invest funds. Despite losses stemming from the global financial crisis, the US $4 million of initial endowment capital has risen to a current value of approx US $6.7 million today.		
2. Ability of community groups to open local bank accounts without onerous requirements (e.g., allows community groups to open bank accounts without deposits) or other means of fund transfer.	■ The administration team of the Socio Bosque program in Ecuador made an agreement with a national bank to streamline the process for establishing beneficiary bank accounts. The scheme enabled participants to establish a bank account in the community's name upon presentation of legal documents, without the usual requirement of an up-front deposit, and with reduced transaction costs incurred on incoming performance-based payments.		
3. Presence of suitable subnational fund management agencies with track record of managing forest revenue collection, budgeting, expenditure, accounting, redistribution, and audit.	■ The FIA in Canada is a forest sector investment model, led by government, that delivers the province's forest investment in an accountable, efficient manner and assists government with developing a globally recognized, sustainably managed forest industry. ■ The endowment fund for the BMCT in Uganda is managed overseas, and funds are transferred to the BMCT's Kampala account every six months. This is based on an annual budget approved by the Trust Management Board.		
4. National or subnational codes of conduct and anticorruption measures are in place to safeguard against fund mismanagement.	■ Brazil's Amazon Fund has put in anticorruption measures to safeguard its funds. The Fund is externally audited, and if the fund manager, BNDES, fails to produce reports and audits on time, or if there is evidence of financial mismanagement, the donor (Norwegian government) has the right to withdraw funds (Zadek, Forstater, and Polacow 2010).		

BUILDING BLOCK 3: FUND MANAGEMENT CAPACITY AND EXPERIENCE (*CONTINUED*)

KEY COMPONENTS	EXAMPLES OF THESE COMPONENTS FROM OTHER COUNTRIES	SNIB SCORE	SNPB SCORE
5. Track record of previous or existing subnational environmental programs disbursing funds to community groups or individuals in a timely manner.	■ Timeliness in benefit distribution will be a key factor for the long-term success of a subnational benefit sharing mechanism. This requires effective expectation management with recipients, and if time lines are adhered to, the relationship between implementation agencies and communities is likely to improve over time. For example, in Uganda, in the absence of community banking infrastructure, the BMCT provides community groups with periodic tranches of cash grant payments on the condition that the beneficiaries provide accurate accounts of previous grant expenditure in line with a previously agreed livelihood development plan.		
6. Presence of third-party organizations with experience in providing financial and nonfinancial (e.g., governance) auditing of fund management processes.	■ Forest Fee Rural Council committees in Cameroon include a third-party auditor from the committee's majority village to monitor and report incidences of financial mismanagement. This has a knock-on deterrent effect to discourage mismanagement in the future.		
7. Existence of effective and adequate standards against which the conduct of civil servants, political appointees, and community representatives can be held accountable, coupled with effective channels for reporting corruption and protecting whistleblowers.	■ In Ecuador, NGOs such as Nature and Culture International (NCI) help communicate community concerns directly to the Ministry of Environment so that these concerns can be addressed and dealt with before the relationship between the program and communities risks possible damage.		
8. Presence of a subnational level government agency, with experience in transferring monetary or nonmonetary benefits to beneficiaries linked to measurable and verifiable performance against predefined targets.[1]	■ The ability of subnational benefit sharing mechanism implementation agencies to verify and link performance with benefit disbursements will be a critical factor in the success of subnational performance-based benefit sharing mechanisms. For example, in Brazil's ICMS-E system, state governments have the capacity to assess and verify the ecological performance of each municipality by using a set of predefined ecological criteria. These performance measures are then used to determine the proportion of ICMS-E revenue directed to each municipality.		

BUILDING BLOCK 3: FUND MANAGEMENT CAPACITY AND EXPERIENCE (*CONTINUED*)

KEY COMPONENTS	EXAMPLES OF THESE COMPONENTS FROM OTHER COUNTRIES	SNIB SCORE	SNPB SCORE
9. Existence of a subnational government or a public or private organization with experience in managing environmental revolving[2] funds.[3]	■ Revolving funds, with finances provided from the sale of carbon credits, could be a useful model to integrate into REDD+ environmental fund structures. This could encourage private-sector engagement in REDD+ project development by reducing investment risk and providing fiscal incentives for placing contributions to a pooled fund. The Fondo para Accion Ambiental y la Niñez (FPAA) is a private Colombian not-for-profit organization created in 2000 under the Bilateral Agreement with the government of the United States of America. The fund has formed a strategic partnership with the National Centre for Cleaner Production and Environmental Technologies to promote access to the Clean Development Mechanism (CDM) and to facilitate the participation of industry in clean technology development and carbon markets. This arrangement includes the provision of technical assistance, carbon market information, and financial incentives to stimulate technological change in industry and mass transportation. Once a reduction in greenhouse gas emissions is achieved due to the introduction of new technologies financed by industry, the avoided CO_2 emissions can be traded as carbon credits in the market. Up to 30 percent of the returns obtained from the transaction are voluntarily donated to a revolving fund set up by Fondo Acción and the National Centre to finance new industry partnerships and further reduce emissions. This donation of financial returns to the revolving fund is also attractive to private companies because of the fiscal benefits that can be gained from such donations (CFA and PwC 2010).		

BUILDING BLOCK 3: FUND MANAGEMENT CAPACITY AND EXPERIENCE (*CONTINUED*)

KEY COMPONENTS	EXAMPLES OF THESE COMPONENTS FROM OTHER COUNTRIES	SNIB SCORE	SNPB SCORE
10. Existence of a subnational government or a public or private organization with experience providing low-interest, long-term, risk-tolerant loans to community groups, members of the public, social enterprises, and the private sector.	■ The provision of low-interest, risk-tolerant loans can help benefit sharing mechanisms effectively support community environmental projects on a financially sustainable basis, while encouraging local-level economic development. For example, in Paraguay, the microcredit organization Fundacion Paraguaya partners with the conservation organization Fundacion Moises Bertoni to provide a combination of microcredit and technical assistance to small-scale rural producers in Paraguay. The credit and technical guidance support producers by helping to increase incomes and improve the environmental sustainability of their agriculture practices.		
	SUBTOTAL SCORE		

[1] The ability to measure and verify performance against predefined targets is necessary for performance-based benefit sharing mechanisms but not necessarily for input-based benefit sharing mechanisms.

[2] Income from taxes, fees, fines, or Payments for Ecosystem Services (PES) that are specially earmarked are used to regularly replenish revolving funds.

[3] Environmental revolving funds are likely to be only applicable to performance-linked REDD+ carbon revenue, and therefore not necessary for input-based benefit sharing mechanisms.

BUILDING BLOCK 4: MONITORING CAPACITY AND EXPERIENCE

KEY COMPONENTS	EXAMPLES OF THESE COMPONENTS FROM OTHER COUNTRIES	SNIB SCORE	SNPB SCORE
1. Presence of organizations at the subnational level with a sufficient combination of experience of monitoring the effects of forestry, social orientation, and ecological conservation projects.	■ In many countries subnational government agencies have received support and technical assistance from NGOs for forest monitoring. These NGOs have also often provided a bridge between local government and communities, providing socioeconomic and ecological monitoring services in conjunction with local government agencies (CFA and PwC 2010). For example, in Brazil's ICMS-E, municipalities have the flexibility to partner with NGOs to increase their ability to successfully implement and monitor protected area and environmental projects. This has been particularly successful in Sao Paulo state.		
2. Demonstrated ability of subnational government agencies to publicly report all benefit sharing transfers to the proposed benefit sharing mechanism recipients on a regular basis.	■ The provision of publicly available monitoring evaluation reports helps demonstrate transparency and build and maintain support from the public and participants for a benefit sharing mechanism. For example, in Canada, quarterly reports on the performance of the FIA LBIP are provided on the Internet.[1]		

BUILDING BLOCK 4: MONITORING CAPACITY AND EXPERIENCE (*CONTINUED*)

KEY COMPONENTS	EXAMPLES OF THESE COMPONENTS FROM OTHER COUNTRIES	SNIB SCORE	SNPB SCORE
3. Prior and effective use of third-party monitoring agencies within subnational government environmental programs.	■ Regular third-party monitoring and review allows benefit sharing mechanisms to track any potential performance-related issues at an early stage and take corrective action swiftly, before these issues grow into larger challenges. For example, the FIA LBIP in British Columbia, Canada, uses a third-party administrator to review fund performance on an annual basis and report on key performance indicators. Additionally, recipient-monitoring data (i.e., audit reports) are used for performance improvement.		
4. Proposed subnational REDD+ benefit sharing mechanism implementation agencies have experience incorporating monitoring and evaluation data into forest management planning and using evaluation results to continually improve program implementation.	■ In Uganda, the Trust Management Board of the BMCT uses ecological and socioeconomic monitoring data to improve the design of community benefit sharing programs. To do this, the BMCT has partnered with the ITFC and graduate students at the Makerere University to evaluate the ecological condition and socioeconomic drivers of encroachment in the Bwindi Impenetrable National Park (BINP) and Mgahinga Gorilla National Park (MGNP).		
5. The proposed subnational benefit sharing mechanism implementation agencies have experience using GIS data to monitor changes in forest cover, or have an existing partnership with an organization that has this capacity.[2]	■ There are a growing number NGO and private REDD+ project developers present within REDD+ nations that may be willing to partner with subnational benefit sharing mechanism agencies and provide their own GIS monitoring services and technical assistance to help monitor changes in forest cover within provinces or states.		
6. The proposed subnational benefit sharing mechanism implementation agency has experience using GIS data to monitor changes in forest cover and in using these data to calculate and monitor changes in bio-carbon stocks and abatement, or has an existing partnership with an organization that has this capacity.[3]	■ The ability of the benefit sharing mechanism implementation agency to calculate and monitor changes in bio-carbon stocks and abatement is important for the monitoring and verification of REDD+ performance. The Brazilian state of Acre is working to establish a central geo-processing unit, UCEGEO, responsible for monitoring deforestation and forest degradation, maintaining the database of carbon stock, and monitoring production units at the state level and in priority areas (Forest Carbon Portal 2010).		

BUILDING BLOCK 4: MONITORING CAPACITY AND EXPERIENCE (*CONTINUED*)

KEY COMPONENTS	EXAMPLES OF THESE COMPONENTS FROM OTHER COUNTRIES	SNIB SCORE	SNPB SCORE
7. The proposed subnational benefit sharing mechanism implementation agencies have experience ground-truthing GIS data on forest cover change, or have an existing partnership with a national level organization that has this capacity.[4]	■ The ground-truthing of higher level carbon data is important to check for smaller scale forest degradation and to verify the accuracy of GIS data. In Ecuador, Socio Bosque's monitoring system combines GIS images with site visits to ground-truth GIS data .This also helps verify that smaller-scale degradation is not being missed in the monitoring process.		
	SUBTOTAL SCORE		

1 Examples can be found here: https://www.fialicensees.com/static_content/documents.asp?ID=BE864485.

2 GIS monitoring capacity is more important for performance-based benefit sharing mechanisms than for input-based benefit sharing mechanisms.

3 GIS monitoring capacity is more important for performance-based benefit sharing mechanisms than for input-based benefit sharing mechanisms.

4 GIS monitoring capacity is more important for performance-based benefit sharing mechanisms than for input-based benefit sharing mechanisms.

4.3.1 Total Scores for a Subnational Benefit Sharing Mechanism

BUILDING BLOCK	SUBNATIONAL INPUT-BASED BENEFIT SHARING MECHANISM			SUBNATIONAL PERFORMANCE-BASED BENEFIT SHARING MECHANISM		
	MAXIMUM SCORE (M)	ACTUAL SCORE (A)	PERCENTAGE SCORE (A/M 100 PERCENT)	MAXIMUM SCORE (M)	ACTUAL SCORE (A)	PERCENTAGE SCORE (A/M 100 PERCENT)
1. Government, civil society, community, and private sector institutional capacity	22			28		
2. The national or subnational legal framework relevant to REDD+	10			16		
3. Fund management capacity and experience	16			20		
4. Monitoring capacity and experience	8			14		
Overall totals:	**56**			**78**		

4.4 SUGGESTED ENABLING ACTIONS FOR SUBNATIONAL BENEFIT SHARING MECHANISMS

The suggested enabling actions for each component are presented in the same order as the components in the Options Assessment Framework.

BUILDING BLOCK 1: GOVERNMENT, CIVIL SOCIETY, COMMUNITY, AND PRIVATE-SECTOR INSTITUTIONAL CAPACITY

KEY COMPONENTS	SUGGESTED ENABLING ACTIONS
Capacity of proposed benefit sharing mechanism implementing agencies	
1. Proposed benefit sharing mechanism implementation agencies (e.g., the state or provincial environmental department) have sufficient forest-management, community development, and technical REDD+ capacity, or can collaborate with civil society or private-sector organizations to oversee implementation of a subnational-level REDD+ benefit sharing mechanism program.	■ Ensure adequate funding is available to support capacity building for subnational REDD+ implementation agencies in training in forest management, community development, and technical REDD+ issues. ■ Undertake a stakeholder mapping exercise of potential civil-society and private-sector implementation partners, assessing each against criteria of key competencies. ■ Where appropriate capacities exist, the proposed subnational benefit sharing mechanism administrator should form partnerships with civil society and private-sector organizations for collaboration in implementation.
2. Political will of the national government to support the establishment of subnational institutions to manage forest benefit sharing mechanisms.	■ Develop a Memorandum of Understanding endorsed by national and subnational key stakeholders outlining how the national government will support the development of the subnational benefit sharing mechanism program and how lessons learned will feed upwards into national policy. ■ Allocate funding toward regular, multilevel government communication and training workshops to ensure alignment of national and subnational programs.
3. Existing and effective coordination among the subnational offices of government agencies mandates relevant to the proposed benefit sharing mechanisms (e.g., Department of Agriculture, Department of Planning).	■ Create a cross-departmental committee (i.e., REDD+ taskforce) that includes Department of Finance or Treasury and proposed subnational benefit sharing mechanism implementation agencies. This will improve working relationships and cooperation between these agencies in relation to subnational REDD+ strategy, and provide a forum to define roles and responsibilities regarding operation of REDD+ benefit sharing mechanisms.
4. Proven capacity of subnational government to engage effectively with CSOs and private sector for forest policy development and implementation at a subnational level.	■ Create local-level multistakeholder platforms that will allow consultation with subnational and local stakeholders and representatives from CSOs. ■ Facilitate formation of a CSO benefit working group to support subnational REDD+ implementation agency.
5. Physical presence and capacity of government offices with staff to engage and work effectively on forest policy and decision-making with community groups and the private sector in forested subnational administrative areas.	■ Allocate a proportion of funds toward financial and logistical (e.g., transport and equipment) support for government outreach staff.

BUILDING BLOCK 1: GOVERNMENT, CIVIL SOCIETY, COMMUNITY, AND PRIVATE-SECTOR INSTITUTIONAL CAPACITY (*CONTINUED*)

KEY COMPONENTS	SUGGESTED ENABLING ACTIONS
6. Intended subnational benefit sharing mechanism implementation agencies have the capability to store and process financial, proprietary, legal, and monitoring information needed to effectively administer a subnational scheme at a scale of tens to hundreds of thousands of individuals or hundreds of organizations. This includes tracking payment disbursals between different actors and beneficiaries in the benefit sharing mechanism.	■ Undertake an assessment of data-management systems being used by best practice international benefit sharing mechanism programs. ■ Identify key data parameters (e.g., GIS coordinates that demarcate beneficiary land titles) and benefit disbursement metrics (e.g., number of community training workshops held by region per year) that will need to be collated at a centralized level. ■ Procure and implement an IT system that can collate and process information from relevant government departments, and civil-society and private-sector partners, including tax revenues, land titles, benefit disbursal data, and impact assessment data. ■ Develop an operational manual assigning data collection and handling responsibilities among proposed benefit sharing mechanism implementation stakeholders.
7. Existence of a formalized, collaborative relationship among different levels of national and subnational government to co-implement forest-conservation programs.	■ Create observer roles for national government stakeholders on subnational REDD+ taskforce. ■ Hold regular meetings of the subnational REDD+ taskforce to assess effectiveness of ongoing cooperation, identify improvements in operational coordination, and ensure alignment of mandates with REDD+ objectives.
8. Previous experience of proposed subnational benefit sharing mechanism implementation agencies in communicating the purpose and function of subnational environmental programs and eligibility criteria to the public in a timely and comprehensive manner.	■ Consider forming a dedicated communications team within the proposed subnational benefit sharing mechanism implementation agency. ■ Develop a clear mandate for communications responsibility at a provincial and local level. ■ Design a communications plan based on lessons learned from public health campaigns or other wide-scale public information campaigns, taking into account international best practice case studies.
Capacity of CSOs	
9. Presence and capacity of CSOs to support community groups and indigenous peoples in engaging in forest-related planning, decision-making, and implementation in targeted subnational areas.	■ Undertake stakeholder mapping and capabilities assessment of CSOs operating with community groups in targeted forest regions. Evaluation criteria may include track record of working with community groups and indigenous peoples on forestry comanagement projects; presence of legal experts within CSOs actively working on forest rights issues; presence and capacity of GIS team within CSO; and track record of working with community groups and indigenous peoples in implementation of forest livelihood programs. ■ Hold multistakeholder workshops with civil society representatives to identify opportunities for coimplementation of benefit sharing mechanism programs. ■ Increase logistical (e.g., transport and equipment) and financial support to CSOs.

BUILDING BLOCK 1: GOVERNMENT, CIVIL SOCIETY, COMMUNITY, AND PRIVATE-SECTOR INSTITUTIONAL CAPACITY (*CONTINUED*)

KEY COMPONENTS	SUGGESTED ENABLING ACTIONS
10. CSOs have a track record of working with forest communities and helping those forest communities without a formal land title to access forest benefits.	■ Undertake stakeholder mapping and capabilities assessment of CSOs operating with community groups in targeted forest regions. Evaluation criteria may include track record of working with community groups and indigenous peoples on forestry comanagement projects; presence of legal experts within CSOs actively working on forest rights issues; presence and capacity of GIS team within CSO; and track record of working with community groups and indigenous peoples in implementation of forest livelihood programs. ■ Hold multistakeholder workshops with civil society representatives to identify opportunities for coimplementation of benefit sharing mechanism programs. ■ Increase logistical (e.g., transport and equipment) and financial support to CSOs.
11. CSOs have track record and capacity to assist forest communities with mapping, demonstrating, and registering their land rights.	■ Undertake stakeholder mapping and capabilities assessment of CSOs operating with community groups in targeted forest regions. Evaluation criteria may include track record of working with community groups and indigenous peoples on forestry comanagement projects; presence of legal experts within CSOs actively working on forest rights issues; presence and capacity of GIS team within CSO; and track record of working with community groups and indigenous peoples in implementation of forest livelihood programs. ■ Hold multistakeholder workshops with civil society representatives to identify opportunities for coimplementation of benefit sharing mechanism programs. ■ Increase logistical (e.g., transport and equipment) and financial support to CSOs.
12. CSOs have sufficient forest management, community development, and technical knowledge and capacity to assist local communities to generate forest carbon, biodiversity, and socioeconomic baselines and monitoring against these baselines.	■ Undertake stakeholder mapping and capabilities assessment of CSOs operating with community groups in targeted forest regions. Evaluation criteria may include track record of working with community groups and indigenous peoples on forestry comanagement projects; presence of legal experts within CSOs actively working on forest rights issues; presence and capacity of GIS team within CSO; and track record of working with community groups and indigenous peoples in implementation of forest livelihood programs. ■ Hold multistakeholder workshops with civil society representatives to identify opportunities for coimplementation of benefit sharing mechanism programs. ■ Increase logistical (e.g., transport and equipment) and financial support to CSOs. ■ Provide funds to CSOs to procure monitoring hardware and implement baseline assessment studies.

BUILDING BLOCK 1: GOVERNMENT, CIVIL SOCIETY, COMMUNITY, AND PRIVATE-SECTOR INSTITUTIONAL CAPACITY (*CONTINUED*)

KEY COMPONENTS	SUGGESTED ENABLING ACTIONS
13. CSOs have sufficient technical forest management, community development and technical benefit sharing mechanism knowledge and capacity to assist subnational benefit sharing mechanism administrators to distribute REDD+ benefits at the community level.	■ Undertake stakeholder mapping and capabilities assessment of CSOs operating with community groups in targeted forest regions. Evaluation criteria may include track record of working with community groups and indigenous peoples on forestry comanagement projects; presence of legal experts within CSOs actively working on forest rights issues; presence and capacity of GIS team within CSO; and track record of working with community groups and indigenous peoples in implementation of forest livelihood programs. ■ Hold multistakeholder workshops with civil society representatives to identify opportunities for coimplementation of benefit sharing mechanism programs. ■ Increase logistical (e.g., transport and equipment) and financial support to CSOs. ■ Use results from stakeholder mapping and capabilities analysis to guide the design of targeted technical training programs.
Capacity of forest communities	
14. Forest communities have sufficient technical forest management, conservation, and technical capacity to support, monitor, and report on local-level REDD+ programs and related activities in line with user-friendly guidance.	■ Consider formation of a working group with government and CSO representation tasked with developing user-friendly monitoring guidelines for use by forest communities. ■ Ensure funds are available for capacity building in carbon, biodiversity, and socioeconomic monitoring in line with the monitoring guidelines developed.
Capacity of private sector	
15. Presence of a community of private-sector REDD+ project developers with sufficient technical knowledge and capacity to generate forest carbon, biodiversity, and socioeconomic baselines and monitor against these baselines.	■ Hold a workshop with potential private-sector actors to identify key opportunities and barriers to using their capabilities in developing relevant baselines for the benefit sharing mechanism. ■ Government or donor agencies consider providing grants or conditional loans to prospective private-sector REDD+ developers to encourage REDD+ project development. ■ Review the possibility of providing tax incentives and improvements to the regulatory and forest-governance environment to encourage REDD+ project establishment.

BUILDING BLOCK 2: THE NATIONAL/SUBNATIONAL LEGAL FRAMEWORK RELEVANT TO REDD+

KEY COMPONENTS	SUGGESTED ENABLING ACTIONS
1. Recognition and enforcement of the customary and traditional forest rights of indigenous peoples, local communities, and traditional forest users in subnational or national legislation.	■ Create a multistakeholder process to gather relevant stakeholders and clarify laws relating to community and indigenous people ownership. This may include multistakeholder consultations and mapping of community land and ownership rights. ■ Review current barriers to effectively enforce community and traditional forest rights at a local level. On the basis of this review, consider allocating funding for capacity building and implementation support to local forestry departments and forestry agencies. ■ Develop systems of land registry that are publicly available and accessible.

BUILDING BLOCK 2: THE NATIONAL/SUBNATIONAL LEGAL FRAMEWORK RELEVANT TO REDD+ (*CONTINUED*)

KEY COMPONENTS	SUGGESTED ENABLING ACTIONS
2. Existence and enforcement of community forestry laws at a subnational level that give community groups management rights of forest lands.	■ Review community forest law and whether it allows communities to manage forests under a renewable license equal to the timeframe of REDD+ projects (circa 30 years). ■ Conduct a formal review of the effectiveness of community forestry law enforcement and consideration of best ways to improve law enforcement.
3. Existing forestry legislation applied at a subnational level that clearly defines allocation of forest rents to forest right holders dependent on their underlying land holding category (e.g., private land title, community land title, concessionary land title); this legislation was formulated through a participatory approach.	■ Review existing rent allocation systems (including survey of forest land rights holders) to identify areas where further guidance and clarity are needed on rent distribution. ■ As a result of this review, revise criteria or the means of qualification for forest rent allocation. For example, allocations may be apportioned to customary rights holders living within a certain distance of the concession boundary.
4. Existence of an effective coordination mechanism to harmonize subnational development plans with the objectives of the proposed benefit sharing mechanisms.	■ Establish cross-departmental working groups with a clear mandate and financing. This should include departments of forestry, financing, agriculture, energy, and infrastructure to assess synergies among national development plans and the proposed objectives of the benefit sharing mechanism.
5. A subnational legal framework fully supports public access to information, promotes debate relating to forest policies, and imposes sanctions for failure to meet obligations to disclose information.	■ Establish formal public consultation periods for all new forest policies being introduced. ■ Review and clarify the legal framework and sanctions for nondisclosure of information or publication of misinformation.
6. Land rights legislation provides a clear definition of how forest carbon rights are assigned according to land ownership, which is accepted and applied at a provincial level.	■ Appoint a specialist legal team to identify legislation options for assignment of carbon rights. ■ Hold a multistakeholder workshop to evaluate the results of legal teams' assessment and implications of options for the proposed benefit sharing mechanism's functioning. ■ Clarify the legal definition and allocation of carbon rights, taking into consideration the outputs of the multistakeholder workshop.
7. Existence and enforcement of a legal requirement in forest law to consult with and gain consent from communities for land-use decisions and benefit sharing arrangements that affect the forest land for which they have customary or formal entitlement.	■ Consider revision of existing land use legislation to include requirements for the free, prior, and informed consent (or an equivalent) of affected community groups. ■ Develop guidelines for use by government, civil society, and private-sector actors outlining an approved equitable process for gaining consent from affected community groups.
8. National or subnational legislation defines carbon revenue sharing arrangements between national, subnational, and government institutions and REDD+ project developers.	■ Review the process other countries use for establishing carbon revenue legislation (e.g., Australia), and begin a legal review for carbon revenue allocation. ■ Develop legislation and clear criteria for the allocation of funds based on ownership rights and uses of the forest area. ■ Develop a fair and equitable separation of funds among the relevant interest groups.

BUILDING BLOCK 3: FUND MANAGEMENT CAPACITY AND EXPERIENCE

KEY COMPONENTS	SUGGESTED ENABLING ACTIONS
1. Presence of either subnational government institutions or private or NGOs with past experience managing subnational environmental funds.	■ Increase institutional capacity through the development and implementation of accounting methodologies and practices and governance structures to manage proposed benefit sharing mechanism funds. ■ Increase staff capacity through training in accounting methodologies and relevant fund management skills.
2. Ability of community groups to open local bank accounts without onerous requirements (e.g., allows community groups to open bank accounts without deposits) or other means of fund transfer.	■ Analyze the potential opportunities and risks faced by local banks through participation in the benefit sharing mechanism. ■ Where risks are identified, consider providing incentives (e.g., risk guarantees) to participating banks. ■ Invite a bank with local presence in targeted regions to participate in benefit sharing mechanism implementation. ■ Hold participatory workshop to identify opportunities in establishing specialist benefit sharing mechanism-linked financial services for beneficiary groups.
3. Presence of suitable subnational fund management agencies with track record of managing forest revenue collection, budgeting, expenditure, accounting, redistribution, and audit.	■ Identify fund management agencies outside the forestry sector that may have the capability to adapt or expand to manage forest sector revenue collection, budgeting expenditures, accounting, redistribution, and audit. ■ If these agencies are not present, consider the use of multilateral institutions with a track record of in-country fund management to manage the proposed benefit sharing mechanisms, or the formation of a multistakeholder benefit sharing mechanism fund management board.
4. National or subnational codes of conduct and anticorruption measures are in place to safeguard against fund mismanagement.	■ Review codes of conduct and anticorruption measures operating in international best practice benefit sharing mechanism programs. ■ Based on the results of this review, appoint a legal advisor to design codes of conduct and anticorruption measures that would support a benefit sharing mechanism. ■ Consider forming a benefit sharing mechanism oversight committee that includes representatives from civil society, government, and the private sector.
5. Track record of previous or existing subnational environmental programs disbursing funds to community groups or individuals in a timely manner.	■ Invest in training fund managers to evaluate, disseminate, and monitor funds at an appropriate scale. ■ Support local stakeholders who are eligible for benefits to write project proposals by providing direct government-extension services or supporting CSOs to provide such services.
6. Presence of third-party organizations with experience in providing financial and nonfinancial (e.g., governance) auditing of fund management processes.	■ Procure an internationally or nationally recognized and technically proficient fund audit body. ■ Develop systemic procedures to track the receipt and expenditure of funds that can be audited by a third party. ■ Increase the capacity and resources to ensure there are sanctions against and appropriate enforcement to detect embezzlement (see above).

BUILDING BLOCK 3: FUND MANAGEMENT CAPACITY AND EXPERIENCE (*CONTINUED*)

KEY COMPONENTS	SUGGESTED ENABLING ACTIONS
7. Existence of effective and adequate standards against which the conduct of civil servants, political appointees, and community representatives can be held accountable, coupled with effective channels for reporting corruption and protecting whistleblowers.	■ Review sanctions and standards for the conduct of relevant groups in the forestry sector. ■ Establish an independent body or watchdog that regularly investigates, monitors, evaluates, and reports on compliance with regulations and standards within the forest sector. ■ Ensure prosecuting bodies in-country are aware of the penalties and sanctions for infringements. ■ Make information about the scope of the sanctions and penalties publicly available.
8. Presence of a subnational level government agency, with experience in transferring monetary or nonmonetary benefits to beneficiaries linked to measurable and verifiable performance against predefined targets.	■ Invest in training subnational government staff to evaluate and verify beneficiary claims and to distribute funds. ■ Ensure the presence of local government officers to verify the performance of REDD+ projects and report on funding outcomes.
9. Existence of a subnational government or a public or private organization with experience in managing environmental revolving[1] funds.	■ Consult with other governments that have experience managing revolving environmental funds to define a Terms of Reference for an independent organization or national bank to assist with establishing REDD+ revolving funds.
10. Existence of a subnational government or a public or private organization with experience providing low-interest, long-term, risk-tolerant loans to community groups, members of the public, social enterprises, and the private sector.	■ Propose a benefit sharing mechanism implementation agency to consider consulting and collaborating with private microcredit institutions or development banks with experience in providing higher risk, long-term horizon loans.

[1] Income from taxes, fees, fines, or Payments for Ecosystem Services (PES) that are specially earmarked are used to regularly replenish revolving funds.

BUILDING BLOCK 4: MONITORING CAPACITY AND EXPERIENCE

KEY COMPONENTS	SUGGESTED ENABLING ACTIONS
1. Presence of organizations at the subnational level with a sufficient combination of experience of monitoring the effects of forestry, social orientation, and ecological conservation projects.	■ Undertake a stakeholder mapping exercise of potential civil society and private-sector implementation partners, assessing each against the criteria of key competencies required for effective impact monitoring. Evaluation criteria may include a track record in development of socioeconomic and forest carbon ecological baseline assessments; presence of field staff in key forested regions of the subnational area; technical capacity of field staff in data collection techniques; capacity in data aggregation and reporting. ■ If insufficient capacity exists, appoint an internationally recognized monitoring organization to assume short-term responsibility for impact monitoring activities while providing on-the-job training to local stakeholders.

BUILDING BLOCK 4: MONITORING CAPACITY AND EXPERIENCE (*CONTINUED*)

KEY COMPONENTS	SUGGESTED ENABLING ACTIONS
2. Demonstrated ability of subnational government agencies to publicly report all benefit sharing transfers to the proposed benefit sharing mechanism recipients on a regular basis.	■ Consider including a user-friendly reporting function within any benefit sharing mechanism data management system commissioned (see suggested enabling actions for component 6 under Building Block 1: Government, civil society, community, and private sector institutional capacity). ■ Task a communications team (see suggested enabling actions for component 8 under Building Block 1: Government, civil society, community, and private sector institutional capacity) with the regular submission of benefit disbursal reports through accessible communication channels (e.g., information in local press, publishing on benefit sharing mechanism-specific websites).
3. Prior and effective use of third-party monitoring agencies within subnational government environmental programs.	■ Undertake a stakeholder mapping exercise and capabilities evaluation of potential third-party monitoring agencies. Evaluation criteria may include proven track record of monitoring national government-spending programs, as well as a multidisciplinary team, including expertise in forest conservation, sustainable forest management, and social development. ■ Based on findings, consider the appointment of third-party monitoring agents.
4. Proposed subnational REDD+ benefit sharing mechanism implementation agencies have experience incorporating monitoring and evaluation data into forest management planning and using evaluation results to continually improve program implementation.	■ Establish procedures for the regular monitoring and evaluation of forest management activities, including ecological and social impact assessments. ■ Ensure procedures include a regular review of forest management plans and adaptation of plans, where appropriate, to account for social and ecological change.
5. The proposed subnational benefit sharing mechanism implementation agencies have experience using GIS data to monitor changes in forest cover, or have an existing partnership with an organization that has this capacity.	■ Undertake a stakeholder mapping and capabilities assessment of government departments, academic institutions, civil society organizations, and private-sector organizations with GIS analysis capabilities and relevant data sets. ■ Consider South-South partnership opportunities with REDD+–ready country governments to enable best practice learning. ■ Allocate a portion of dedicated benefit sharing mechanism financing to ongoing technical training in GIS-analysis techniques. ■ Increase funding for recruitment and training of staff with GIS expertise. ■ Explore the opportunities to partner with academic institutions or other partners who have the necessary technical expertise. ■ Invest in the relevant GIS equipment or procure the services of organizations that have the existing capability in relevant technologies such as satellite monitoring and LIDAR.

BUILDING BLOCK 4: MONITORING CAPACITY AND EXPERIENCE (*CONTINUED*)

KEY COMPONENTS	SUGGESTED ENABLING ACTIONS
6. The proposed subnational benefit sharing mechanism implementation agency has experience using GIS data to monitor changes in forest cover and in using these data to calculate and monitor changes in bio-carbon stocks and abatement, or has an existing partnership with an organization that has this capacity.	■ Increase funding for recruiting and training staff with GIS expertise and carbon stock analysis. ■ Invest in the relevant GIS equipment or procure the services of organizations that have an existing capability in relevant technologies. ■ Explore South-South collaboration opportunities with other REDD+ nations in a more advanced state of monitoring readiness. This may involve international monitoring training secondments.
7. The proposed subnational benefit sharing mechanism implementation agencies have experience ground-truthing GIS data on forest cover change, or have an existing partnership with a national level organization that has this capacity.	■ Increase funding for recruitment and training of local forest officers or community representatives in forest monitoring techniques and in carbon stock analysis.

5 FURTHER INFORMATION SOURCES

The following reports contain valuable guidance and key considerations to take into account during the scoping and pre-establishment process for REDD+ benefit sharing mechanisms:

Lessons from Forest Sector Benefit Sharing

Mahanty, S., J. Guernier, and Y. Yasmi. 2009. "A Fair Share? Sharing the Benefits and Costs of Collaborative Forest Management." *International Forestry Review* 11 (2).

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REDD+ Benefit Sharing

Cortez et al. 2010. *A Nested Approach to REDD+: Structuring Effective and Transparent Incentive Mechanisms for REDD+ Implementation at Multiple Scales*. The Nature Conservancy and Baker & McKenzie.

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Cortez, Rane, Rick Saines, Bronson Griscom, Marisa Martin, Daniel De Deo, Greg Fishbein, John Kerkering, Duncan Marsh. 2010. *A Nested Approach to REDD+: Structuring Effective and Transparent Incentive Mechanisms for REDD+ Implementation at Multiple Scales*. Gland, Switzerland: The Nature Conservancy and Baker & McKenzie. http://www.theredddesk.org/sites/default/files/resources/pdf/2010/TNC_june_2010_A_nested_approach_to_REDD.pdf.

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ANNEX I: IN-DEPTH CASE STUDY ASSESSMENTS

Five mechanisms for sharing benefits were examined in detail. These include:

- Annual Forestry Fee (RFA)—Cameroon
- Socio Bosque—Ecuador
- Bwindi Mgahinga Conservation Trust (BMCT)—Uganda
- Ecological ICMS—Brazil

Forest Investment Account (FIA)—Land Base Investment Program (LBIP)—British Columbia, Canada

This Annex presents the key characteristics of each of these and the insights they offer for benefit sharing mechanisms for REDD+. The information for each of the mechanisms is derived from a thorough literature review and key informant interviews with a range of experts. Experts interviewed included legal experts, representatives of community advocacy groups, researchers, independent consultants, civil society representatives, central and state government representatives, current and former benefit sharing mechanism staff, benefit sharing mechanism donor, and fund management organization.

IN-DEPTH CASE STUDY OF ANNUAL FORESTRY FEE (RFA)–CAMEROON

MECHANISM NAME	RFA, CAMEROON
1. Overview	
Typology	National input-based benefit sharing mechanism. Cameroon's Redevance Forestière Annuelle (RFA) is a fee paid by forestry companies to benefit municipalities or communities throughout the country. The fee is calculated according to the land area of the concession and the amount the company bid to acquire it.
Summary	■ Scale of mechanism—national ■ Benefit sharing mechanism formed by a state requirement from private forestry concessions ■ Source of funding—forestry companies mandated to pay the RFA ■ Type of mechanism—forest benefit sharing from payment of an annual forest-fee based on concession area ■ Linked to national-level funding—no
Basic description of mechanism	Commercial timber concession operators are required to pay an annual fee to be used to support local economic development across Cameroon. The fee is divided among the central government, a centralized local council support fund (FEICOM), and local councils and communities adjacent to the concession.

IN-DEPTH CASE STUDY OF ANNUAL FORESTRY FEE (RFA)—CAMEROON (*CONTINUED*)

MECHANISM NAME	RFA, CAMEROON
Key lessons	The lessons learned for the RFA can be divided into the following sections, which correspond directly to the four building blocks of Options Assessment Framework 1: National input-based benefit sharing mechanisms. These are grouped under capacity building, legal framework, fund management, and MRV. It should be noted that these lessons are not necessarily based on best practice and may instead be derived from what could be improved on. **Capacity building** ■ Distinct ministerial roles for administration of the RFA provide its necessary institutional framework. Strong cross-ministerial oversight will be important for REDD+ benefit sharing mechanisms. ■ A central government secretariat or committee has been needed to provide an ongoing support function for RFA operation. ■ The use of community management committees and project proposals is intended to help prioritize local development projects and align them with community development priorities. **Legal framework** ■ The implementation of a law mandating the forestry industry to pay an area fee to be redistributed to communities (and the subsequent 1998 finance law and 2010 national decree) has helped to raise awareness within the beneficiary community of their entitlements. ■ The relative simplicity of the calculation of the forestry "fee" and the benefit-transfer mechanism has helped gain broad public understanding of the mechanism. The fee is based on the area of the forestry concession and the value of the winning bid. ■ Policy reform on the use of revenues from logging, which links to the RFA, provides an opportunity for improved forest governance with greater public participation and rights. These improvements in forest governance will be important for the success of REDD+ benefit sharing mechanisms. **Fund management** ■ RFA fees paid by forestry companies are directed into the national Treasury and once taxed, are managed and transferred directly into beneficiary accounts by the Program de Sécurization des Recettes Forestières, which is responsible for the fiscal monitoring of the timber industry. The ability of government forestry agencies to transfer funds directly to beneficiaries may be needed in national REDD+ benefit sharing mechanisms. ■ Forest sector benefit sharing mechanisms should include the design of an effective communications program through which all stakeholders can regularly understand the volumes and disbursement of available funds throughout the lifetime of the program. ■ Benefit sharing mechanisms should be supported by a national banking network that can be successfully accessed in rural areas. **MRV** ■ In the case of the RFA, overall responsibility for monitoring is held in one ministry. A similar allocation of monitoring responsibility to one government agency may help REDD+ benefit sharing mechanisms to maintain accountable and consistent monitoring systems.

IN-DEPTH CASE STUDY OF ANNUAL FORESTRY FEE (RFA)—CAMEROON (*CONTINUED*)

MECHANISM NAME	RFA, CAMEROON
2. Background information	
Background to mechanism	The benefit sharing mechanism relates to the annual forest fee (RFA), with an explicit goal to contribute to local economic development. The introduction of a competitive bidding process for concession licenses, including an assessment of RFAs required, has led to an increase in RFA per hectare for long-term (Forest Management Units [UFA]) and short-term (Sales of Standing Volume) harvesting rights. The finance law of 1998 mandated that 50 percent of collected RFA should go to the state, 40 percent to local councils, and 10 percent to local communities. This division was designed so the RFA might support the economic development of Cameroon at multiple levels. The division of the fee was revised subject to a June 2010 national decree. The change responded to demand that a greater number of local councils (in forested and nonforested areas) should benefit from the RFA. The revised division of the RFA is as follows: ■ Fifty percent is still channeled into the central government treasury. ■ Twenty percent enters a Special Council Support Fund for Mutual Assistance administered by the agency, FEICOM (Fonds special d'équipement et d'intervention intercommunale). This national equalization fund became operational in 1977 and aims to harmonize the development of local authorities. As such, a proportion of RFA payments are distributed across the country to nonforested areas. ■ Twenty percent goes directly into the budget of the local council that is adjacent to or contains the concession. It has been recorded that RFA payments have constituted as much as 80 percent to 95 percent of the local council budget; however, this may alter now that 20 percent of RFA is to be paid into FEICOM. ■ Ten percent is divided equally among the villages bordering a concession area. This payment should now be paid directly into community bank accounts, which are administered by community management committees. However this money is most often paid into the local council bank account and is distributed to villages following presentation and approval of community-development projects. The money pays service providers who deliver the community-based projects that have been prioritized by the community and approved by the council.
Stated objectives	To support community economic development across Cameroon, not just in areas adjacent to forestry concessions.
Scope	Following the development and presentation of proposed community-development projects, the 10 percent of RFA funds intended for community level could support the following types of activities: ■ Water supply or electrification ■ Construction and maintenance of roads, bridges, sports equipment, or public works ■ Building or maintaining schools and health centers ■ Purchasing medication ■ Any other realization of community interest decided by community members themselves. However, there is currently an emphasis on the provision or maintenance of physical infrastructure, equipment, and resources.

IN-DEPTH CASE STUDY OF ANNUAL FORESTRY FEE (RFA)—CAMEROON (*CONTINUED*)

MECHANISM NAME	RFA, CAMEROON
Years in operation	17 (established by law in the Forest Code of Cameroon in 1994)
Target country or region	Cameroon
Administered by	Three government ministries with distinct responsibilities: ■ Ministry of Forestry and Wildlife (MINFOF) for establishing concession areas and pricing ■ Ministry of Economics and Finance (MINFI) for collection of RFA payments and monitoring ■ Ministry of Territorial Administration and Decentralization (MINATD) for managing rural councils' use of RFA funds
Beneficiaries	Forest- and nonforest-dependent communities across Cameroon, but with an emphasis toward local councils and villages adjacent to forestry concessions for their long-term economic development
Approximate total beneficiaries (people)	Estimated range: 3.2 million people represented by 56 local councils (Topa et al. 2009)
Total value of benefits disbursed to date	Since 2000, about US $12 million has been transferred annually (about US $5.5 per hectare per year).
Cofinancing of benefit sharing mechanism	No
Overall strengths of mechanism in delivering specific objectives	The strengths of the mechanism include the following: ■ Relatively simplicity of the mechanism and fee calculation. The fee is based on the area of the forestry concession and the value of the winning bid. ■ Collecting RFA from forestry companies has not posed significant difficulties and has been streamlined. RFA paid by forestry companies is paid into the national Treasury and once taxed, is managed and transferred directly into beneficiary accounts by the Program de Sécurization des Recettes Forestières, which is responsible for the fiscal monitoring of the timber industry. ■ Provides a key role for community participation in benefit sharing decisions through the requirement of a community management committee that prioritizes local development projects considered for 10 percent of RFA funding. ■ Policy reform on the use of revenues from logging, which links to the RFA, provides an opportunity for improved forest governance with greater public participation and rights. ■ There has been much investment in the RFA model in Cameroon, and it is being championed across the Congo Basin region, although it is yet to be implemented elsewhere.
3. Country context	
Economy size (annual GDP)	US $22.2 billion
World Bank governance indices (–2.5 to +2.5)—a higher value indicates better governance.	
Voice and accountability	–1.03
Political instability	–0.41
Government effectiveness	–0.81
Regulatory quality	–0.69
Rule of law	–1.07
Control of corruption	–0.92
Position on forest transition curve	High Forest—High Deforestation

IN-DEPTH CASE STUDY OF ANNUAL FORESTRY FEE (RFA)—CAMEROON (*CONTINUED*)

MECHANISM NAME	RFA, CAMEROON
Drivers of deforestation	According to Cameroon's R-PIN submitted to the FCPF, the most important direct and indirect drivers of deforestation and degradation in Cameroon are the following: ■ Development of agricultural activities, including slash-and-burn agriculture ■ Illegal exploitation of timber ■ Exploitation of fuel wood ■ Industrial exploitation of production forests ■ Development of the mining sector
Forest governance and enforcement capacity	In 2004, the Ministry of Environment and Forests (MINEF) was split into the Ministry of Forestry and Wildlife (MINFOF) and the Ministry of the Environment and the Protection of Nature (MINEP). MINFOF responsibilities include monitoring forests and forest inventories, enforcing forestry regulations, and managing protected areas. However, enforcement capacity is considered low, particularly at a local level. AGRECO, an international consultancy firm, carries out independent monitoring of timber extraction, but does not audit the RFA mechanism's financial performance. Following the June 2010 national decree, MINFOF, MINFI, and MINATD have a joint responsibility to report on the use of RFA funds.
Political stance on role of market mechanisms	The Cameroon government is supportive of market mechanisms, and there are several pilot REDD+ projects in the country.
Socio-political standing of indigenous groups	The Forestry Law (1994) laid the groundwork for this mechanism, in association with forestry concessions. It also introduced the concept of community forests. This has provided communities with the legal standing they need to receive adequate benefits from the RFA. In December 2001 communities were also officially granted the right of pre-emption and therefore have the right to say no to logging activities in nearby forests by stating their interest in establishing a community forest.
4. How the mechanism functions	
Type of benefits delivered	Ten percent of the RFA payment is provided as cash transfers to the local level; however, this money must be spent on approved community development projects. There is a focus on providing community goods rather than, for example, supporting local business ventures. In Lomie, RFA money is paying for Internet provision and for local development plans. Indirect benefits include the potential for improved local participation in decision-making processes.
Who is the holder of land title (carbon rights—if differentiated)	Local communities and individuals may hold land titles in Cameroon, but more commonly they have user rights that may be transferred to forestry companies when concessions are won. Local council and community RFA beneficiaries are identified if their territories are adjacent to or contain the concession.

IN-DEPTH CASE STUDY OF ANNUAL FORESTRY FEE (RFA)—CAMEROON (*CONTINUED*)

MECHANISM NAME	RFA, CAMEROON
Timing and punctuality of benefit disbursement	RFA distribution is made in three defined tranches during the year for Forest Management Units and one tranche for Sales of Standing Volume. Money is sent directly to the bank accounts of the Treasury and FEICOM. A local management committee is responsible for the allocation of the 10 percent to the local communities to be spent on local development projects. The projects and disbursement of money to deliver them are, however, subject to approval by a municipal council committee, for which the local council leader (the Mayor) acts as rapporteur. As such there is a high dependency on capacity at the local level to review, approve, and provide sign-off for RFA funds to be used for local development initiatives. This may influence the timing of fund disbursement for projects. Note that the June 2010 decree reduced the level of influence the Mayor has in this decision-making process: rather than presiding over the committee, Mayors have been designated a rapporteur function. This change in role is currently being challenged by a number of Mayors.
Benefits provided up front or linked to performance	Payments are not linked to performance. The amount paid is calculated solely on the land area of the concession and the value of the winning bid.
How benefits are transferred	Eighty percent of RFA is transferred to the Treasury, and 20 percent to FEICOM directly from the forestry company to the bank accounts of these groups. Of the 80 percent sent to the Treasury, 50 percent is retained for central government, 20 percent is transferred to rural councils, and 10 percent goes to local communities. The Program de Sécurization des Recettes Forestières, within the Treasury, is responsible for the fiscal monitoring of the timber industry. The PSRF calculates the proportion of RFA due to beneficiaries and manages the transfer of funds to recipient bank accounts at the council and local community levels. The 10 percent allocated to communities is often transferred to and held in local council bank accounts if communities do not have their own accounts. However, if the local community does have an independent bank account, approval to disburse RFA funds from this account for community development projects must still be authorized by the council committee.
Monitoring effectiveness	Three monitoring mechanisms are in place: ■ Local council committees. Members include the traditional chief, representatives of community groups, and the local population. They are responsible for approving and recording the dispersal of the 10 percent of RFA funds at the local level. These records are subject to scrutiny through the national monitoring function. ■ Local administrative authority. This provides a prefect who can be notified by any local stakeholder if there is a problem with a council committee or the use of RFA funds. Prefects must act on any notification they receive. ■ Government ministries. The June 2010 national decree established that MINFOF, MINFI, and MINATD will form a tripartite committee with the responsibility of monitoring local councils and evaluating and reporting on activities. Findings are to be shared, specifically, with MINFI, which is the national institution responsible for the management of public funds. The June 2010 national decree also provided for an annual, public presentation of the report of all the activities undertaken with RFA funds throughout the preceding year.

IN-DEPTH CASE STUDY OF ANNUAL FORESTRY FEE (RFA)—CAMEROON (*CONTINUED*)

MECHANISM NAME	RFA, CAMEROON
Engagement and capacity building with local communities	Local communities are engaged through local management committees that provide the focal point for development and prioritization of community-development projects. Communities are increasingly aware that they are entitled to benefit from RFA payments and as such, are calling for better financial management and delivery of benefits. This is being supported by CSOs and NGOs such as the Association de Baka, an indigenous peoples' association. To be eligible to receive RFA funds, communities must be in villages that the state recognizes. Local councils are working with some indigenous groups to ensure they are recognized within existing village units and are thus able to benefit from the RFA system. A few NGOs are helping to build capacity at local levels to ensure communities are able to develop strategic project proposals that may bring long-term benefits.
Institutional requirements	At the national level, MINFOF is responsible for establishing concession contracts with forestry companies and including annexes in these contracts that detail the company's obligations to support local community development, including through the RFA. A clear, national legal framework outlines the need for forestry companies to pay the RFA and how payments should be paid directly from the company to national institutions and local beneficiaries. A tripartite arrangement exists among MINFOF, MINFI, and MINATD to provide strong interministerial oversight and monitoring functions. The June 2010 national decree provided by MINFI and MINATD established that RFA funds should only be disbursed once robust local development projects are proposed. This increased the need for local capacity and support to develop projects at the village level and to evaluate them effectively at the local council level. In addition, the decree mandated that not more than 20 percent of the RFA funds disbursed to local councils could be used to pay for running the council. Previously, the council could choose how the money was used. The administration of the RFA at local levels, therefore, must be efficient and supported by appropriate local institutions.
Role of carbon markets and what would need to be changed for REDD+	Not applicable in the current RFA setup
5. Critical success factors	
Pre-establishment	
Building blocks	**Critical success factors**
Capacity requirements	■ Existing national institutions must increase capacity to guide the formulation of the benefit sharing mechanism, potentially with support from international experts. ■ Joint decision and commitment across key ministries to adopt a system that will transparently and equitably share benefits from national forestry activities. ■ Clear rationale and designation of responsibilities across benefit sharing mechanism administrative levels.

IN-DEPTH CASE STUDY OF ANNUAL FORESTRY FEE (RFA)—CAMEROON (*CONTINUED*)

MECHANISM NAME	RFA, CAMEROON
Legal framework	■ A robust legislative framework upon which agreements among different stakeholders and companies can be grounded
Fund management	■ The initial financial commitment is moderate, although the establishment of a specific budget line at the national Treasury may be required to administer the setting up and transfer of funds once the system is established. ■ The fund management system should include design of an effective communications program through which all stakeholders can regularly understand the volumes and disbursement of available funds throughout the lifetime of the program.
Monitoring, reporting, and verification	■ MINFI is designated as having the final monitoring function and oversight of the use of public funds (including RFA fees paid).
Establishment and maintenance	
Building blocks	**Critical success factors**
Capacity requirements	■ Central government responsibilities provide an ongoing support function for the operation of the RFA. ■ Local management committees are established, with broad representation from a variety of local stakeholders. These committees have needed to demonstrate an understanding of the obligations and entitlements of different beneficiary groups.
Legal framework	■ The legal agreement on the division of the fee to different beneficiaries and national institutions is clear. ■ Penalties for mismanagement of funds must be in place and enforced.
Fund management	■ Payments from forestry companies are reliable and contractually secure. ■ Clear transfer mechanisms supported by national banking system that can be successfully accessed at local levels.
Monitoring, reporting, and verification	■ Government oversight of disbursement of funds is essential, supported by detailed information on sums paid by forestry companies and when and how the final beneficiaries receive these. ■ Overall responsibility for monitoring is held in one Ministry that can be held clearly accountable.

IN-DEPTH CASE STUDY OF SOCIO BOSQUE—ECUADOR

MECHANISM NAME	SOCIO BOSQUE, ECUADOR
1. Overview	
Topology	National performance-based benefit sharing mechanism. *Rationale for typology:* Socio Bosque (Forest Partners) is a national program—forest areas from across Ecuador are eligible (there is a higher concentration in provinces such as Esmeraldas, Morona Santiago, Pastaza, and Sucumbíos). Payments are provided following verification of performance as per the agreed contract.
Summary	■ Scale of mechanism—national ■ Benefit sharing mechanism recognizing communities and private landholders as stewards of the forest ■ Source of funding—public ■ Type of mechanism—conservation agreements ■ Link to national-level funding—yes

IN-DEPTH CASE STUDY OF SOCIO BOSQUE–ECUADOR (*CONTINUED*)

MECHANISM NAME	SOCIO BOSQUE, ECUADOR
Basic description of mechanism	The government provides payments twice a year on a 20-year contract to private landholders and communities for the conservation of forests in Ecuador. Payments are conditional on the verification of the conservation activities, which are carried out through satellite monitoring and annual field visits by local Ministry officials.
Key lessons	The lessons learned for Socio Bosque can be divided into the following sections, which correspond directly to the four building blocks of Options Assessment Framework 1: National benefit sharing mechanisms. These are grouped under capacity building, legal framework, fund management, and MRV. **Capacity building** ■ Pilot phase implemented between September and December 2008 in the three main provinces of Esmeraldas, Morona Santiago, and Sucumbíos helped to quickly and efficiently refine the design of the mechanism ready for national roll-out in 2009. ■ NGO participation and some other local strategic alliances have been important in building community capacity and participation. For example, the NGO NCI (Nature and Culture International) helps communities identify the status quo and gain legal tenure rights through the Ministry of Agriculture and the land registry (although in cases where land is in protected areas, the Ministry of Environment can recognize ancestral land rights). ■ The program operations manual clearly sets out the roles of different ministries and the reporting procedures between the Ministry of Environment and Ministry of Finance. ■ The program has effectively used Internet, newspaper, radio, and television communication channels to increase public engagement with the program, although there is still further communication work to do in more remote parts of the country. **Legal framework** ■ The establishment of the program received high-level political support, which meant it took only three months for a ministerial decree to be in place for Socio Bosque. It should be recognized that the speed at which the decree took place was criticized by the NGO community because of concerns over a perceived lack of consultation with civil society. ■ An important reason for the political support given to Socio Bosque was that the program was linked in with Ecuador's new national development plan, which included deforestation, poverty, and protected areas targets for 2009–13. **Fund management** ■ The administration team of the Socio Bosque program in Ecuador made an agreement with a national bank to streamline the process for establishing beneficiary bank accounts. The scheme enabled participants to establish a bank account in the community's name upon presentation of legal documents, without the usual requirement of an up-front deposit, and with reduced transaction costs incurred on incoming performance-based payments. ■ Communities have to submit an investment plan to the Ministry of Environment. This helps ensure that funds are used for locally appropriate economic and poverty-alleviation activities. ■ Payments are made by the Ministry of Finance directly to individual or community bank accounts. Legal documentation is required to set up a bank account. Agreements with the National Bank have streamlined the process of setting up community bank accounts (e.g., lifting the requirement for an up-front deposit). ■ NGOs such as NCI help Socio Bosque create a communication bridge between local community groups and the Ministry of Environment. This allows the effective communication of community concerns and helps communities comply with the governments due diligence procedures.

IN-DEPTH CASE STUDY OF SOCIO BOSQUE–ECUADOR (*CONTINUED*)

MECHANISM NAME	SOCIO BOSQUE, ECUADOR
	MRV ■ Several communities hire forest keepers from among their members, who are responsible for control and surveillance activities. ■ The use of GIS monitoring and a ground-truthing monitoring methodology means that payments for verified carbon emission reductions may be feasible in the future. ■ In the rare event of infringement of the conditions of the program (as stated in the operations manual) payment may be withheld or the return of previous payments may be demanded, depending on severity. ■ The Socio Bosque is starting to assess the socioeconomic and gender effects of incentive provision under the program. ■ The operations manual makes clear how monitoring information from the Ministry of Environment is linked to and triggers payments from the Ministry of Finance to Program beneficiaries.
2. Background information	
Background to mechanism	The Socio Bosque program was started in 2008 by the Ecuadorian government as an incentive-based conservation program. It is a central component of the Ecuadorian proposal for REDD+. The Ministry of Environment played a central role in the development of the program as an incentive-based mechanism to reduce deforestation, complementing other forms of direct regulation. A pilot phase was designed and launched with ministerial support in 2008. The proposed poverty-alleviation benefits of the mechanism helped build political support such that the development of the pilot took only three months.
Stated objectives	The objective of the scheme is to preserve native forests and other native ecosystems in Ecuador and increase the well-being of the forest-dependent population. The mechanism aims to protect 4 million hectares of native ecosystems (mainly forests), significantly reducing greenhouse gas emissions caused by deforestation and improving the living conditions of 1 million of the rural population.
Scope	The government signs voluntary conservation agreements with private landowners and indigenous and local community groups,[9] and provides annual monetary incentives on a per hectare basis.
Years in operation	2 years and 9 months
Target country or region	Ecuador
Administered by	The Ministry of Environment is responsible for the overall coordination of the program, with the Ministry of Finance in charge of transferring the incentives from the central bank account. Local governments don't yet have a strong role in Socio Bosque, with most government functions centralized.
Beneficiaries	The principal beneficiaries are forest-dependent communities and private forest landowners.
Approximate total beneficiaries (people)	Approximately 67,000 people directly benefit from the program.

IN-DEPTH CASE STUDY OF SOCIO BOSQUE–ECUADOR (*CONTINUED*)

MECHANISM NAME	SOCIO BOSQUE, ECUADOR
Total value of benefits disbursed to date	The value of disbursements has increased since the pilot phase in 2008, as follows: 2008—US $0.95 million 2009—US $2.7 million (approximately) 2010—US $3.8 million (approximately) 2008—10—US $4.5 million (in incentives) 2011—US $6 million this year, with 70 percent for incentives Since its launch, the program has been 100 percent government funded. However, from 2011, the German development bank KfW has signed an agreement to support the program, providing EU 13 million over five years. This is partly intended to strengthen Ecuador's REDD+ readiness. It is probable this funding will become available in the last quarter of 2011. Obtaining additional funding will become more important as the contracts are set for 20 years. A tax on fuel has been considered, but no decision on this is expected in the short term. Administrative costs are relatively high, about 30 percent of total spending. This is partly because additional research costs of initiatives to ascertain the program's effects (historical map of deforestation), and also includes remote sensing and field verification, as well as assessment and following up of the social investments made with the payments. The long-term goal is to bring administrative costs down to 12 percent.
Cofinancing of benefit sharing mechanism	Yes. Participant communities often accomplish their priority needs by adding counterparts to the incentives they receive.
Overall strengths of mechanism in delivering specific objectives	The strengths of the programs include the following: ■ As a precondition to joining the program, indigenous and local communities have to develop a "social investment plan" in which beneficiaries specify how they will spend the money they will receive yearly from Socio Bosque. This social investment plan is developed in a participatory way by all members of the community, and beneficiaries freely decide how to use their economic incentive. ■ Payments under Socio Bosque are conditional upon compliance with a conservation agreement. Conservation agreements under the program run for 20 years, providing landowners and community groups with a predictable long-term source of alternative income around which to plan their conservation efforts. ■ The program is demand based, with voluntary participation by communities. ■ The program targets priority areas with high biodiversity, high carbon value, and high poverty levels. ■ The application process is relatively straightforward and transparent for communities to build trust. ■ There is a good level of participation from local NGOs. For example, Nature and Culture International (NCI) has good communication channels with both the ministry and beneficiaries, as do several other local NGOs.
3. Country context	
Economy size (annual GDP)	US $57.249 billion
World Bank governance indices (–2.5 to +2.5)—a higher value indicates better governance.	
Voice and accountability	–0.26
Political instability	–0.75

IN-DEPTH CASE STUDY OF SOCIO BOSQUE–ECUADOR (*CONTINUED*)

MECHANISM NAME	SOCIO BOSQUE, ECUADOR
Government effectiveness	–0.84
Regulatory quality	–1.36
Rule of law	–1.28
Control of corruption	–0.92
Position on forest transition curve	Low forest—High deforestation
Drivers of deforestation	The principle drivers of deforestation include commercial and small-scale forestry, subsistence activities (including slash-and-burn agriculture), and demand for land from agribusinesses. The Socio Bosque program is demand driven and does not include an explicit analysis of the risk of deforestation when selecting beneficiaries. It therefore includes a range of high- as well as low-risk forest areas. This is because of the use of multiple criteria in selecting eligible areas that include poverty and ecosystem services. Road construction providing access to remote areas and the mining industry also has important localized effects on deforestation. Furthermore, in a few cases, the incentive provided by the program is in conflict with other policies that support these activities (e.g., oil drilling, mining, road construction).
Forest governance and enforcement capacity	The governance structure of Socio Bosque has been relatively transparent, and the wide view is that the program is well governed, if under-staffed, particularly in local offices. The program already works with local environmental ministry offices but aims to strengthen the coordination and count with trained staff in these local offices to carry specific activities such as verification, monitoring, and overall inscription process.
Political stance on role of market mechanisms	The Ecuadorian government has identified international REDD+ markets as a potential source of financing for the Socio Bosque program, although there is currently national debate between stakeholders over the wider use of market mechanisms for ecosystem services.
Socio-political standing of indigenous groups	On September 28, 2008, Ecuador passed a new constitution that recognizes both indigenous peoples' land rights and their livelihoods and the rights of nature. See http://www.rightsandresources.org/blog.php?id=358 for more detail. As part of the National REDD+ strategy, the government of Ecuador seeks to provide legal guarantees for land tenure rights among local inhabitants of forest areas.
4. How the mechanism functions	
Type of benefits delivered	The incentive mechanism is driven by annual direct payments per hectare of forest (or other native ecosystem) conserved. In addition, communities have other associated benefits through the investment of the incentives (productive development; conservation; organizational development; and social and cultural development, including education and health, among others), as well as local empowerment and facilitation of communication between communities and the government. Also, representatives (mainly from the communities) periodically partake in capacity-building workshops in priority topics such as investment plans and control and monitoring. Payments are US $30 per hectare for plots less than 50 hectares; per-hectare payments decrease as plot areas increase. The ministry is currently analyzing the possibility of increasing the monetary payments. This may include differentiated incentive structures for communities and high-altitude ecosystems important for water regulation. It is important to note that the motivation of participants in Socio Bosque is not always directly linked to covering and exceeding the opportunity costs of forest conservation, especially where communities' primary interest is in conservation rather than agricultural conversion.

IN-DEPTH CASE STUDY OF SOCIO BOSQUE–ECUADOR (*CONTINUED*)

MECHANISM NAME	SOCIO BOSQUE, ECUADOR
Who is the holder of land title (carbon rights—if differentiated)	The legalization of land tenure is a priority issue within the Ecuadorian REDD+ strategy. It is also an important part of the application and administrative process of the Socio Bosque program because individuals or communities need to present land titles to participate. NCI helps communities identify their status quo and gain legal tenure rights through the Ministry of Agriculture and the land registry (although in cases where land is in protected areas, the Ministry of Environment can recognize ancestral land rights). This recognition of ancestral land rights in protected areas has helped increase participation by indigenous peoples. In many cases this can be a complex process, not the least of which is to get consensus within the communities. Communities must then elect a representative and identify an investment plan outlining how they intend to spend the funds, with updates on progress every six months.
Timing and punctuality of benefit disbursement	Contracts are for 20 years, providing long-term security (although the program is still working on the financial sustainability to guarantee the 20-year incentives). Payments are provided every six months, starting one or two months after registration, with subsequent payments following performance verification.
Benefits provided up front or linked to performance	The payment is linked to performance such that payments are conditional on continued conservation of forest areas. This is verified through satellite monitoring and field visits by the Ministry of Environment.
How benefits are transferred	The Ministry of Finance makes the payments directly to individual or community bank accounts. Legal documentation is required to set up a bank account. Agreements with the National Bank have streamlined the process of setting up community bank accounts, for example, lifting the requirement of an up-front deposit. In some instances, conflicts within a community may affect implementation of the agreement and allocation of funds. In such cases, the ministry may act as mediators to resolve disputes and ensure equitable distribution of benefits within communities.
Monitoring of effectiveness	Monitoring activities include the use of GIS images combined with site visits. In addition, communities have "forest keepers" responsible for the control and monitoring system of that community. In the rare event of infringement of the conditions of the program (as stated in the operations manual), payment may be withheld or the return of previous payments may be demanded, depending on severity. The program is also starting to assess and monitor the socioeconomic effects, including a set of gender criteria alongside community investment plans. The MRV system for Socio Bosque is still being developed and improved to allow for more accurate monitoring of the program's impact. Please see "Role of carbon markets and what would need to be changed for REDD+" for more details on the program's potential use for REDD+.
Engagement and capacity building with local communities	Some commentators have noted that the government could have increased the level of participation of local communities during the design of the program. To date, the program has received support in the engagement process with communities with some NGOs, such as NCI, Altropico, Solidaridad Internacional, and Conservation International (through financing local NGOs or other organizations). Legal and administrative support is provided during the application process. For example, NCI provides beneficiaries with assistance for mapping and GIS (at a cost from about US $1.5 to US $2 per hectare), legal support to confirm land ownership, and registration. In addition, once up and running, NGO-led workshops help educate the communities about the financial reporting procedures and requirements of the ministry (e.g., review of the community investment plans, including verification of invoices and purchases). The government is making progress in increasing engagement and capacity building of local communities in an effort to build trust and facilitate broader participation and understanding of the objectives of the scheme and benefits for communities.

IN-DEPTH CASE STUDY OF SOCIO BOSQUE–ECUADOR (*CONTINUED*)

MECHANISM NAME	SOCIO BOSQUE, ECUADOR
Institutional requirements	The Ministry of the Environment has overall administrative responsibility for implementation of the program, including the following: ■ Consultation with community groups and administration of voluntary agreements ■ Monitoring program effectiveness through remote sensing ■ Facilitating "social investment plans" The Ministry of Finance is responsible for fund disbursal from a central bank to the beneficiary bank accounts. The success of the program is partly because of the clear definition of responsibilities between participating ministries and defined working arrangements. The design of the program is fairly resource intensive, as indicated by the higher administrative costs (30 percent). The legal requirements of identified land tenure are common to most programs of its type. The Ministry of Environment has identified the need to increase coordination with the Ministry of Agriculture, which holds responsibility for registering land tenure for individuals and communities. External assistance was also important in the development of the pilot and subsequent up-scaling. The Ministry of Environment hired several technical and legal experts (with financial support from donors), and held workshops with international experts.
Role of carbon markets and what would need to be changed for REDD+	Socio Bosque is not currently linked to carbon markets. However, the Ecuadorian government has identified the REDD+ carbon markets as a potential future source of funding for the program. Successfully linking the Socio Bosque program with carbon markets will require the monitoring systems of the program to be linked with a national MRV system to account for potential leakage risks. This will help identify which areas might qualify for payments (dependent on internationally approved additionality) and provide assurance for crediting. Bilateral agreements may hold the most promise in the short term. In addition to the deal agreed with KfW, the Norwegian government has indicated its interest in the program, together with some private enterprises. A key action needed to convert Socio Bosque to a REDD+ mechanism will be the inclusion of an analysis of deforestation baselines when selecting beneficiaries for REDD+ to demonstrate additionality.
5. Critical success factors	
Pre-establishment	
Building blocks	**Critical success factors**
Capacity requirements	■ Clearly defined tasks within relevant ministries set out in the program handbook (Environment, Finance, and Agriculture) and good intraministry communication ■ Cross-discipline (biology, economics, sociology) expertise in government departments (central and local) with appropriate resource availability ■ Local offices essential to capacity building and monitoring community activities ■ Capacity in local communities to prepare for participation and continuing fund management and reporting processes ■ Well-organized pilot phase program with participation of internationally experienced experts in the design ■ Strong local NGO participation to assist with community engagement and participation

IN-DEPTH CASE STUDY OF SOCIO BOSQUE–ECUADOR (*CONTINUED*)

MECHANISM NAME	SOCIO BOSQUE, ECUADOR
Legal framework	■ The program is linked to the SIGTIERRAS (Management System of Rural Land), which is a program administered by the Ministry of Agriculture. This program generates planning information that can support the resolution of rural land-tenure issues for participants in Socio Bosque.
Fund management	■ Engagement with a national bank to streamline the process of getting community bank accounts set up in preparation of program launch
Monitoring, reporting, and verification	■ Potential sources for satellite imagery were identified (Brazil and the United States of America) for remote sensing, and responsibilities were allocated to local Ministry of Environment offices for field visits.
Establishment and maintenance	
Building blocks	**Critical success factors**
Capacity requirements	■ Clearly defined tasks within relevant ministries (Environment, Finance, and Agriculture) and good intraministry communication ■ Continuing input from local offices important for verification before biannual payments ■ Support from a national bank to facilitate the creation of bank accounts and reduce administrative burden on communities ■ Strong NGO participation to assist community participation and report submission ■ Community investment plans to help ensure that poverty-reduction actions are aligned with the needs of communities. The plan formation process helps to build community-planning capacity
Legal framework	■ NCI has helped communities identify tenure rights or application of new tenure rights.
Fund management	■ This is a simple framework—Ministry of Environment approving payments, followed by the Ministry of Finance making direct payment through a national bank. ■ Transparent process with clearly defined conditions of payment
Monitoring, reporting, and verification	■ The use of ground-truthing is resource intensive, but it has a high level of certainty of results. ■ Need on-the-ground personnel, technical capacity, and resources for GIS and remote-sensing using satellite imagery.

[9] Ecuador has a great variety of "communitarian" organizations, not all of which are indigenous

IN-DEPTH CASE STUDY OF BWINDI MGAHINGA CONSERVATION TRUST (BMCT)–UGANDA

MECHANISM NAME	BWINDI MGAHINGA CONSERVATION TRUST (BMCT)
1. Overview	
Typology	Subnational input-based benefit sharing mechanism: The BMCT operates exclusively in the areas surrounding Bwindi Impenetrable National Park (BINP) and Mgahinga Gorilla National Park (MGNP) in southwest Uganda. Allocation of benefits to community groups and individuals is not contingent on beneficiary performance criteria.

IN-DEPTH CASE STUDY OF BWINDI MGAHINGA CONSERVATION TRUST (BMCT)—UGANDA (*CONTINUED*)

MECHANISM NAME	BWINDI MGAHINGA CONSERVATION TRUST (BMCT)
Summary	■ Scale of mechanism—project ■ Source of funding—grant funding (Global Environment Facility, World Bank, USAID, Government of The Netherlands, CARE International, D. Swarovski & Co) ■ Type of mechanism—conservation endowment trust fund ■ Linked to national-level funding—no
Basic description of mechanism	The BMCT provides grants to individuals and community groups to establish alternative livelihood and public good projects that replace livelihood streams previously generated through deforesting and forest degrading activities. The BMCT provides additional funding to local research organizations for ecological and socioeconomic evaluation of the area, and funding to the Uganda Wildlife Authority (UWA) for park management activities.
Key lessons	The lessons learned for BMCT can be divided into the following sections, which correspond directly to the four building blocks of Options Assessment Framework 2: Subnational benefit sharing mechanisms. These are grouped under capacity building, legal framework, fund management, and MRV. **Capacity building** ■ Socioeconomic assessments dictated the choice of which public services and infrastructure would best meet the needs of communities. These services and infrastructure developments proved to be an effective way of distributing benefits to broad stakeholder groups in the absence of defined land rights. ■ Five expert working groups (the local community, conservation, legal and governance, investment, and administration groups) spent three months designing the institutional structures and developing an operational manual for the BMCT before its establishment. ■ In the absence of decentralized government capacity, the institutional structure for the BMCT was developed from scratch. Key to the success of the formation of the TMB, TAU, LCSC, and TAC was the selection and integration of expert representatives with an understanding of local context from government, CSOs, local community groups, the private sector, and the international donor community. ■ The BMCT administrative and field staff hired had a track record of working in the area with local community groups. ■ The BMCT hired expert community-extension workers to provide livelihood development training to local beneficiaries in areas such as agro-forestry, agriculture, livestock management, and bookkeeping. This ensures livelihood grant allocations are effectively used. ■ The BMCT collaborated with local NGOs such as CARE International and the International Gorilla Conservation Program (IGCP) during the early years of establishment. This allowed the BMCT to benefit from existing community networks and the local knowledge these NGOs had accrued through years of working in the area. ■ The provision of public infrastructure can be an effective way of distributing benefits to a broad stakeholder group where there may be conflict of land rights between government and traditional forest user groups. **Legal framework** ■ The trust legislation was developed by a policy lawyer appointed within the BMCT design team and then approved in parliament. This provided sufficient legal safeguards for establishment of the BMCT. ■ The introduction of BMCT by-laws have provided a robust foundation for key institutional structures of the benefit sharing mechanism to operate effectively.

IN-DEPTH CASE STUDY OF BWINDI MGAHINGA CONSERVATION TRUST (BMCT)–UGANDA (*CONTINUED*)

MECHANISM NAME	BWINDI MGAHINGA CONSERVATION TRUST (BMCT)
	Fund management ■ Endowment fund models can be incorporated into the design of national or subnational benefit sharing mechanisms. Also see the Eastern Arc Mountains Conservation Endowment Fund (www.easternarc.or.tz/). ■ The representation of key nongovernmental stakeholder groups at the decision-making level provides an effective safeguard against the mismanagement of funds and inequitable benefit allocation. ■ The proportional allocation of benefits to be disbursed through BMCT agreed by stakeholders from local interest groups during a three-day workshop (researchers—20 percent of funding, local communities—60 percent of funding, park management—20 percent of funding). This was perceived to be an effective and equitable process. ■ An international asset-management company with responsibility for investment of BMCT endowment capital was identified. **MRV** ■ The Local Community Steering Committee (LCSC) plays a crucial role in the two-way dissemination of information between the Trust Management Board (TMB) and BMCT beneficiaries. ■ The presence of local research institutions with sufficient technical capacity to undertake monitoring assessments of conservation activities in the national park areas. ■ Livelihood grant beneficiaries are required to develop implementation plans with the assistance of community extension workers as a prerequisite to issuance of grants, and to submit periodic update reports to trigger release of subsequent tranches of funding. This acts as a safeguard against the misappropriation of funding, and helps ensure grants are spent in an effective and equitable manner. ■ The lack of socioeconomic baseline has limited impact assessments, which could have formed a basis for effectiveness review.
2. Background information	
Background to mechanism	The BMCT was set up in 1994 under the Uganda Trust Act to provide a long-term, sustainable funding source for the conservation of the biodiversity and ecosystem of the MGNP and BINP in southwest Uganda. The World Bank and Global Environment Facility contributed the original fund capital of US $4 million. The BMCT was the first GEF environmental endowment trust fund to be launched in Africa.
Stated objectives	The BMCT was established to support the conservation of biodiversity in two national parks in southwest Uganda, which protect some of the most biologically diverse tropical forests in East Africa and are home to more than half the world's remaining mountain gorillas.
Scope	The scope of activities supported by the fund fall under three categories: ■ Support to community livelihoods and social infrastructure initiatives in the parishes (local administrative areas) surrounding the two parks (60 percent of funds) ■ Support to park management through the Uganda Wildlife Authority (20 percent of funds) ■ Support for socioeconomic and ecological research activities linked to conservation efforts (20 percent of funds)
Years in operation	16
Target country or region	Areas surrounding the MGNP and BINP in southwest Uganda

IN-DEPTH CASE STUDY OF BWINDI MGAHINGA CONSERVATION TRUST (BMCT)—UGANDA (*CONTINUED*)

MECHANISM NAME	BWINDI MGAHINGA CONSERVATION TRUST (BMCT)
Administered by	The supreme governing and policy making body is the Trust Management Board (TMB). The TMB comprises trustees drawn from the following groups: ■ Uganda Wildlife Authority (UWA) ■ Conservation section of the Forest Department ■ Three representatives from the local communities selected from the Local Community Steering Committee (LCSC) ■ One representative from each of the three districts, Kabale, Kisoro, and Kanungu ■ An NGO involved in conservation in Uganda (International Gorilla Conservation Program) ■ An international NGO involved in conservation in the same region (currently CARE International) ■ A research institute, the Institute of Tropical Forest Conservation (ITFC), which is an affiliate of Mbarara University of Science and Technology ■ The tourism industry, currently the President of the Uganda Tourist Association The TMB is supported by a Trust Administration Unit (TAU) comprising eight full-time and four temporary staff.
Beneficiaries	Members of community groups living within a two-parish (local administrative area) buffer surrounding the borders of the national parks. Benefits are provided in the form of social infrastructure (e.g., water infrastructural development programs, school buildings) and livelihood development programs that combine grants with capacity building training to both individuals and groups (e.g., potato farming, goat rearing, pig rearing, bee keeping, fish farming, and agro-forestry). In addition, specific livelihood-development programs are run to support members of the Batwa community in the purchase of agricultural lands and implementation of agricultural activities.
Approximate total beneficiaries (people)	At the point at which the BMCT became operational, there was a population of approximately 100,000 within the beneficiary catchment area. It can be assumed that this has grown in line with national population growth rates over the subsequent 16 years (3.6 percent per year,[10] an approximate expansion of 60,000 beneficiaries). As the majority of benefits distributed are in the form of public infrastructure and services, specific records of beneficiary numbers are not on record. However, examples of beneficiary numbers for specific programs include the following: ■ Batwa livelihood program: 200 beneficiaries ■ Community agro-forestry program: 10,000 beneficiaries ■ Gravity water supply program: 15,000 beneficiaries ■ Individual and community group livelihood-development grants: up to 40 issued per year
Total value of benefits disbursed to date	Complete records of the value of benefits disbursed to date were not recorded through interview. However, examples of the cost or value of specific beneficiary programs include the following: ■ Batwa livelihood program: approximately US $250,000 (2005–11) ■ Gravity water supply program: EU 730,000 ■ Individual and community group livelihood-development grants: approximately US $500 per grant

IN-DEPTH CASE STUDY OF BWINDI MGAHINGA CONSERVATION TRUST (BMCT)—UGANDA (*CONTINUED*)

MECHANISM NAME	BWINDI MGAHINGA CONSERVATION TRUST (BMCT)
Cofinancing of benefit sharing mechanism	Benefit disbursal is not conditional on cofinancing by beneficiaries (however, it is one of the criteria considered in the selection of grant beneficiaries). For example, community members may be required to make bricks for the construction of school buildings, with the rest of materials bought with grants from the BMCT.
Overall strengths of mechanism in delivering specific objectives	**Local interests represented at decision-making level through the Local Community Steering Committee (LCSC):** The LCSC comprises 15 elected local representatives; 1 special interest group representative (Batwa community member); 3 local NGOs (IGCP, CARE International, and Nature Uganda); and 3 local government representatives. The committee selects three of its members to sit on the TMB (including at least one woman). This ensures the objectives of the BMCT remain aligned with the needs of local beneficiaries. **The Trust Management Board operates with autonomy from government:** This has reduced the red tape in decision-making processes and allowed the TMB to operate with a firm mandate to achieve the long-term objectives of the BMCT. **Multiple stakeholder groups are represented in the TMB:** This has ensured objectivity in the decision-making processes of the board. **Benefits provided on a demand-led basis ensuring social welfare from activities are maximized:** The BMCT has learned that the types of benefits provided don't need to directly compensate for lost forest income streams. Instead, local communities associate the provision of socially valuable social infrastructure with avoided deforestation efforts and realize the value of conservation.
3. Country context	
Economy size (annual GDP)	US $15.7 billion
World Bank governance indices (–2.5 to +2.5)—a higher value indicates better governance	
Voice and accountability	–0.49
Political instability	–1.06
Government effectiveness	–0.63
Regulatory quality	–0.17
Rule of law	–0.43
Control of corruption	–0.87
Position on forest transition curve	Low Forest—High Deforestation
Drivers of deforestation	Agricultural expansion, fuel wood extraction, and unsustainable timber harvesting
Forest governance and enforcement capacity	The National Forestry Business Plan (2003) promotes the use of incentives to encourage private sector involvement in tree-planting activities. It stresses community and private sector involvement in forestry management. The decentralization system provided for by the Local Government Act of 1997 has vested the power of managing the environmental and natural resources at local government level. The reports reviewed claim that effective enforcement continues to be a challenge.
Political stance on role of market mechanisms	The Government of Uganda supports private sector investments in the forestry sector and revenue opportunities generated through carbon markets.

IN-DEPTH CASE STUDY OF BWINDI MGAHINGA CONSERVATION TRUST (BMCT)—UGANDA (*CONTINUED*)

MECHANISM NAME	BWINDI MGAHINGA CONSERVATION TRUST (BMCT)
4. How the mechanism functions	
Type of benefits delivered	■ Livelihood development grants and trainings (e.g., agriculture, animal husbandry, beekeeping, agro-forestry, and fish farming) ■ Social infrastructure (e.g., clean-water programs, sanitation infrastructures, school building construction, health centers, and public bridges) ■ Land purchase and resettlement assistance for former forest dwellers from the Batwa community group ■ Educational programs (e.g., awareness raising programs in local schools on the value of conservation) ■ Research grants to local Ph.D. students and local research centers ■ Training in grant management
Who is the holder of land title (carbon rights—if differentiated)	The Ugandan Government holds the land rights to BINP and MGNP.
Timing and punctuality of benefit disbursement	Livelihood development grant applications processed every 6–12 months. Approximately 40 grants made to individuals and self-help groups every year. Social infrastructure projects implemented in phases, typically with the backing of an additional donor (e.g., D. Swarovski is supporting the development of water-supply and sanitation programs with EU 2.1 million 2009–12).
Benefits provided up front or linked to performance	Criteria are used to assess livelihood development grant applications. These include beneficiary cofinancing; poverty level of beneficiary (pro-poor bias); distance of beneficiaries home from forest frontier; alignment with local government development objectives. However, disbursement of livelihood development grants is not linked to any ongoing performance assessment. Funding for public good construction is typically provided in tranches, with an elected beneficiary treasurer required to periodically report on the spending of tranche before issuance of a subsequent tranche.
How are benefits transferred	An allocation of the endowment funds in overseas management is transferred to the BMCT's Kampala bank account every six months. This is based on an annual budget approved by the TMB. Bilateral donors have contributed to specific BMCT activities directly. In these instances a separate Kampala-based bank account has been established for each. Benefits are then disbursed from the BMCT Kampala bank accounts through the following channels: ■ Payment of wages for extension officers who provide community trainings ■ Direct monetary transfer to research institutions' bank accounts ■ Procurement of lands for former forest dwellers ■ Allocation of cash grants (often in tranches) to individual and community group beneficiaries to procure inputs for livelihood development projects ■ Direct monetary transfer to contractors for development of large public infrastructure projects (e.g., Robtex Kasese Enterprises, who will deliver construction of 35 kilometers of gravity water flow infrastructure and reservoir tanks)

IN-DEPTH CASE STUDY OF BWINDI MGAHINGA CONSERVATION TRUST (BMCT)—UGANDA (*CONTINUED*)

MECHANISM NAME	BWINDI MGAHINGA CONSERVATION TRUST (BMCT)
Monitoring of effectiveness	Monitoring of the long-term socioeconomic impacts of the BMCTs activities has not been undertaken through a structured process. Members of the board have indicated they would like to commission a socioeconomic baseline assessment and then to hire a community officer to undertake ongoing monitoring against this. Research grants have been provided to local Ph.D. researchers and research institutions such as the Institute for Tropical Forest Conservation (ITFC) to support ongoing ecological monitoring activities in the BINP and MGNP. It was reported that because of limited financial resources of the BMCT, long-term monitoring activities of this nature are often underfunded.
Engagement and capacity building with local communities	A community working group comprising respected local leaders participated in the design phase of the BMCT operational manual, providing local insights as to how the BMCT should engage with local beneficiary groups and the types of benefits that would be greatest value. Two field staff were hired on a full-time basis at the point of the BMCT's establishment. For the first year, these staff held village meetings throughout the BMCT's catchment area, explaining how the BMCT would operate and its objectives; gathering basic data from participants; and assisting community groups with the development of livelihood project ideas. The BMCT collaborated with local NGOs such as CARE International and the IGCP during the early years of establishment. This allowed the BMCT to benefit from existing community networks and the local knowledge these NGOs had accrued through years of working in the area. LCSC established, with 15 elected representatives from local communities, including one special interest group representative (Batwa community member), three local NGOs, and three local government representatives. The LCSC plays a crucial role in the two-way dissemination of information between the TMB and BMCT beneficiaries. The BMCT hired community extension staff to work on specific livelihood programs and provide relevant trainings. These have included agro-forestry specialists, veterinarians, and agriculture experts. The BMCT has supported conservation awareness programs in local schools in collaboration with Uganda Wildlife Clubs.
Institutional requirements	The institutional requirements and governance structure for the BMCT was assessed during the design phase of the operation manual. The BMCT was established before the decentralization of government in Uganda; therefore, the institutional structure was developed in the absence of sufficient local institutional capacity. The BMCT is underpinned by four institutional bodies: the Trust Management Board (TMB), the Local Community Steering Committee (LCSC), the Trust Administrative Unit (TAU), and the Trust Advisory Committee (TAC). (See *Administered by* section for details.) The BMCT is supported by Local NGO and research institutions in an official partner capacity. These include CARE International, the International Gorilla Conservation Program, the Institute for Tropical Forest Conservation, Makerere University, the Uganda Wildlife Authority, Nature Uganda, and the Greater Virunga Transboundary Conservation Program. These partners have aligned objectives with the BMCT and play a role in delivering community program implementation, ecological monitoring activities, and park management activities.
Role of carbon markets and what would need to be changed for REDD+	There is no current link with carbon markets. Creating one would require major realignment and investment within MRV system to incorporate forest carbon stocks and flows.

IN-DEPTH CASE STUDY OF BWINDI MGAHINGA CONSERVATION TRUST (BMCT)—UGANDA (*CONTINUED*)

MECHANISM NAME	BWINDI MGAHINGA CONSERVATION TRUST (BMCT)
5. Critical success factors	
Pre-establishment	
Building blocks	**Critical success factors**
Capacity requirements	■ Five expert working groups (the local community, conservation, legal and governance, investment groups, and administration groups) spent three months designing the institutional structures and developing an operational manual for the BMCT before its establishment. ■ There was a presence of established NGOs with existing working relationships with local community groups in the BMCT catchment area. ■ BMCT administrative and field staff with a track record of working in areas with local community groups were hired. The TAU manager and his two field staff spent one year holding stakeholder meetings and trainings with local beneficiaries to ensure sufficient local capacity was in place before issuance of any trust livelihood grants. ■ In the absence of decentralized government capacity, the institutional structure for the BMCT was developed from scratch. Key to the success of the formation of the Trust Management Board, Trust Administrative Unit, Local Community Steering Committee, and Technical Advisory Committee was the selection and integration of expert representatives with an understanding of local context from government, CSOs, local community groups, the private sector, and the international donor community.
Legal framework	■ Trust legislation was developed by a policy lawyer appointed within BMCT design team and approved in parliament. This provided sufficient legal safeguards for establishment of the BMCT.
Fund management	■ Proportional allocation of benefits to be disbursed through BMCT was agreed by stakeholders from local interest groups during a three-day workshop (researchers—20 percent of funding, local communities—60 percent of funding, park management—20 percent of funding). This was perceived to be an effective and equitable process. ■ An international asset management company was identified with responsibility for investment of BMCT endowment capital.
Monitoring, reporting, and verification	■ Presence of local research institutions with sufficient technical capacity to undertake the monitoring assessments of conservation activities' effects on the ecological condition of the national park areas
Establishment and maintenance	
Building blocks	**Critical success factors**
Capacity requirements	■ The BMCT hires expert community extension workers to provide livelihood development trainings to local beneficiaries in areas such as agro-forestry, agriculture, livestock management, and bookkeeping. This ensures livelihood grant allocations are effectively used. ■ The BMCT has collaborated with partner NGOs in implementing community programs. This has allowed the existing expertise of these partner organizations to be used to achieve shared objectives. ■ The multistakeholder TMB operates with autonomy from government with a mandate to oversee implementation of the BMCT's policy in line with overall objectives. This has allowed the BMCT to avoid the red tape associated government administration. ■ LCSC provides a pivotal channel of communication among TMB and local communities, ensuring priority benefit types are identified and disbursed accordingly.

IN-DEPTH CASE STUDY OF BWINDI MGAHINGA CONSERVATION TRUST (BMCT)—UGANDA (*CONTINUED*)

MECHANISM NAME	BWINDI MGAHINGA CONSERVATION TRUST (BMCT)
Legal framework	■ BMCT bylaws have provided a robust foundation for key institutional structures to operate effectively.
Fund management	■ Additional bilateral donor funding was provided that covered operational costs of the BMCT in initial years of establishment. This allowed for initial endowment capital provided by GEF to remain unspent and grow through investments from US $4 million to approximately US $6.7 million today. Once this investment has grown sufficiently, the endowment trust fund model will provide a reliable constant minimum amount of funding upon which the BMCT can operate.
Monitoring, reporting, and verification	■ Livelihood grant beneficiaries are required to develop implementation plans with the assistance of community extension workers as a prerequisite to issuance of grants, and to submit periodic update reports to trigger release of subsequent tranches of funding. This acts as a safeguard to misappropriation of funding, and helps to ensure that grants are spent in an effective and equitable manner.

[10] CIA website, https://www.cia.gov/library/publications/the-world-factbook/geos/ug.html (accessed 6th June 2011).

IN-DEPTH CASE STUDY OF ECOLOGICAL ICMS—BRAZIL

MECHANISM NAME	ICMS ECOLÓGICO, BRAZIL
1. Overview	
Typology	Subnational performance-based benefit sharing mechanism A mechanism of tax revenue distribution that is weighted against ecological criteria applied in municipalities. ICMS Ecológico, or ICMS-E, is implemented in a number of states throughout Brazil.
Summary	■ Scale of mechanism—subnational ■ A public-sector managed mechanism ■ Source of funding—revenue collected from state-level value-added tax (ICMS) ■ Type of mechanism—Payment for maintenance of protected areas and other environmental services ■ Linked to national level funding—no direct funding linkages, but part of a national policy
Basic description of mechanism	State-level government tax revenue distribution system to municipal governments dependent on ecological performance by municipalities.
Key lessons	The lessons learned from ICMS-E can be divided into the following sections, which correspond directly to the four building blocks of Options Assessment Framework 2: Subnational benefit sharing mechanisms. These are grouped under capacity building, legal framework, fund management, and MRV. **Capacity building** ■ In the states where ICMS-E has been successful, such as Paraná, individual municipalities have high capacity and the mandate to manage protected areas. A strong legal mandate for local government to manage protected forest areas accompanied by capacity building could help strengthen the effectiveness of subnational REDD+ benefit sharing mechanisms. This is not currently the case in many REDD+ nations that have centralized protected area authorities. ■ During pre-establishment the existing state-level capacity for monitoring and reporting technical ecological conservation data was identified. Gaps in capacity were identified, and appropriate capacity building actions were taken to increase the technical monitoring capacity within state government.

IN-DEPTH CASE STUDY OF ECOLOGICAL ICMS–BRAZIL (*CONTINUED*)

MECHANISM NAME	ICMS ECOLÓGICO, BRAZIL
	■ Where municipalities don't have this capacity, they have the flexibility to partner with NGOs to increase their ability to successfully implement protected-area and environmental projects (e.g., this has been used in Sao Paulo state). ■ Capacity building is provided to landowners and managers of protected areas by local authorities to maintain environmental quality of managed land and to help prepare the necessary registration documentation to engage with ICMS-E. ■ Direct cash transfers are made to private landowners if distinct arrangements are made at the municipal level to reward owners of privately protected land, such as Private Natural Patrimony Reserves (RPPNs). Mutually beneficial arrangements have been constructed in some states to allocate up to 50 percent of ICMS-E returns attributed to individual RPPNs, to the RPPN owner. A similar system could be considered as a means of redistributing REDD+ funds to private developers under a nested approach to REDD+. ■ Indirect benefits to communities are prioritized by local authorities (e.g., well drilling, cleaning and landscaping of urban areas, rubbish collection, landfills, environmental education, and enforcement of land use controls). The use of ICMS-E returns are often widely publicized and increases awareness of the value generated locally by protected areas. ■ There is strong coordination between state-level finance and environment institutions. This allows for the clear connection of ICMS-E funds to well-managed protected areas. **Legal framework** ■ Brazilian legislation clearly supports the process for allocating ICMS returns to the municipal level, with ecological criteria clearly specified. If REDD+ benefit sharing mechanisms intend to use existing tax distribution systems to transfer REDD+ funding on a performance basis, there may be a need for legal reform to include REDD+ performance as a criteria in determining tax distribution to local governments. **Fund management** ■ For government-to-government REDD+ benefit transfer, policy makers should consider using existing benefit transfer channels (e.g., tax or other forms of revenue sharing). ■ The use of a relatively simple direct cash transfer system from state to municipal authorities allows higher levels of transparency. ■ ICMS-E builds on existing institutional structures for administration of the ICMS tax system, making transaction costs moderate; however, additional capacity is required at state and municipal levels. **MRV** ■ A frequently updated web portal on revenue transfers to municipalities has helped maintain transparency and engendered wide public support for the ICMS-E. The use of a similar, publically available information source may be important for REDD+ benefit sharing mechanisms. ■ Increasingly, qualitative data, in addition to quantitative data, are being collected on the effectiveness of the ICMS-E. Including qualitative factors in monitoring has proven useful, forming a decision-making tool for municipalities and allowing deeper engagement with local stakeholders. ■ The addition of a quality index for protected areas is being developed across several states to increase the accuracy of the municipality's ecological index. This is improving the incentive for protected areas to be managed for increased conservation value. ■ Capacity for verification of indices at the municipal level varies, but in some states there are decentralized state offices to regularly collect and evaluate data to support ICMS-E.

IN-DEPTH CASE STUDY OF ECOLOGICAL ICMS–BRAZIL (*CONTINUED*)

MECHANISM NAME	ICMS ECOLÓGICO, BRAZIL
2. Background information	
Background to mechanism	Established in Paraná state in 1992 by the state government, this was the first initiative of its kind in Brazil to allocate a percentage of revenue from ICMS tax (Imposto sobre Circulação de Mercadorias e Serviços)—similar to value-added tax—generated within the state to compensate municipal authorities with large protected areas for the land-use restrictions that they face, while providing incentives for conservation. An ICMS-E mechanism is now being implemented, developed, or discussed in 24 states.[11]
Stated objectives	The ICMS-E has two main objectives: ■ To compensate local authorities for adopting good environmental practices such as applying land-use restrictions on protected areas or watershed protection areas. ■ To provide an incentive to implement and manage protected areas or increase the land area under protection.
Scope	The Federal Constitution of Brazil decrees that 25 percent of the revenues raised by ICMS tax are to be allocated from state to municipal governments. Seventy-five percent of the total amount passed on to the municipalities is distributed according to the share of the state ICMS that has been collected within that municipality. The state governments determine the selection criteria to be used to allocate the remaining 25 percent to municipalities. Since the 1990s, states have begun to use ecological criteria to allocate tax returns to municipalities. Ecological criteria vary by state, but often acknowledge the presence of the following in each municipality: ■ Conservation units—officially registered protected areas for nature and biodiversity conservation ■ Watershed protection areas ■ Solid waste disposal sites ■ Sanitation systems and sewage disposal ■ Slash and burn controls in place ■ Soil protection initiatives ■ Municipal environmental policies These factors are evaluated and used to determine the "ecological index" of each municipality. The ICMS revenues allocated to municipalities are calculated by multiplying the ecological index of the municipality by the total amount of ICMS-E revenues dedicated to conservation units by the state.
Years in operation	19
Target country or region	ICMS-E is being implemented, developed, or discussed in 24 states.[12] Thirteen states have introduced the use of ecological criteria for the allocation of ICMS to municipal authorities: Paraná, Minas Gerais, São Paulo, Rondônia, Mato Grosso do Sul, Tocantins, Pernambuco, Rio Grande do Sul, Acre, Amapá, Mato Grosso, Goiás, and Rio de Janeiro. Seven states are constructing the legal and institutional base for implementation: Santa Catarina, Espírito Santo, Amazonas, Bahia, Ceará, Para, and Alagoas. In addition, the states of Sergipe, Piaui, and Rio Grande do Norte have draft laws that are being considered by the respective legislative assemblies, and consultation is taking place in Paraiba to sensitize stakeholders to the prospect of ICMS-E implementation.

IN-DEPTH CASE STUDY OF ECOLOGICAL ICMS–BRAZIL (*CONTINUED*)

MECHANISM NAME	ICMS ECOLÓGICO, BRAZIL
Administered by	State government and municipal authorities. For example, in Paraná state, administration of the ICMS-E program is one of the responsibilities of the State Environmental Institute.
Beneficiaries	Municipal authorities receive ICMS returns on the basis of meeting ecological criteria. Indirect beneficiaries are as follows: ■ Public-private partnerships may be provided with funding support for improving land use sustainability ■ Private land users—where municipalities are providing funding support for private land users to manage conservation units ■ Communities to indirectly benefit from increased local revenue
Approximate total beneficiaries (people)	Multiple municipalities benefit in each state implementing ICMS-E. As such, several million people throughout Brazil indirectly benefit from the revenue transferred to municipal governments.
Total value of benefits disbursed to date	On average, the ecological share of total ICMS revenue is 5 percent in states operating the ICMS-E. This is distributed among municipalities that demonstrate adherence to the prescribed ecological criteria. As an indication, in Paraná, ICMS-E returns averaged over R $50 million (US $20.5 million) annually between 1994 and 2000, and totaled an estimated US $160 million up to 2006.
Cofinancing of benefit sharing mechanism	No
Overall strengths of mechanism in delivering specific objectives	Clear increase in the number and size of protected areas in states where ICMS-E is operational. For example, in Paraná there has been an increase of 158 percent in protected area land cover since the beginning of the ICMS-E scheme. This state also has a good record of maintaining and improving the quality of the protected areas. The addition of a quality index for protected areas is being developed across several states to increase the accuracy of the municipality's ecological index. This is improving the incentive for protected areas to be managed for increased conservation value. Consistent and scalable increase in municipalities now benefiting from ICMS-E revenues. ICMS-E has greatly improved relations between protected areas and the surrounding inhabitants.
3. Country context	
Economy size (annual GDP)	US $1.573 trillion
World Bank governance indices (–2.5 to +2.5)—a higher value indicates better governance	
Voice and accountability	+0.51
Political instability	+0.29
Government effectiveness	+0.08
Regulatory quality	+0.18
Rule of law	–0.18
Control of corruption	–0.07
Position on forest transition curve	High Forest—High Deforestation
Drivers of deforestation	Deforestation of the Amazon region largely attributed to agricultural expansion and cattle production

IN-DEPTH CASE STUDY OF ECOLOGICAL ICMS–BRAZIL (*CONTINUED*)

MECHANISM NAME	ICMS ECOLÓGICO, BRAZIL
Forest governance and enforcement capacity	There is extensive legislation regulating forests and land tenure in Brazil. The existing legal framework in Brazil enables land users to obtain legal title if they have made the land productive for five continuous years. Despite this, Brazil lacks a central land registry and, because of complicated systems of ownership, disputes over land ownership are common. The Terra Legal Program was initiated in 2009 with the goal to establish the regulation of 80 percent of Amazonian land titles over the next two to three years.
Political stance on role of market mechanisms	The National Plan on Climate Change does not allow for offsets or the possibility of trading the carbon stored in the forests.
Socio-political standing of indigenous groups	Relatively high socio-political standing of indigenous groups. Legal indigenous reserve system in place.
4. How the mechanism functions	
Type of benefits delivered	Direct cash transfers from state to municipal authorities are the principle benefits received through the ICMS-E mechanism. Capacity building of landowners and managers of protected areas by local authorities to maintain environmental quality of the land and for preparation of necessary registration documentation. Direct cash transfers to private landowners if distinct arrangements are made at the municipal level to reward owners of privately protected land, such as Private Natural Patrimony Reserves (RPPNs). Mutually beneficial arrangements have been made in some states to allocate up to 50 percent of ICMS-E returns attributed to individual RPPNs, to the RPPN owner. Indirect benefits to communities as prioritized by local authorities (e.g., well drilling, cleaning and landscaping of urban areas, rubbish collection, landfills, environmental education, and enforcement of land use controls). The use of ICMS-E returns are often widely publicized and increases awareness of the value generated locally by protected areas.
Who is the holder of land title (carbon rights—if differentiated)	Protected areas may be under the jurisdiction of the federal government, the state, or the municipality. Therefore limiting local government power to influence decisions made on the designation and maintenance of a large proportion of the area set aside for protection. Privately owned protected areas may qualify against ICMS ecological criteria; however, any ICMS revenue associated with them accrues to the municipality and not to the owner of the land. There are cases, however, in which agreements have been made among municipal authorities and private landowners for sharing ICMS-E returns as described above. Carbon rights are not differentiated from land rights in Brazilian legislation.
Timing and punctuality of benefit disbursement	Linked to established mechanism of ICMS revenue payments, so disbursement is predictable.
Benefits provided up front or linked to performance	Annual monitoring of ecological criteria helps determine the calculation of ICMS-E returns to municipalities. This tends to be organized at the state level, but also draws on municipal monitoring capacity. Municipalities have the responsibility to maintain protected areas year after year and have the incentive to increase areas to improve ICMS-E returns. The use of a quality index is being developed in some states to incentivize the quality of management of protected areas. Capacity for verification of indices at the municipal level varies, but in some states there are decentralized state offices to regularly collect and evaluate data to support ICMS-E.

IN-DEPTH CASE STUDY OF ECOLOGICAL ICMS–BRAZIL (*CONTINUED*)

MECHANISM NAME	ICMS ECOLÓGICO, BRAZIL
How benefits are transferred	ICMS tax revenue is collected by the state and then regular (often monthly) transfers are made from the state to municipality level on the basis of ICMS criteria. Returns are transferred as a lump sum. Municipalities must understand how tax returns are calculated to track the benefit of investing in meeting ecological criteria. Transfer of benefits to local communities is often nonmonetary, including investments in local infrastructure and in health and education initiatives.
Monitoring of effectiveness	The ICMS-E programs are customized in design at the state level. As such, the monitoring and verification of the effectiveness of ICMS-E and meeting ecological criteria varies between states. More sophisticated monitoring systems are present in higher income states with increased capacity at state and municipal levels. In Paraná, decentralized state offices provide a localized monitoring and reporting function and bolster capacity at the municipal level. Tocantins state conducts an annual survey with municipalities; 47 questions investigate how ecological criteria are being met and require quantitative and qualitative responses. The state's Institute for the Environment collates and validates the information. Ideally, a state authority should have responsibility for monitoring the use of ICMS-E returns provided to municipalities and encourage programs that minimize environmental degradation to maximize effectiveness against overall objectives.
Engagement and capacity building with local communities	Because the ICMS-E principally benefits local authorities, capacity building and engagement with local communities is dependent on the priority this is given at municipal level.
Institutional requirements	ICMS-E builds on existing institutional structures for administration of the ICMS tax system making transaction costs moderate; however, additional capacity is required at state and municipal levels. Municipal authorities must have the human resources and capacity to effectively invest in meeting ecological criteria; provide data and evidence on actions taken to the state administration and responsibly spend the resources which the ICMS-E generates. A range of state level institutes are involved in different aspects of delivering the ICMS-E mechanism. In Tocantins, the state environmental institute provides guidance on the development of ecological criteria and collects and evaluates data from monitoring exercises; the state agricultural institute collates and validates technical information on specific ecological criteria such as soil quality; the state's sustainable development bureau consolidates and communicates provisional and agreed ICMS-E criteria and the state financial agency receives ICMS indices, consolidates and publishes data, and also calculates the returns to be made to each municipality.
Role of carbon markets and what would need to be changed for REDD+	Not applicable. Entirely funded by existing ICMS tax mechanism. Would require major strategic and operational changes to be used for REDD+, along with a realignment of the MRV system to focus on forest carbon stocks and flows. This may include use of additional criteria such as carbon stock quality indexes, which would need to be monitored against to ensure the generation of real and permanent emission reductions. This would require capacity building in MRV systems and skills. Because carbon rights are not differentiated from land rights in Brazilian legislation, standardized agreements would need to be developed outlining carbon revenue sharing arrangements between municipal authorities and private landowners.
5. Critical success factors	
Pre-establishment	
Building blocks	**Critical success factors**
Capacity requirements	■ During pre-establishment, the existing state-level capacity for monitoring and reporting technical ecological conservation data was identified. Gaps in capacity were identified, and appropriate capacity-building actions taken to increase the technical monitoring capacity within state government.

IN-DEPTH CASE STUDY OF ECOLOGICAL ICMS–BRAZIL (*CONTINUED*)

MECHANISM NAME	ICMS ECOLÓGICO, BRAZIL
Legal framework	■ One of the enabling conditions for ICMS-E is that municipalities have the mandate to manage protected areas. This local government mandate to protect natural habitat is an important consideration for REDD+ benefit sharing mechanisms.
Fund management	■ State-level government has previous experience in managing ICMS returns and distributing them downward to municipalities
Monitoring, reporting, and verification	■ Existing state- or regional-level capacity for monitoring and reporting technical information is reviewed and primed for development.
Establishment and maintenance	
Building blocks	**Critical success factors**
Capacity requirements	■ Enhanced support from the state to municipalities with large protected areas. State agencies should prioritize support to such municipalities for effective engagement with and monitoring of ICMS-E criteria. ■ Capacity at the municipal level should be sufficient to monitor how performance against ICMS-E ecological criteria develops over time. ■ Strong coordination between state-level finance and environment institutions to clearly connect the flow of funds with sustained and well-managed protected areas.
Legal framework	■ Legislation must clearly support the process for allocation of ICMS returns to the municipal level, with ecological criteria clearly specified.
Fund management	■ Strengthening the existing ICMS tax return system to support the inclusion of ecological criteria for calculation of returns to municipalities.
Monitoring, reporting, and verification	■ Technical skills at state and municipal levels to monitor municipality performance against ecological criteria. This was enabled through specific allocation of funding support targeting these areas, and technical support provided by key state institutions. In states with more sophisticated monitoring processes, this may include conducting ecological and biophysical surveys to provide data, engaging with local communities to provide qualitative information, and consolidating findings into the necessary reporting formats.

[11] There are 27 Brazilian states, including the Brazilian Federal District containing Brasília.

[12] *Sources:* Ring, 2008; Loureiro, 2008; ICMS Ecológico website

IN-DEPTH CASE STUDY OF FOREST INVESTMENT ACCOUNT (FIA) LAND BASE INVESTMENT PROGRAM (LBIP), BRITISH COLUMBIA–CANADA

MECHANISM NAME	FOREST INVESTMENT ACCOUNT, CANADA
1. Overview	
Typology	Subnational input-based benefit sharing mechanism The Land Base Investment Program is one of five programs supported under the government of British Columbia's Forest Investment Account. The LBIP provides funding to forest sector tenure holders to invest in sustainable forest management activities.
Summary	■ Public provincial-level funding ■ Source of financing—Public funds and taxes ■ Type of mechanism—Sustainable Forest Management ■ Linked to national level funding—Yes
Basic description of mechanism	Public funding is made available to forest landholders to implement projects that will maintain the ecological and economic value of British Columbia's forests.

IN-DEPTH CASE STUDY OF FOREST INVESTMENT ACCOUNT (FIA) LAND BASE INVESTMENT PROGRAM (LBIP), BRITISH COLUMBIA–CANADA (*CONTINUED*)

MECHANISM NAME	FOREST INVESTMENT ACCOUNT, CANADA
Key lessons	■ Strong leadership from provincial-level ministries supported by independent administrative and audit functions for individual programs helps to maintain high governance and management standards. ■ The program integrates and creates synergies between other similar government programs to leverage funds and decrease delivery costs. ■ Regular, independent audits take place to assess conformance with a Recipient Agreement and project work standards, supported by effective monitoring and risk-management processes. ■ First Nations (aboriginal) information sharing requirements must be met before beginning a project. Where identified, there is public involvement in sustainable forest management planning through the use of public advisory groups. For all project activities planned within a given year, recipients need to contact First Nations and provide the district manager with a record of correspondence, including details of issues discussed and outstanding issues. If necessary, identified issues can be reviewed by the Ministry of Forests. ■ Project work requires the involvement of a registered professional who signs off on the project completion reports, taking responsibility for the project's financial information and deliverables. ■ The program uses an Internet-based information management system (FIRS) to enable recipients to submit project plans, amendment requests, quarterly reports, and completion reports. This information is reviewed and approved by an investment management team and then archived in the system database along with any additional project documentation. ■ Quality in project design and delivery is ensured through expert review of project proposals by the investment management team, adherence to government work standards or an approved work plan, requirements for quality assurance processes built into projects, and independent performance audits of work completed.
2. Background information	
Background to mechanism	■ In 2001, the government of British Columbia made a decision to change its approach to forest investment by establishing a funding program with a more accountable and efficient structure, the Forest Investment Account (FIA). ■ Established in 2002, the FIA Land Base Investment Program (LBIP) is a forest sector investment model led by the Ministry of Forests and Range to deliver the province's forest investment in an accountable, efficient manner and to assist government with developing a globally recognized, sustainably managed forest industry. ■ Funding is allocated to eligible forest licensees to carry out nonobligation forest management activities to enhance the productivity and ensure sustainable management of the Crown forest asset base.
Stated objectives	The purpose of the FIA LBIP is to help government develop a globally recognized, sustainably managed forest industry. Administered by a third-party administrator, the FIA LBIP provides funding to forest tenure holders to do the following: ■ Support sustainable forest management practices ■ Improve the public forest asset base ■ Promote greater returns from the use of public timber

IN-DEPTH CASE STUDY OF FOREST INVESTMENT ACCOUNT (FIA) LAND BASE INVESTMENT PROGRAM (LBIP), BRITISH COLUMBIA–CANADA (*CONTINUED*)

MECHANISM NAME	FOREST INVESTMENT ACCOUNT, CANADA
Scope	The FIA was founded on legislation authorizing the Minister of Forests and Range to provide funding for certain forest management activities. Specific amounts have been dedicated to program elements implemented through a provincial-level strategy; other amounts have been allocated for disbursement to eligible forest tenure licensees in each forest management unit throughout the province. Under the LBIP, the largest of all the FIA programs, funding allocations are awarded to eligible recipients for appropriate projects. The program budget is established each year through an annual vote of the British Columbia provincial government. Government staff establish program objectives, develop and maintain project activity standards, and are available as consultants for technical issues. Beneficiaries (recipients) are selected by the ministry based on timber allocations on crown land. Funding is distributed to licensees according to an allocation formula based on apportioned Allowable Annual Cut (i.e., the AAC volume has to be of sufficient size in relation to other program recipients to warrant a Canadian $10,000 minimum funding allocation).
Years in operation	8
Target country or region	Canada, British Columbia
Administered by	The British Columbia Ministry of Forests and Range (now within the Ministry of Forests, Lands and Natural Resource Operation [MFLNRO]) has authority over the FIA. The Deputy Minister of MFLNRO chairs the Forest Investment Council (FIC), whose membership includes deputy ministers from the Ministry of Environment, Ministry of Agriculture and Lands, three industry representatives, and one representative from the forest research and technology sector. The role of the FIC is to provide strategic direction and make recommendations on all FIA programs, either in reaction to issues brought before it or at its own volition, including the following: ■ The objectives, strategies, and funding of FIA programs ■ Financial and performance monitoring through quarterly reporting, and audits ■ The required content of various business plans and reports The FIC receives progress reports and audit results from the program administrators and is responsible for determining whether guidance or restrictions are necessary to ensure that investment choices provide the greatest contribution to sustainable forest management. The program delivery and fund management of the FIA LBIP is contracted out to a private entity. PwC Canada provides this function for the FIA LBIP, and in addition, for the FIA Forest Science Program. This management support includes the following: ■ Strategic direction, advice on program governance, and development of program policy ■ Procurement and project administration ■ Accounting and information management system administration ■ Internal financial and performance auditing ■ Advisory services for performance management, reporting, and continuous improvement
Beneficiaries	Commercial or crown forest landholders and managers. Fund recipients are selected by the ministry based on timber allocations on crown land.
Approximate total beneficiaries (people)	Between 800 and 1,200 projects are funded per year and benefit a wide range of recipients.
Total value of benefits disbursed to date	CAD 369.10 million since 2002. Average CAD 46.2 million per year.

IN-DEPTH CASE STUDY OF FOREST INVESTMENT ACCOUNT (FIA) LAND BASE INVESTMENT PROGRAM (LBIP), BRITISH COLUMBIA–CANADA (*CONTINUED*)

MECHANISM NAME	FOREST INVESTMENT ACCOUNT, CANADA
Cofinancing of benefit sharing mechanism	The LBIP does not require recipient contributions.
Overall strengths of mechanism in delivering specific objectives	■ The strategic focus maximizes economic potential of public forest resources. ■ The licensees operate within the project area and understand the local priorities and resource management issues. ■ Third-party administration ensures an objective approach. Government established and prioritized the program policy; the administrator now implements and enforces that policy. This creates efficiencies and allows establishment of efficient delivery mechanisms that might not otherwise have been possible through in-house administration. ■ Program delivery at provincial scale enables cost-efficiencies in material procurement and managing contractor capacity. ■ Providing recipients with a delivery allowance contingent on achieving project outcomes creates incentives to complete planned works.
3. Country context	
Economy size (annual GDP)	US $1.3 trillion
World Bank governance indices (–2.5 to +2.5)—a higher value indicates better governance	
Voice and accountability	+1.44
Political instability	+1.02
Government effectiveness	+1.78
Regulatory quality	+1.64
Rule of law	+1.78
Control of corruption	+2.04
Position on forest transition curve	Not applicable, not REDD target country (deforestation 0.1 percent per annum).
Drivers of deforestation	■ Land-use change (95 percent of BC is crown land and with the implementation of a new forest code, reforestation measures were enhanced) ■ Insect outbreaks, forest fires
Forest governance and enforcement capacity	■ Centralized forest governance, policy and regulatory decision making ■ Good resources within national and regional institutions for MRV
Political stance on role of market mechanisms	■ Open to market mechanisms, but not a priority for this mechanism. ■ In British Columbia, there are several examples of forestry carbon credit projects. The Pacific Carbon Trust, a Crown Corporation, was established by the BC government to stimulate the carbon economy by purchasing carbon credits in order to offset public sector emissions. There are also several other forestry carbon credit projects that have been established for trade on voluntary markets.
Socio-political standing of indigenous groups	First Nations have relatively high political profile and legal recognition of land rights.
4. How the mechanism functions	
Type of benefits delivered	Fixed-term cash grants paid to project developers. The minimum funding allocation for recipients is CAD 10,000. Project values, in general, vary from CAD 1,000 to CAD 1 million.
Who is the holder of land title (carbon rights—if differentiated)	FIA LBIP funds are only available for activities on crown land. The holder of land titles is the crown. There are no benefits delivered to private landholders.

IN-DEPTH CASE STUDY OF FOREST INVESTMENT ACCOUNT (FIA) LAND BASE INVESTMENT PROGRAM (LBIP), BRITISH COLUMBIA–CANADA (*CONTINUED*)

MECHANISM NAME	FOREST INVESTMENT ACCOUNT, CANADA
Timing and punctuality of benefit disbursement	Payment on acceptance and approval of project plan, in advance of results. There have been no reported delays of payment.
Benefits provided up front or linked to performance	Funding allocations are made available to eligible recipients. Funds are advanced by the administrator for approved projects only. Final payments are made on completion of the project activity.
How are benefits transferred	■ The program budget is established each year through an annual vote of the British Columbia provincial government. ■ The provincial government delegates responsibility for all administration and disbursement of program funds to the company providing administrative support to the FIA LBIP. ■ Funds are disbursed following the establishment of a recipient agreement between the administrator and the fund recipient. This agreement establishes requirements for project and file management, accounting, project reporting, use of funds, and auditing. ■ Two signatures are required on checks issued to program recipients. ■ All funding approved is for annual use only. Approved projects must be completed in one fiscal year; any unspent funds are returned to the administrators for use in alternate projects or returned to the government.
Monitoring of effectiveness	Administrative performance measures are reported on an annual basis to the Forest Investment Council members. For the LBIP, PwC project management and monitoring of recipient performance includes the following: ■ The implementation of a proprietary risk management methodology and suite of sophisticated risk assessment and audit management tools to control risks and increase returns ■ A results-based project management framework, including monitoring and verifying fieldwork, that ensures cost-effective project performance ■ Development and implementation of a program of financial and performance audits and reviews, including the administration of sanctions pursuant to non-performance ■ A screening process to conduct due-diligence reviews of investment proposals and consistency with program-eligibility criteria, risk analysis, and cost guidelines ■ The establishment of information management systems to monitor investment progress and manage the accounting of fund advances, adjustments, final payments, and recoveries ■ The fund managers (PwC) are subject to audit by the British Columbia Office of the Auditor General.

IN-DEPTH CASE STUDY OF FOREST INVESTMENT ACCOUNT (FIA) LAND BASE INVESTMENT PROGRAM (LBIP), BRITISH COLUMBIA–CANADA (*CONTINUED*)

MECHANISM NAME	FOREST INVESTMENT ACCOUNT, CANADA
Engagement and capacity building with local communities	■ First Nations (indigenous groups) are consulted if forestry activities overlap with traditional land rights before project implementation. ■ For all project activities planned within a given year, recipients need to contact First Nations and provide the district manager with a record of correspondence, including details of issues discussed and outstanding issues. If necessary, identified issues can be reviewed by the Ministry of Forests, Lands and Natural Resource Operations. ■ An annual Land Base Investment Rationale is developed to engage stakeholders in planning and prioritizing projects. ■ Most FIA LBIP project activities involve strategic-level planning, which often takes into consideration social factors, such as access management planning related to road deactivation and restoration. ■ For LBIP, as necessary, PwC provides likely project participants with design assistance.
Institutional requirements	■ A focal authority, the Ministry of Forests, Lands and Natural Resource Operations, in the provincial government provides program governance and budget oversight. ■ The government employs four people to oversee the FIA LBIP program, establish and review program objectives, develop annual program budgets for government approval, and develop and maintain program standards and specifications. ■ External administrative and audit support for FIA LBIP programs is provided by private entities, including PwC.
Role of carbon markets	n.a.
5. Critical success factors	
Pre-establishment	
Building blocks	**Critical success factors**
Capacity requirements	■ Provincial government directed that the delivery of the FIA LBIP was to be outsourced because it was considered to be a "non-core" function of its civil servants. Staffing within government for the program was set at a minimum to provide oversight and direction as needed to PwC.
Legal framework	■ Review of existing environmental legislation to understand how proposed projects on crown (public) lands must comply with necessary legal standards.
Fund management	■ Integration and synergies between similar government programs to leverage funds and decrease delivery costs.
Monitoring, reporting, and verification	■ Effective and efficient communication procedures were established between the government and PwC, as well as program recipients.
Establishment and maintenance	
Building blocks	**Critical success factors**
Capacity requirements	■ An organization structure and governance polices designed to ensure the program is delivered in an objective manner, free of conflict of interest. ■ Cleary defined roles for all stakeholders and appropriate communication protocols are developed and followed. ■ The ability to integrate and create synergies between other, similar government programs to leverage funds and decrease delivery costs. ■ Project work requires the involvement of a registered professional who signs off on the project completion reports, taking responsibility for the project financial information and deliverables.

IN-DEPTH CASE STUDY OF FOREST INVESTMENT ACCOUNT (FIA) LAND BASE INVESTMENT PROGRAM (LBIP), BRITISH COLUMBIA–CANADA (*CONTINUED*)

MECHANISM NAME	FOREST INVESTMENT ACCOUNT, CANADA
Legal framework	■ Setting of program remit and standards in necessary provincial regulations. ■ Non-conformances within the program are identified during audits and result in corrective actions and repayment of funds. ■ First Nations (aboriginal) information sharing requirements must be met before starting a project. Where identified, there is public involvement in sustainable forest management planning (public advisory groups).
Fund management	■ Regular, independent audits take place to assess conformance with the recipient agreement, supported by effective auditing, monitoring, and risk-management processes.
Monitoring, reporting, and verification	■ Key experts with appropriate technical skills review, approve, and monitor projects. ■ The program uses an Internet-based information management system (FIRS) to enable recipients to submit project plans, amend requests, and submit quarterly and completion reports. This information is reviewed and approved by an independent auditor and then archived in the system database along with any additional project documentation.

ANNEX II: HIGH-LEVEL CASE STUDY ASSESSMENTS

This annex presents a review of seven mechanisms. The reviews are based on a literature review. It should be clear that the authors of this report were not able to verify the primary data. The mechanisms presented in this annex include:

- Green Resources Uchindile and Mapanda VCS Project—Tanzania
- Nile Basin Reforestation Project—Uganda
- Oddar Meanchey—Cambodia
- REDD+ Approach—Indonesia
- Rewarding Upland Poor for Environmental Services (RUPES)—The Philippines
- Amazon Fund—Brazil
- Program for Hydrological Environmental Services (PSAH)—Mexico

HIGH-LEVEL CASE STUDY OF GREEN RESOURCES UCHINDILE AND MAPANDA VCS PROJECT–TANZANIA

MECHANISM NAME	GREEN RESOURCES UCHINDILE AND MAPANDA VCS PROJECT
1. Background information	
Summary	■ Scale of mechanism—Project ■ Private sector-led initiative ■ Source of financing—Private investment and carbon markets ■ Type of mechanism—REDD+ ■ Link to national level funding—No
Basic description of mechanism	Green Resources Limited (GRL) provides community groups bordering its plantation operations with employment opportunities, health programs, and community infrastructure to meet staffing requirements and to enhance its social license to operate in the region.
Background of mechanism	GRL is a private-sector plantation, renewable energy, and carbon offset company operating across East Africa. GRL acquired a long-term lease from the government of Tanzania for the establishment of plantation forestry operations in the southern highland areas of Uchindile and Mapanda, in 2001 and 2003, respectively. Since these dates, GRL has established mutually beneficial relationships with local communities through implementation of employment and community development programs.
Stated objectives	To uplift the socioeconomic status of the native rural communities in the areas surrounding the plantation operations.
Scope	■ Provide employment opportunities ■ Implement outgrower scheme ■ Develop social infrastructure (e.g., schools, health centers, and roads) ■ Share carbon revenues (10 percent of project total)
Years in operation	10

HIGH-LEVEL CASE STUDY OF GREEN RESOURCES UCHINDILE AND MAPANDA VCS PROJECT–TANZANIA (*CONTINUED*)

MECHANISM NAME	GREEN RESOURCES UCHINDILE AND MAPANDA VCS PROJECT
Target country or region	Uchindile, Kilombero, Tanzania and Mapanda, Mufindi, Tanzania
Administered by	Green Resources Limited
Beneficiaries	■ Agricultural communities ■ Landless small-scale farmers ■ Land-holding small-scale farmers
Approximate total beneficiaries (people)	Estimated range: 1,000-10,000.
Total value of benefits disbursed to date	Information not publically available.
Co-financing of benefit sharing mechanism	Yes—Labor inputs for establishment of community and private woodlots by local community members. Seedlings and training provided by GRL.
Overall strengths of mechanism in delivering specific objectives	■ Independent consultants undertook socioeconomic assessments of project risks and community needs before project implementation. This formed a knowledge base from which to design effective mitigation measures to reduce negative effects. ■ GRL has developed a community monitoring survey that is administered every three years to assess project impacts across different demographic groups of local communities. ■ GRL has in place a company bylaw to ensure equal participation of women within the community-development programs and direct employment within the company's plantation operations.
2. Country context	
Economy size (annual GDP)	US $21.6 billion
World Bank governance indices (–2-5 to +2.5)—higher rating indicates better governance.	
Voice and accountability	–0.14
Political instability	+0.08
Government effectiveness	–0.42
Regulatory quality	–0.38
Rule of law	–0.35
Control of corruption	–0.42
Position on forest transition curve	Low Forest—High Deforestation
Drivers of deforestation	■ Small-scale agricultural expansion (slash and burn) ■ Charcoal extraction
Forest governance and enforcement capacity	The Land Act of 1999 and the Village Act of 1999 established that land is the property of the state and can only be leased from the government for a specific period of time and activity. Land areas can be sold under 99-year lease agreements. The National Land Policy aims to ensure the sustainable use of land, to guide allocations, and to resolve conflicts. The coordination of licensing mandates at the local and central government levels is unclear, as is the devolution of land management responsibilities from the commissioner for lands to the local government. A lack of proper instruments for enforcement of legislation and policies by local authorities is also a problem.
Political stance on role of market mechanisms	Tanzania favors a fund-based approach to REDD+ financing.

HIGH-LEVEL CASE STUDY OF GREEN RESOURCES UCHINDILE AND MAPANDA VCS PROJECT–TANZANIA (*CONTINUED*)

MECHANISM NAME	GREEN RESOURCES UCHINDILE AND MAPANDA VCS PROJECT	
Socio-political standing of indigenous groups	Indigenous groups have marginalized socioeconomic political standing. Under the Land Act, payment of compensation by the state to the landowner extinguishes customary rights to the land.	
3. Specifics of the mechanism		
	Description	**Critical factors for success of replication**
Type of benefits delivered	■ Capacity building (e.g., silviculture training, education programs, and health training) ■ In-kind benefits (e.g., free seedlings) ■ Employment opportunities in plantation forestry ■ Community land-use planning (a prerequisite to formal registration of community lands with the government) ■ Infrastructural developments (e.g., school buildings, health facilities, and roads)	■ Provision of such benefits requires capacity in community outreach and extension services. ■ Role of private sector in delivery of national REDD+ objectives must be considered fully in national REDD+ strategy.
Who is the holder of land title (carbon rights—if differentiated)	■ GRL holds land title on a 99-year lease, and as such holds rights to carbon credits generated from project.	■ In the absence of carbon revenue-sharing legislation, success of the benefit sharing mechanism requires carbon revenue-sharing agreements to be brokered independently between the company and the communities.
Timing and punctuality of benefit disbursement	■ Carbon revenues deposited in community fund post verification and sale of credits. ■ Other benefit types disbursed seasonally (i.e., saplings and silviculture training), or ad hoc (i.e., health training).	■ Benefit delivery occurs before carbon revenue generation. If replicated at a national level, this would require forward financing of benefit sharing mechanism that may require private-sector investment or donor support.
Benefits provided up front or linked to performance	■ Both	■ See above.
How benefits are transferred	■ Training is delivered by company-employed community officers and plantation staff. ■ Infrastructure developments are financed by the company and delivered by external contractors of company employees (e.g., road development, and school construction). ■ Details of the financial transfer mechanism for carbon revenues are not publicly available.	■ Delivery of training requires skilled community-extension workers.

HIGH-LEVEL CASE STUDY OF GREEN RESOURCES UCHINDILE AND MAPANDA VCS PROJECT–TANZANIA (*CONTINUED*)

MECHANISM NAME	GREEN RESOURCES UCHINDILE AND MAPANDA VCS PROJECT	
	Description	Critical factors for success of replication
Monitoring effectiveness	■ A community-monitoring survey, developed by GRL and applied across all plantation sites, is administered every three years by the community officer. ■ Variables monitored include poverty level, food security, education, and health. ■ The study includes representative groups from the community (i.e., poorest of the poor and up). ■ The objective of the monitoring system is to quantify the effect the project has on the community members' welfare.	■ Monitoring community impacts through field assessment and questionnaires requires significant human resources if scaled beyond project level.
Engagement and capacity building with local communities	■ Technical capacity building (i.e., silviculture, machinery operation); educational (i.e., health training, academic); organizational (i.e., community land-use planning). ■ GRL delivers the majority of capacity-building activities through its own staff. GRL has partnered with an NGO for rollout of HIV-awareness program. ■ Community land use planning requires technical input from GIS team.	■ Community land use planning requires significant technical capacity in GIS analysis, as well as investments in organizational planning.
Institutional requirements	■ No government institutions are involved in the delivery of the GRL benefit sharing mechanism.	n.a.
Role of carbon markets	■ Ten percent of carbon revenues have been earmarked for a community development fund by GRL. ■ This revenue will finance the benefit sharing mechanism's future delivery.	■ Government could establish carbon revenue-sharing legislative guidelines for joint private sector and community REDD+ activities to ensure adequate financial resources are generated for financing benefit sharing mechanism activities.

HIGH-LEVEL CASE STUDY OF NILE BASIN REFORESTATION PROJECT–UGANDA

MECHANISM NAME	NILE BASIN REFORESTATION PROJECT, UGANDA
1. Background information	
Summary	■ Scale of mechanism—National (cluster of five projects) ■ Initiated by the National Forestry Authority (NFA) in association with local community organizations ■ Source of funding—World Bank BioCarbon Fund ■ Type of mechanism—REDD+ ■ Linked to national level funding—Yes
Basic description of mechanism	Carbon revenues, from the sale of credits to the World Bank BioCarbon Fund, awarded to the NFA and community groups in relation to afforestation and reforestation CDM project.
Background to mechanism	Uganda has to expand its wood resources substantially to meet the growing demand of wood products and to reduce pressure on remaining natural forests. According to the FAO, Uganda has one of the highest deforestation rates in the world at 2.7 percent per year. Only a few thousand hectares of timber plantations remain, but at least 65,000 hectares of high-yielding plantations are necessary to meet the domestic demand. Because of investment barriers, tree planting for timber production is only viable if public incentives are provided.
Stated objectives	To provide a new financing mechanism to overcome the current barriers to establishing timber plantations in Uganda and to allow communities to benefit from the CDM.
Scope	All five projects allow the involvement of (private-[13] and) community-based tree-planting initiatives with different investor shares (about 90 percent NFA and 10 percent communities, although this varies by project). Community groups will receive payments for each metric ton of CO_2 sequestered at a price stipulated in the Emission Reductions Purchase Agreement (ERPA) between the buyer and the NFA (about 15 percent of the total carbon income). Through internal community association agreements, community group members can buy shares in cash or in kind, which allows them to receive a portion of future carbon revenues. These are divided on a shareholding basis and on other criteria.
Years in operation	2
Target country/region	Uganda—the project area is located in Mbarara (Rwampara county), Isingiro (Isingiro county), and Ntungamo (Ruhama county) districts.
Administered by	The NFA
Beneficiaries	Potential beneficiaries include the following: ■ Forest-dependent communities ■ Agricultural communities ■ Landless small-scale farmers ■ Federal program
Approximate total beneficiaries (people)	Estimated: 500+ (labor) and 250+ (members)
Total value of benefits disbursed to date	Information not publicly available but likely to be zero because no credits have been issued to date. Four of five projects are at validation stage within the CDM process; one of five is registered.
Co-financing of benefit sharing mechanism	No

HIGH-LEVEL CASE STUDY OF NILE BASIN REFORESTATION PROJECT–UGANDA (*CONTINUED*)

MECHANISM NAME	NILE BASIN REFORESTATION PROJECT, UGANDA
Overall strengths of mechanism in delivering specific objectives	■ It is a useful example of how carbon finance can be shared among governments and communities, as well as within communities. National rules surrounding collaborative forest management, as well as specific carbon finance agreements and an internal community group constitution, govern how such finance is distributed among actors.
2. Country context	
Economy size (annual GDP)	US $17.1 billion
World Bank Governance Indices (–2.5 to +2.5)—higher rating indicates better governance.	
Voice and accountability	–0.49
Political instability	–1.06
Government effectiveness	–0.63
Regulatory quality	–0.17
Rule of law	–0.43
Control of corruption	–0.87
Position on forest transition curve	Low Forest—High Deforestation
Drivers of deforestation	■ Agricultural expansion into forested land ■ Unsustainable cutting of trees for charcoal and firewood ■ Unsustainable harvesting of timber ■ Livestock grazing and bush burning
Forest governance and enforcement capacity	■ Policy, legal, and institutional framework that could help improve forest governance, although improved implementation of this framework is required. ■ Capacity building is still needed for institutions responsible for forestry and those that provide support services. ■ Forest law enforcement is reportedly hampered by lack of resources, poor coordination among stakeholder institutions and other law enforcement agencies, political interference, and corruption.
Political stance on role of market mechanisms	Open to market mechanisms
Socio-political standing of indigenous groups	There is a growth in recognition of community rights, particularly for the Batwa, but genuine participation rates remain low.
3. Specifics of the mechanism	

	Description	Critical factors for success of replication
Type of benefits delivered	■ Monetary—employment and carbon revenues ■ Capacity building	■ Contracting and legal capacity ■ Community outreach capacity ■ Local disbursement mechanisms
Who is the holder of land title (carbon rights—if differentiated)	■ Land is owned by the NFA. ■ Detailed rights and responsibilities are regulated in community forest management agreements and a tree farming license.	■ A legal framework for the allocation of carbon rights, because payments are directly linked to emission-reduction performance at project level

HIGH-LEVEL CASE STUDY OF NILE BASIN REFORESTATION PROJECT–UGANDA (*CONTINUED*)

MECHANISM NAME	NILE BASIN REFORESTATION PROJECT, UGANDA	
	■ Carbon credits are awarded to the NFA and communities, based on agreements and share percent. As agreed in the ERPA, these credits will be sold to the World Bank BioCarbon Fund upon credit issuance.	
Timing and punctuality of benefit disbursement	■ Timing of disbursal is reliant on carbon credit delivery.	■ Contracted buyers of credits (via ERPA) or immediate sale to market required for punctual disbursement.
Benefits provided up front or linked to performance	■ Up front—The NFA will provide seedlings and technical advice to community groups. In return community groups will be tasked with protecting plantations from fire and protecting the remaining patches of natural forests. ■ Linked to performance—Monetary benefits occur upon credit delivery.	n.a.
How benefits are transferred	■ Cash payment for labor and credits ■ Technical training by NFA for growing trees	■ Local community capacity to disburse ■ Delivery of training requires skilled employees
Monitoring of effectiveness	■ Information not publicly available in respect of monitoring of the benefit sharing mechanism. ■ Monitoring of credits will be in accordance with CDM criteria and as set out in PDD.	■ Requires the development of monitoring guidelines for project-level beneficiaries ■ Requires periodic monitoring of project performance in accordance with CDM criteria (e.g., verification includes involvement of third parties)
Engagement and capacity building with local communities	■ NFA engagement with local communities through community groups (e.g., RECPA) ■ Capacity-building activities including technical training to improve tree growing skills	■ Established presence or relationship with community groups to ensure trust and community buy-in
Institutional requirements	■ The National Forest Authority (NFA)	■ Community groups provide an effective and necessary link to collective and longer term action by the wider community.
Role of carbon markets	■ Direct link with the carbon markets—this is the primary source of benefits.	■ Government could establish carbon revenue sharing legislative guidelines.

[13] The role and extent of involvement of any private-sector participants is not clear.

HIGH-LEVEL CASE STUDY OF ODDAR MEANCHEY–CAMBODIA

MECHANISM NAME	ODDAR MEANCHEY, CAMBODIA
1. Background information	
Summary	■ Scale of mechanism—Project level ■ Initiated by Community Forestry International, now coordinated by PACT ■ Source of funding—Royal Danish Embassy (Danida) and the John D. and Catherine T. MacArthur Foundation ■ Type of mechanism—REDD+ ■ Linked to national-level funding—Yes
Basic description of mechanism	A REDD+ project, which provides community forestry groups with monetary, land tenure, and capacity-building incentives to protect and manage their local forests
Background to mechanism	Oddar Meanchey has lost 3 percent of its forests each year from 2002 to 2006. A growing number of communities in the province have been protecting the remaining natural forests as community forestry areas. This project seeks to maintain and increase forest carbon stocks in these areas by motivating community forestry groups to protect the forest and engage in sustainable forest management.
Stated objectives	To mitigate the effects of a number of drivers of deforestation and forest degradation while responding to the economic needs of the low-income rural populations that inhabit the project area

Scope	■ Thirteen community forestry (CF) groups that protect 60,000+ hectares of forest land.
	■ Expected sequestration of 8.7 million metric tons of CO_2 over 30 years.
	■ Net income from carbon credits will be primarily used for three activities (the exact amount and flow of funds is not known):
	  ■ Community development activities (50 percent of funding)
	  ■ Establishing other REDD projects
	  ■ Improving forest quality
	■ CF groups gain legal tenure rights over local forests for a (renewable) 15-year period.

Years in operation	3
Target country or region	Cambodia—north-western province of Oddar Meanchey
Administered by	Joint venture between the Royal Government of Cambodia and the Forestry Administration (FA), Community Forestry International, and Terra Global Capital
Beneficiaries	Potential beneficiaries include forest-dependent communities
Approximate total beneficiaries (people)	The project involves 13 community forestry groups, comprising 55+ villages or 10,000+ households.
Total value of benefits disbursed to date	Information not publicly available
Cofinancing of benefit sharing mechanism	Yes—Terra Global Capital is providing carbon development and marketing services. The Oddar Meanchey Provincial Government, the local NGO Children's Development Association (CDA), and the Monk's CF Association have also contributed time and effort to develop and implement the project at the provincial level.

HIGH-LEVEL CASE STUDY OF ODDAR MEANCHEY–CAMBODIA (*CONTINUED*)

MECHANISM NAME	ODDAR MEANCHEY, CAMBODIA	
Overall strengths of mechanism in delivering specific objectives	■ Studies (Poffenberger et al. 2009) suggest that there is a high level of community participation in the Community Forestry Management Committees (CFMC) meetings that help ensure transparency in the decision-making process. The existence of these community groups has also facilitated interaction among project participants. CFMCs have been particularly useful in clarifying project boundaries and resolving any conflicts.	
2. Country context		
Economy size (annual GDP)	US $11.36 billion	
World Bank Governance Indices (–2.5 to +2.5)		
Voice and accountability	–0.88	
Political instability	–0.63	
Government effectiveness	–0.74	
Regulatory quality	–0.37	
Rule of law	–1.05	
Control of corruption	–1.18	
Position on forest transition curve	High Forest—High Deforestation	
Drivers of deforestation	■ Commercial and illegal logging ■ Forest fires ■ Economic land concessions ■ Encroachment	
Forest governance and enforcement capacity	■ Weak forest land tenure ■ Overlapping/unclear jurisdictions ■ Weak enforcement of the law	
Political stance on role of market mechanisms	Open to market mechanisms	
Socio-political standing of indigenous groups	Cambodia has policies and regulations that provide for recognition and protection of the rights of indigenous peoples to their lands.	
3. Specifics of the mechanism		
	Description	**Critical factors for success of replication**
Type of benefits delivered	■ Legal land tenure rights for communities ■ Additional income streams (i.e., sale of NTFPs, community-based ecotourism) ■ Community development through governance and organizational capacity building	■ Contracting and legal capacity ■ Community outreach capacity

HIGH-LEVEL CASE STUDY OF ODDAR MEANCHEY–CAMBODIA (*CONTINUED*)

MECHANISM NAME	ODDAR MEANCHEY, CAMBODIA	
	Description	Critical factors for success of replication
Who is the holder of land title (carbon rights—if differentiated)	■ Local communities do not legally own the forest land but through legally binding forest management agreements under the Community Forestry Subdecree, project communities will have secured management rights over the project area for a 15-year period that can be renewed. ■ A community carbon agreement provides for a minimum 50 percent share of carbon revenues.	■ A legal framework for land tenure and the allocation of carbon rights
Timing and punctuality of benefit disbursement	■ Timing is reliant on carbon credit delivery and government disbursal (the details of which are not publically available).	■ Government management plans for allocation and disbursal of funds to community development activities should be developed in conjunction with CF groups and formalized in the agreements between the project participants.
Benefits provided up front or linked to performance	■ Both up front and linked to performance	■ As above
How are benefits transferred	■ Information not publically available	■ Information not publically available
Monitoring of effectiveness	■ Information not publically available on the monitoring of the benefit sharing mechanism ■ Third-party monitoring and verification of carbon credits will be required in accordance with VCS and CCBA criteria and as set out in PDD.	■ Requires the development of monitoring guidelines for project level beneficiaries ■ Requires periodic monitoring of project performance in accordance with CCBA and VCS criteria (e.g., verification includes involvement of third parties)
Engagement & capacity building with local communities	■ FA engagement with CF groups ■ Capacity building through training in effective governance and financial management	■ Local groups require legal support to discuss and negotiate contracts and capacity building in effective governance and financial management. ■ Established presence or relationship with community groups to ensure trust and community buy-in

HIGH-LEVEL CASE STUDY OF ODDAR MEANCHEY–CAMBODIA (*CONTINUED*)

MECHANISM NAME	ODDAR MEANCHEY, CAMBODIA	
Institutional requirements	■ The Forestry Administration (FA) is the dedicated government authority interfacing with community groups and wider government. ■ The National CF Program provides an enabling policy framework which allows for the legal empowerment of forest communities as resident managers.	■ An intermediary between high-level political and legal powers and CF groups ■ Conflict resolution mechanism for different stakeholders ■ Enabling policy framework, which allows for the legal empowerment of forest communities as resident managers
Role of carbon markets	■ Direct link with the carbon markets	■ Government could establish carbon revenue sharing legislative guidelines.

HIGH-LEVEL CASE STUDY OF REDD+ APPROACH–INDONESIA

MECHANISM NAME	REDD+ APPROACH, INDONESIA
1. Background information	
Summary	■ Scale of mechanism—National ■ Public sector-led framework for implementing REDD+ projects by a range of actors, including the private sector, NGOs, and communities. ■ Source of financing—potentially all sources of REDD+ related finance that are available to Indonesia. ■ Type of mechanism—REDD+ ■ Link to national level funding—potentially, if REDD+ projects are to be supported by national funds
Basic description of mechanism	Indonesia's national REDD+ regulations by which REDD+ projects are to be implemented and benefits shared
Background of mechanism	In 2008 and 2009, Indonesia established the world's first national laws relating to REDD+. These laws are necessary to clarify the legal and policy framework needed to attract REDD+ investment. On May 1, 2009, the Indonesian Minister of Forestry signed the Ministry of Forestry Regulation P.30/2009 on Procedures for REDD+ Regulation. This introduced a national legal regime for the implementation of REDD+ projects and the issuance and trading of carbon credits in respect of the greenhouse gas reductions such projects generate. The national framework for REDD+ in Indonesia has been described as a nested approach, whereby entity-level carbon trading from emissions reductions in REDD+ projects can be carried out under national regulations.
Stated objectives	The government of Indonesia is seeking to provide clarity to REDD+ investors and project developers through a national framework. To date, regulations have been put in place and draft rules for REDD+ investments have been set out. The government therefore plays a key role in benefit sharing both through the development of the regulations and their eventual implementation.

HIGH-LEVEL CASE STUDY OF REDD+ APPROACH–INDONESIA (*CONTINUED*)

MECHANISM NAME	REDD+ APPROACH, INDONESIA
Scope	Key provisions of the regulations describe the following: ■ Who is eligible to participate and develop REDD+ projects—this includes individuals; cooperatives; national and provincially owned enterprises; private entities; indigenous groups; and permit holders of customary, community, and village forests. ■ The types of eligible land areas for REDD+ projects, including areas with pre-existing land rights. For example, customary, community, village forests, licensed concessions, and agricultural land. ■ The revenue-sharing arrangements among different actors (although this continues to be debated). ■ The role of the national government in implementing the regulations. The ways in which benefits from REDD+ revenue are to be shared will be governed, to some extent, by these criteria and other regulatory provisions.
Years in operation	2
Target country or region	Indonesia
Administered by	The Ministry of Forestry has the main responsibility for developing the national REDD+ strategy in Indonesia, although reports suggest this responsibility has been handed to the National Development Planning Agency (BAPPENAS). The main coordinating bodies are the National REDD Working Group, National Council on Climate Change (DPNI), and BAPPENAS.
Beneficiaries	A wide range of beneficiaries are anticipated from the implementation of the national regulations because they will guide how benefits are to be shared across the spectrum of REDD+ projects. There is, however, ongoing debate regarding the split of REDD+ revenues in different scenarios. In 2009, the Ministry of Forestry proposed that REDD+ project developers would have to share between 20 and 70 percent of profits with local communities, depending on the type of forest and type of license held, while between 10 and 50 percent of profits would be shared with the government. Reports reviewed state that the Ministry of Finance has disputed this proposed arrangement. It is considered unconstitutional because REDD+ revenues are considered to be nontax state revenues that fall outside the remit of the Ministry of Forestry.
Approximate total beneficiaries	This information is not available. Once agreed upon, however, the national regulations have the potential to guide the distribution of benefits to many thousands of people across Indonesia.
Total value of benefits disbursed to date	This information is not available. Once regulations are fully agreed upon and implemented, however, this could account for benefits from any new and existing government-approved REDD+ projects.
Cofinancing of benefit sharing mechanism	Government-approved REDD+ projects may be funded from a variety of sources and could potentially be cofinanced.
Overall strengths of mechanism in delivering specific objectives	■ Indonesia is a first mover in developing a nationally agreed framework for implementing REDD+ projects and benefit sharing from REDD+ revenues. There are lessons to be learned and applied elsewhere while Indonesia continues to improve the existing framework.
2. Country context	
Economy size (annual GDP)	US $540.3 billion
World Bank Governance Indices (–2.5 to +2.5)—higher rating indicates better governance.	
Voice and accountability	–0.05
Political instability	–0.64

HIGH-LEVEL CASE STUDY OF REDD+ APPROACH–INDONESIA (*CONTINUED*)

MECHANISM NAME	REDD+ APPROACH, INDONESIA
Government effectiveness	–0.21
Regulatory quality	–0.28
Rule of law	–0.56
Control of corruption	–0.71
Position on forest transition curve	High Forest—High Deforestation
Drivers of deforestation	■ The destruction and degradation of forests is the result of logging, mining operations, large-scale agricultural conversions, settlement, subsistence farming, and fuel wood cutting. ■ Despite a government ban on the export of raw logs from Indonesia, timber is, reportedly, regularly smuggled out via Malaysia and Singapore for processing in other neighboring countries from where it is exported across the world.
Forest governance and enforcement capacity	■ Indonesia's Readiness Preparation Plan (RPP) recognizes that enforcement of regulations in the past has been weak. However, steps are being taken to better manage Indonesia's vast forest resource. ■ For example, in May 2011, Indonesia concluded Voluntary Partnership Agreement negotiations with the European Union. This marked the culmination of a long process toward establishing a timber legality verification system in the country and an important milestone for forest governance reform.
Political stance on role of market mechanisms	■ Indonesia is open to market mechanisms—for example, there are 48 Clean Development Mechanism projects in Indonesia that have been registered with the CDM executive board for review.
Socio-political standing of indigenous groups	■ The 1945 Constitution of the Republic of Indonesia recognizes the rights of *adat* communities as "customary communities," stating the "cultural identity and traditional rights of *adat* communities are respected and protected by the State as human rights." In particular, article 18B(2) of the Constitution notes, "The State recognizes and respects customary laws of communities along with their traditional rights"; however, it limits these rights according to a broad notion of "societal development." These articles have been interpreted by some observers as providing the state with a broad right of control over all land in Indonesia, allowing the state to subordinate *adat* rights to the national interest.

3. Specifics of the mechanism

	Description	Critical factors for success of replication
Type of benefits delivered	■ The types of benefits may vary by project ■ The debate on how revenues will be shared from REDD+ continues (as described above)	■ Agreement across government ministries as to how REDD+ revenue will be shared is important for developing a viable framework.

HIGH-LEVEL CASE STUDY OF REDD+ APPROACH–INDONESIA (*CONTINUED*)

MECHANISM NAME	REDD+ APPROACH, INDONESIA	
Who is the holder of land title (carbon rights—if differentiated)	■ The REDD+ Regulations stipulate that land rights must be in place for a land area to be eligible for REDD+ activities. Forested or other eligible lands that are not subject to any form of land right are not allowed to participate. ■ Indigenous peoples can be project developers because customary rights are recognized. However, it is not clear whether these rights extend to carbon.	■ Clearly defined land rights will assist the distribution of benefits from REDD+ projects. ■ Where land rights are not established, vulnerable groups may be excluded from benefiting from REDD+ revenue.
Timing and punctuality of benefit disbursement	■ Not applicable. These will be project specific, but may be directed by agreed-upon regulations.	n.a.
Benefits provided up front or linked to performance	■ Under the national approach, there may be a variety of approaches to the provision of benefits; however, where projects are financed by the carbon markets, revenues are likely to be linked to performance.	n.a.
How benefits are transferred	■ Not applicable. These will be project specific, but may be directed by agreed-upon regulations.	n.a.
Monitoring of effectiveness	■ No details are in the public domain.	n.a.
Engagement and capacity building with local communities	■ The REDD+ regulations contain specific procedural requirements, such as the need for prior informed consent. While there are concerns about how such consent is independently established, these requirements might increase empowerment and reduce poverty by involving local communities and indigenous communities in decisions about REDD+.	■ Certain regulatory provisions may enhance the engagement of local communities in benefit sharing arrangements.

HIGH-LEVEL CASE STUDY OF REDD+ APPROACH—INDONESIA (*CONTINUED*)

MECHANISM NAME	REDD+ APPROACH, INDONESIA	
	Description	Critical factors for success of replication
Institutional requirements	■ The institutional requirements to plan and establish a national framework for REDD+ are vast. The Ministry of Forestry, the National Development Planning Agency (BAPPENAS), and the Ministry of Finance have been key agencies involved in the formulation of the REDD+ regulations. ■ There is an ongoing need for improved coordination between government departments and between central and provincial governments.	■ There are substantial institutional requirements associated with developing a nationally agreed-upon framework for REDD+ revenue sharing.

HIGH-LEVEL CASE STUDY OF REWARDING UPLAND POOR FOR ENVIRONMENTAL SERVICES (RUPES)—THE PHILIPPINES

1. Background information	
Summary	■ Scale of mechanism—two project sites ■ Source of funding—Private and NGO ■ Type of mechanism—Payment for Ecosystem Services (PES) ■ Link to national level funding—No
Basic description of mechanism	Pilot payments for ecosystem services project, whereby downstream hydroelectric companies pay indigenous communities for upland management practices
Background of mechanism	Established in 2002 by the World Agroforestry Centre (ICRAF) as part of the wider RUPES program, with six pilot sites across Asia. It is not supported by an underlying legislative framework
Stated objectives	Resource security and poverty alleviation
Scope	Local hydro power companies providing payments to local tribe to maintain watershed quality. The goals include the following: ■ Build a mutually beneficial relationship between providers and consumers of watershed services ■ Raise awareness and understanding of the dynamic relationship of land use and watershed functions ■ Maintain valuation of the watershed service provided by the IPs ■ Develop a fair, transparent, and effective reward mechanism that benefits all stakeholders for the watershed service provided ■ Provide capacity building of local institutions ■ Monitor and evaluate the mechanisms put into place (for learning and design of other PES mechanisms elsewhere)
Years in operation	8
Target country/region	The Philippines (Ikalahan Ancestral Domain, Nueva Vizcaya and Bakun Watershed, Benguet)

HIGH-LEVEL CASE STUDY OF REWARDING UPLAND POOR FOR ENVIRONMENTAL SERVICES (RUPES)—THE PHILIPPINES (*CONTINUED*)

Administered by	■ Joint Management by Cordillera Highland Agricultural Resources Management Project (CHARM) Project Support Office and Bakun Indigenous Tribes Organization (BITO) ■ Funding from International Fund for Agricultural Development (IFAD), through the World Agroforestry Center (ICRAF)
Beneficiaries	■ Marginalized indigenous forest dwellers and small farmers in less productive agricultural land vulnerable to environmental degradation and climate change
Approximate total beneficiaries	Estimated range: 100–1,000
Total value of benefits disbursed to date	US $45,081 grant over two years
Cofinancing of benefit sharing mechanism	No
Overall strengths of mechanism in delivering specific objectives	Strengths of the program include the following: ■ Provides a direct link between providers and beneficiaries of ecosystem services ■ Focus on supporting marginalized communities ■ The sustainability of the funding model will be high if benefits to private companies can be demonstrated ■ Effective capacity building during design stages ■ Buy-in and support from a range of stakeholders
2. Country context	
Economy size (annual GDP)	US $161 billion.
World Bank governance indices (–2.5 to +2.5)—a higher value indicates better governance	
Voice and accountability governance index	–0.12
Political instability governance index	–1.42
Government effectiveness governance index	–0.14
Regulatory quality governance index	+0.02
Rule of law governance index	–0.53
Control of corruption governance index	–0.71
Position on forest transition curve	Low Forest—High Deforestation
Drivers of deforestation	Drivers include the following: ■ Illegal logging and fuel wood ■ Timber poaching ■ Agricultural expansion ■ Strip-mining ■ Migration ■ Plantation development
Forest governance and enforcement capacity	Insufficient information at this time
Political stance on role of market mechanisms	■ Open to market mechanisms ■ Several pilot forest-carbon projects in the country

HIGH-LEVEL CASE STUDY OF REWARDING UPLAND POOR FOR ENVIRONMENTAL SERVICES (RUPES)—THE PHILIPPINES (*CONTINUED*)

Socio-political standing of indigenous groups	Indigenous People Right Act (IPRA) of 1997 lays the legal foundations for indigenous property rights.

3. Specifics of the mechanism

	Description	Critical factors for success of replication
Type of benefits delivered	■ Monetary	■ Financial capacity of local groups or intermediaries
Who is the holder of land title (carbon rights—if differentiated)	■ Indigenous community ■ Carbon rights not differentiated	■ Recognition of traditional land rights ■ Defined and enforceable property rights ■ Beneficiary pays principal
Timing and punctuality of benefit disbursement	■ Inadequate information at this time	■ Inadequate information at this time
Benefits provided up front or linked to performance	■ Payments are provided based on the activities of upland communities. The payments are not, therefore, directly linked to the resultant ecosystem service change or the performance of these activities.	■ There is an assumed connection between land management practices and improvements in water quality and reduced sedimentation in dams.
How benefits are transferred	■ Benefits are transferred via the Project Support Office and Bakun Indigenous Tribes Organization (BITO).	■ Legal capacity of intermediaries is required. ■ Indigenous community support for intermediaries
Monitoring of effectiveness	■ Inadequate information at this time	■ Inadequate information at this time
Engagement and capacity building with local communities	■ Orientation meetings and technical advisory group meetings were held to assist locals with changes in land management practices and negotiate contracts via BITO and CHARM. ■ The ICRAF team supported in providing baseline data for the contract, finalizing the business case for the buyer, and making sure that the negotiation between the community as environmental service providers and buyer was fair for both sides.	■ Resource-intensive capacity-building program, both with local communities and with institutions

HIGH-LEVEL CASE STUDY OF REWARDING UPLAND POOR FOR ENVIRONMENTAL SERVICES (RUPES)—THE PHILIPPINES (*CONTINUED*)

Institutional requirements	■ Bago-Kankana-ey Tribe Organization (BITO) represented the communities. ■ Cordillera Administrative Region provided government oversight. ■ Hydropower companies with interests in the area were key in terms of providing funding. ■ A Technical Advisory Group made up of NGO and international experts oversaw engagement to provide technical guidance in the smooth implementation of the project and provided capacity building of local institutions. ■ Initial constraints that were noted by the advisory group included a lack of political will, institutional capacity, supportive legal framework, and financial resources, and limited community interest and commitment. ■ The project also supports national policy dialogues, helping policy makers to establish and implement effective international payment schemes and to knowledgeably participate in international forums.	■ Coordination of numerous stakeholders requires careful negotiation. ■ The technical advisory group should represent a range of stakeholders to ensure its continuing support. ■ Constraints need careful consideration in advance of initiating a project; the advisory group should be designed to specifically tackle identified issues.
Role of carbon markets	■ Not financed through carbon market.	n.a.

HIGH-LEVEL CASE STUDY OF AMAZON FUND—BRAZIL

MECHANISM NAME	AMAZON FUND, BRAZIL
1. Background information	
Summary	■ Scale of mechanism—National ■ Initiated as a public sector mechanism ■ Source of funding—International donation (Norway and Germany) ■ Type of mechanism—REDD+ ■ Linked to national level funding—Yes
Basic description of mechanism	Brazilian government provides indigenous community groups, farmers, NGOs, and state and municipal programs with grants to implement activities that support low carbon development of the Amazon.
Background to mechanism	In December 2008, Brazilian President Luiz Inácio Lula da Silva announced Brazil's commitment to reduce Amazon deforestation by 80 percent below its historical baseline over the next 10 years. To support this goal, Brazil created the Amazon Fund, supported by an initial pledge of US $1 billion from the government of Norway.

HIGH-LEVEL CASE STUDY OF AMAZON FUND–BRAZIL (*CONTINUED*)

MECHANISM NAME	AMAZON FUND, BRAZIL
Stated objectives	To support low carbon development of the Amazon region
Scope	To provide grants to support the following activities: ■ Environmental control, monitoring, and inspection ■ Sustainable forest management ■ Economic activities created with sustainable use of forests ■ Ecological and economic zoning, territorial arrangement, and agricultural regulation ■ Preservation and sustainable use of biodiversity ■ Restoration of deforested areas
Years in operation	3
Target country or region	Brazil—80 percent Amazon biome; 20 percent other Brazilian or tropical biomes
Administered by	The Amazon Fund is managed by BNDES, the Brazilian Development Bank.
Beneficiaries	Potential beneficiaries include the following: ■ Forest-dependent communities ■ Agricultural communities ■ Landless small-scale farmers ■ Land-holding small-scale farmers ■ Large-scale farmers ■ Local NGO ■ International NGOs ■ Public-private programs ■ Federal, state, and municipal programs
Approximate total beneficiaries (people)	Estimated range: 10,000–100,000
Total value of benefits disbursed to date	US $51 million deposited into Amazon Fund as of February 2011 US $7.1 million disbursed to Fund beneficiaries as of February 2011
Cofinancing of benefit sharing mechanism	Yes—In some instances. Examples include provision of social infrastructure by local communities and provision of administrative support by grass-root NGOs working with forest community groups.
Overall strengths of mechanism in delivering specific objectives	■ The Amazon Fund provides a model for a performance-based national benefit sharing mechanism. International donations to the fund are secured on the basis of demonstratively achieved emissions reductions. ■ The Amazon Fund sits outside the national government budget. This avoids the risk of overly bureaucratic decisions relating to funding allocation, allowing for more rapid disbursal of funds.
2. Country context	
Economy size (annual GDP)	US $1.573 trillion
World Bank governance indices (–2-5 to +2.5)—higher rating indicates better governance.	
Voice and accountability	+0.51
Political instability	+0.29
Government effectiveness	+0.08
Regulatory quality	+0.18
Rule of law	–0.18

HIGH-LEVEL CASE STUDY OF AMAZON FUND–BRAZIL (*CONTINUED*)

MECHANISM NAME	AMAZON FUND, BRAZIL
Control of corruption	–0.07
Position on forest transition curve	High Forest—High Deforestation
Drivers of deforestation	Deforestation of the Amazon region is largely attributed to agricultural expansion and cattle production.
Forest governance and enforcement capacity	■ There is extensive legislation regulating forests and land tenure in Brazil. ■ The existing legal framework in Brazil enables land users to obtain legal title if they have made the land productive for five continuous years. ■ Despite this, Brazil lacks a central land registry and because of complicated systems of ownership, disputes over land ownership are common. ■ The Terra Legal Program was initiated in 2009 with a goal to establish the regulation of 80 percent of Amazonian land titles over the next two to three years.
Political stance on role of market mechanisms	The National Plan on Climate Change does not allow for offsets or the possibility of trading the carbon stored in its forests.
Socio-political standing of indigenous groups	High socio-political standing of indigenous groups. Legal indigenous reserve system in place.
3. Specifics of the mechanism	

	Description	Critical factors for success of replication
Type of benefits delivered	■ Monetary—grants provided from BNDES, payments made to local community groups through project PES schemes (e.g., Amazonas Sustainable Foundation Project) ■ Secure land tenure ■ Institutional capacity building and trainings ■ SFM-related livelihood programs ■ Infrastructure and equipment	■ The allocation of large monetary grants to nongovernmental implementing agents requires sufficient financial management capacity at a civil-society level.
■ Who is the holder of land title (carbon rights—if differentiated)	■ In nonprotected areas, private land ownership is possible. (see forest governance and enforcement capacity above). ■ Protected areas are considered part of the public domain—and indigenous land is the property of the federal government. ■ Indigenous communities are, however, entitled to income generated by payments to REDD and can enter into REDD contracts with the state. ■ Brazil does not have a national law that specifically addresses the legal ownership of carbon rights.	

HIGH-LEVEL CASE STUDY OF AMAZON FUND–BRAZIL (*CONTINUED*)

MECHANISM NAME	AMAZON FUND, BRAZIL	
	■ It is presumed that whoever owns the right to use the land above ground has the rights to the carbon (although this is not legally explicit).	■ A legal framework for the allocation of carbon rights is not a critical success factor because payments from the fund are not directly linked to the emission-reduction performance at a project level.
Timing and punctuality of benefit disbursement	■ Timing of disbursal from BNDES to the funding applicant is case specific. ■ Disbursal from the funding applicant to a grass-root beneficiary is case specific.	n.a.
Benefits provided up front or linked to performance	■ Donors make deposits into the Amazon Fund on a performance basis (measured in proxy by deforestation rates). ■ Recipient organizations at a subnational level receive funding on an input basis, provided a sufficient implementation plan is in place.	■ Performance-based transfers at the national level are dependent on technical MRV capacity, which in the case of the Amazon Fund, is provided by INPE and verified by a technical committee.
	Description	**Critical factors for success of replication**
How are benefits transferred	■ Funds are deposited by BNDES into the funding applicant's bank account. These are then allocated accordingly.	■ Requires financial monitoring and reporting standards to be adhered to by recipient organizations. In turn, this requires sufficient technical capacity at the funding applicant level and periodic due diligence checks by BNDES staff over the spending of beneficiary organizations.
Monitoring of effectiveness	■ The monitoring and evaluation of impacts is left to individual projects to report to the fund. These reports are then consolidated and headline impacts are reported by the fund.	■ Requires the development of monitoring guidelines for project-level beneficiaries of the fund. ■ Requires BNDES to periodically monitor the project beneficiaries' performance.

HIGH-LEVEL CASE STUDY OF AMAZON FUND–BRAZIL (*CONTINUED*)

MECHANISM NAME	AMAZON FUND, BRAZIL	

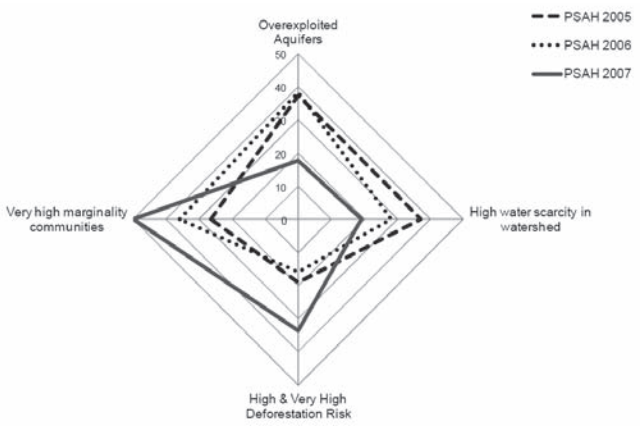
Engagement and capacity building with local communities	■ Project beneficiaries engage with local communities in capacity-building activities.
	■ Examples include the following:
	  ■ TNC assisting rural producers with environmental registration of their products
	  ■ Ouro Verde Institute working with family farmers to develop agro-forestry systems
	  ■ The CSO IMAZON working with local municipalities to improve institutional capacities in land registration.
	■ The resource requirement in each case is project specific.
		■ The devolution of responsibilities for community engagement to civil society actors requires them to have an established presence with relevant capacities in training, community mobilization, and project management.

Institutional requirements	■ The Amazon Fund is managed by BNDES, the Brazilian Development Bank, which also undertakes to raise funds, facilitate contracts, and monitor support projects and efforts. ■ The Amazon Fund has a Guidance Committee, COFA, assigned with the responsibility of posting guidelines and monitoring the results obtained; and a Technical Committee, CTFA, appointed by the Ministry of Environment, which is charged with certifying the emissions achieved. ■ CTFA consists of six authoritative technical and scientific experts appointed by the Ministry of Environment, for a term of three years, extendable once for an equal period.	■ Effective management, disbursal, and monitoring of funds requires high levels of administrative capacity. ■ Certification of emission reduction performance of the fund requires a comprehensive MRV system and capabilities in GIS analysis.
Role of carbon markets	■ There is no current direct link with carbon markets, although this is being considered through the proposed "REDD bill."	■ In the absence of a direct link with carbon markets, the benefit sharing mechanism is dependent on donor funding. This may be performance-based but linked to NAMAs as opposed to credit generation.

HIGH-LEVEL CASE STUDY OF PROGRAM FOR HYDROLOGICAL ENVIRONMENTAL SERVICES (PSAH)–MEXICO

MECHANISM NAME	MEXICO, PROGRAM FOR HYDROLOGICAL ENVIRONMENTAL SERVICES—PSAH
4. Background information	
Summary	■ Scale of mechanism—Subnational (only national priority areas eligible) ■ Initiated by—Public sector ■ Source of funding—Earmarked water use charge (fixed fee); 96 percent of funding is designated for beneficiaries, with 4 percent earmarked for administration ■ Additional funding provided by government (supplementary management cost) ■ Type of mechanism—Payments for Ecosystem Services ■ Linked to national level funding—Yes
Basic description of mechanism	Public payments to landowners to conserve the natural forest for the maintenance of hydrological services.
Background of mechanism	Established in 2003 by CONAFOR (Mexico's National Forest Commission), PSAH is designed to increase the benefits directed to poor, small-scale landholders and indigenous groups. These groups were viewed by CONAFOR to be disadvantaged by conventional SFM subsidies and forestry regulation, and PSAH seeks to address this imbalance. The implementation of PSAH is supported by a political process at national and local government level to formalize traditional land rights.
Stated objectives	To protect the aquifer recharge function of Mexico's natural forest cover.
Scope	Provides a yearly payment to forest landowners of approx US $40 per hectare on the condition that they preserve the forest cover on their land.
Years in operation	7
Target country or region	Mexico, priority forest ecosystems (e.g., payments in cloud forest ecosystems are higher because of their greater contribution to watershed regulation). By 2005 the program had covered almost 500,000 hectares of forest land.
Administered by	CONAFOR—Mexico's National Forest Commission.
Beneficiaries	■ Forest-dependent communities and agricultural communities living near forested areas. ■ Private landholders (between 50 and 4,000 hectares on 80 percent forested land). ■ Agro-forestry community groups.
Approximate total beneficiaries	Estimated range: 900–2,000 (980 in 2005).
Total value of benefits disbursed to date	Estimated range: US $80–200 million (water fees of around US $20–30 million per year invested; US $80 disbursed by 2005). CONAFOR received a loan of US $95 million from The World Bank in 2006 to support PSAH.
Cofinancing of benefit sharing mechanism	No

HIGH-LEVEL CASE STUDY OF PROGRAM FOR HYDROLOGICAL ENVIRONMENTAL SERVICES (PSAH)–MEXICO (*CONTINUED*)

MECHANISM NAME	MEXICO, PROGRAM FOR HYDROLOGICAL ENVIRONMENTAL SERVICES—PSAH
Overall strengths of mechanism in delivering specific objectives	■ The majority of scheme beneficiaries live in areas of low agricultural productivity. ■ The scheme has had a high positive social effect because of the fact that the majority of forest areas are owned by indigenous groups and rural cooperatives. ■ The scheme is underpinned by formal legislation for spatially defined investments in environmental protection. ■ PSAH uses an explicit targeting mechanism to increase the social and environmental benefits from PSAH funding (see figure below). **FIGURE II.1. TARGETING PEHS IN MEXICO** 
5. Country context	
Economy size (annual GDP)	US $874 billion.
World bank governance indices (–2.5 to +2.5)—a higher value indicates better governance	
Voice and accountability	+0.13
Political instability	–0.68
Government effectiveness	+0.17
Regulatory quality	+0.35
Rule of law governance index	–0.57
Control of corruption governance index	–0.27
Position on forest transition curve	Low Forest—Low Deforestation
Drivers of deforestation	■ Illegal logging ■ Slash-and-burn agriculture and ranching ■ Urban expansion
Forest governance and enforcement capacity	■ Enforcement capacity against illegal activity is minimal at the local level, but CONAFOR can withhold payments if forests are not effectively protected. ■ Enforcement at national level backed up by GIS tracking.
Political stance on role of market mechanisms	■ Proponent of market mechanisms. ■ Several carbon financed projects implemented in country.

HIGH-LEVEL CASE STUDY OF PROGRAM FOR HYDROLOGICAL ENVIRONMENTAL SERVICES (PSAH)—MEXICO (*CONTINUED*)

MECHANISM NAME	MEXICO, PROGRAM FOR HYDROLOGICAL ENVIRONMENTAL SERVICES—PSAH	
Socio-political standing of indigenous groups	■ Growing recognition of traditional rights. ■ Between the 1930s and 1980s, traditional land-use rights were formalized into common property lands (ejidos). This means the household head was granted shared ownership rights and voting powers within the legally recognized local authority.	
6. Specifics of the mechanism		
	Description	Critical factors for success of replication
Type of benefits delivered	■ Monetary. ■ Higher payments for cloud forest (assumed greater benefits to watershed services).	■ User rights and management control. ■ Increase in ability of rural communities to engage in legal contracting processes. ■ The benefit sharing mechanism is supported by process to formalize traditional land rights.
Who is the holder of land title (carbon rights—if differentiated)	■ Either private individuals or communities with a title split among household heads.	■ Recognition of traditional property rights in a formalized legal process with local authorities. ■ Benefit sharing mechanisms should support the resolution of land tenure conflicts through legal assistance.
Timing and punctuality of benefit disbursement	■ Agreements are based on a five-year timeframe. ■ Payments are made at the end of the year.	■ Agreed funding periods and timeframe with community members allows effective expectation management for disbursement with recipients.
Benefits provided up front or linked to performance	■ Performance-based following verification at year's end.	■ Monitoring, verification, and reporting capacity on yearly basis.
How benefits are transferred	■ Via individuals' bank accounts. ■ If community group, transferred to local authority who is then in charge of disbursement to household heads.	■ Banking system access can be a limitation to implementing this scheme in countries with poor banking networks. ■ Requires local authorities with the capacity to disburse funds effectively.
Monitoring of effectiveness	■ GIS photography at year's end, plus random sample site visits. ■ CONAFOR responsible for monitoring. ■ Annual monitoring linked to performance-based disbursal of benefits and monitoring of overall impacts of the benefit sharing mechanism.	■ Focus on satellite monitoring capacity. ■ Requires government personnel and travel availability to do site visits.

HIGH-LEVEL CASE STUDY OF PROGRAM FOR HYDROLOGICAL ENVIRONMENTAL SERVICES (PSAH)–MEXICO (*CONTINUED*)

MECHANISM NAME	MEXICO, PROGRAM FOR HYDROLOGICAL ENVIRONMENTAL SERVICES—PSAH	
Engagement and capacity building with local communities	■ Use of pilot phase in 2003 to test out community engagement strategy before scaling up. ■ Some initial capacity building to verify participation and estimate appropriate payments per hectare with communities (using auction). ■ Ministry of Environment, Forestry Commission, University of Berkeley, two Mexican universities, and World Bank.	■ Early support from academics and institutions involved in lobbying process to gain government support. ■ Subsequent buy-in from landholders requires on-the-ground presence for implementation agency.
Institutional requirements	■ Local authorities to monitor community land rights. ■ Mexico's National Forest Commission manages program.	■ Lack of third-party intermediary—led to some observer criticism ■ CONAFOR is viewed as having a primary focus on commercial exploitation of forests.
Role of carbon markets	■ Not part of carbon markets; carbon abatement is not the principal objective of the project.	■ Could tie in carbon revenue into payments, but would require added complexity to the payment mechanism.