

USAID BIODIVERSITY AND DEVELOPMENT HANDBOOK

V

ANNEXES



HANGING ON: An infant orangutan clings to its mother in the Bukit Lawang area of Leuser National Park, northern Sumatra, Indonesia. Probably fewer than 6,000 Sumatran orangutans remain in the wild. USAID projects have helped conserve orangutan habitat through careful land use planning and protected area management, including community policing and habitat protection.

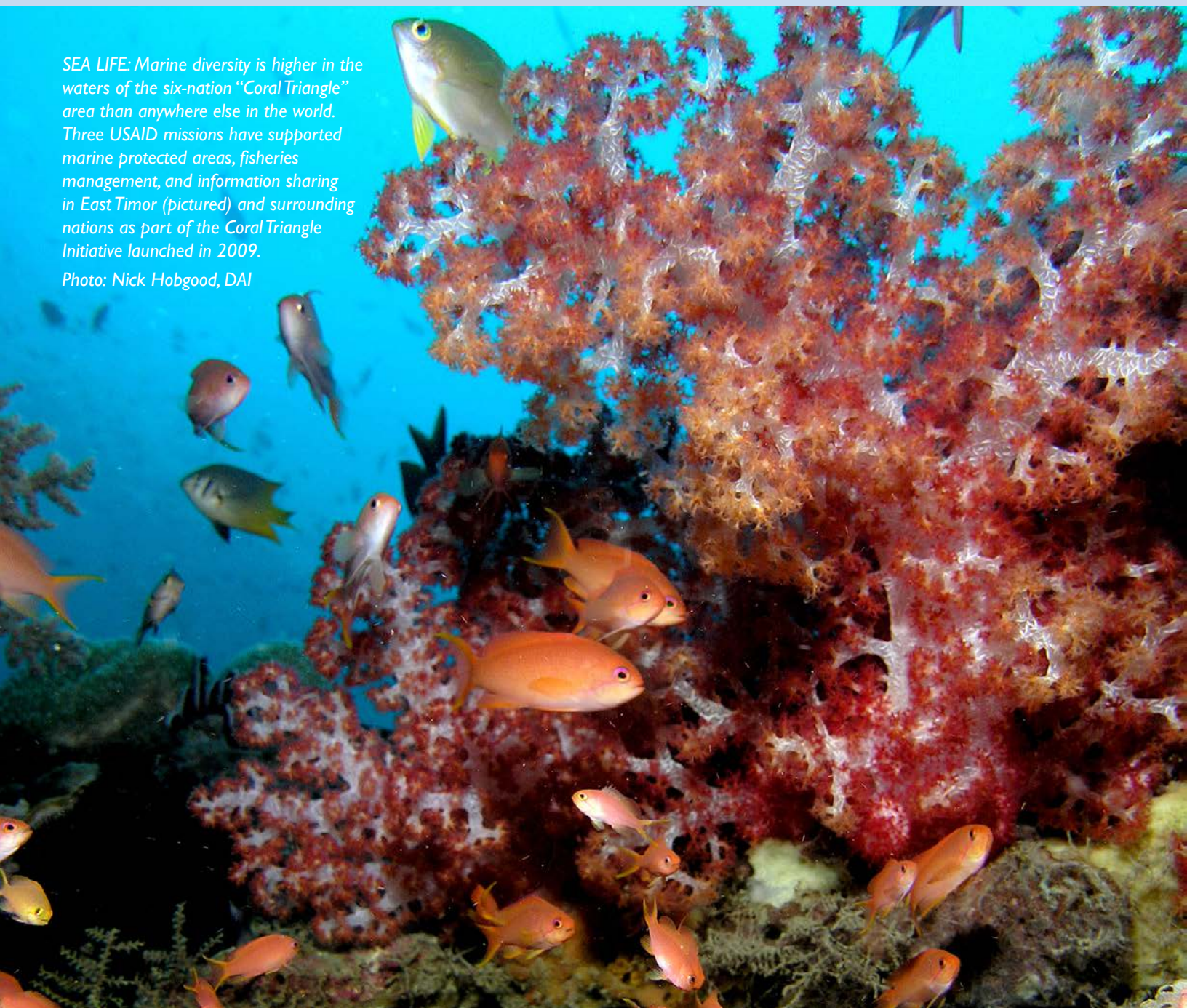
Photo: Andrew Watson, DAI

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SEA LIFE: Marine diversity is higher in the waters of the six-nation “Coral Triangle” area than anywhere else in the world. Three USAID missions have supported marine protected areas, fisheries management, and information sharing in East Timor (pictured) and surrounding nations as part of the Coral Triangle Initiative launched in 2009.

Photo: Nick Hobgood, DAI



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This set of Annexes provides additional background information and details useful to USAID biodiversity managers. It includes

- detailed information (beyond the briefer descriptions provided in Chapter 3) about conservation strategies where USAID has considerable experience and lessons
- description of key international policies and treaties
- a glossary of terms used throughout the handbook
- an acronym list

5.1 DETAILED INFORMATION ABOUT SELECT CONSERVATION STRATEGIES

Chapter 3 provides an overview of conservation strategic approaches, organized by the IUCN-CMP Classification of Conservation Actions. This annex provides more detailed information about select conservation strategic approaches. In general, these tend to be strategic approaches that are more commonly used by USAID teams and partners, are of current interest to the conservation community, and/or are related to an area of expertise of contributors to this handbook.

5.1.1 Private Protected Areas (Land and Water Protection)

As mentioned in Chapter 3, protected areas may be established through many governance structures by different entities, including government agencies, NGOs, individuals, communities, and indigenous groups. A private protected area is an area that is managed for biodiversity conservation objectives; protected through a legal or contractual agreement; and owned by a private individual, family, corporation, and/or NGO. Some specific examples of private protected areas are found in Box 77. Key categories include

- a family-owned farm or forest with a conservation easement restricting future development of the property
- the leasing of submerged lands along coasts for conservation purposes
- an area owned and managed by a nonprofit for research, education, and conservation

BOX 77. EXAMPLES OF SPECIFIC PRIVATE PROTECTED AREAS

Green Hills Private Conservation Management Area, Belize: Located in the Cayo District near Georgeville, this small (40 ha) but significant area provides habitat for ocelots, jaguarundis, agoutis, coatis, and other species. The area links Nojkaaxmeen Eljio Panti National Park and ecologically valuable forest remnants, such as those located on Maya Ranch estate and along the Macal River.

Siju-Rewak Corridor and Tirunelli-Kudrakote Corridor, India: The World Land Trust funds these privately owned wildlife corridors that provide habitat for the Bengal tiger, clouded leopard, and Himalayan black bear, among many other species. The corridors also link the Tirunelli and Kudrakote Reserved Forests and act as a migration corridor for India's largest elephant population.

Selva Verde, Costa Rica: Located next to the Braulio Carillo National Park and established in 1982, Selva Verde was one of the first private protected areas in Costa Rica. The over 1,600-hectare reserve hosts 448 species of birds, nearly half of all bird species in the country, as well as pumas, jaguars, ocelots, margays, and jaguarundis.

- a private game reserve that manages wildlife for hunting
- a private reserve managed for ecotourism and bird watching
- an area designated for biodiversity conservation as part of a biodiversity offset for a development project
- a seasonally protected area for migratory species, such as a bird flyway

In some countries, large landscapes consist primarily of private lands, offering important opportunities for encouraging private protected areas. These areas often reduce threats on other types of protected areas that have stricter protection. They also add to a national portfolio of protected areas, often protecting critical sites with endangered species at a minimal cost to the government. In addition, they may be well-suited for buffer zones and conservation corridors and can expand the representativeness, size, and connectivity of a national protected area network.

In some countries, laws and legal frameworks do not allow for the establishment of private protected areas. In such cases, modifications to existing laws may be needed for their formal creation. It may be necessary to “pilot” the concept and ensure that it can work within the existing legal framework.

Private protected areas provide landowners with legal protection from certain threats, such as illegal logging and encroachment, providing another incentive for their establishment. However, owners of private protected areas rarely have access to the tools, data, and technical skills needed to manage and monitor their lands and waters. Having access to relevant national and regional networks can help landowners identify creative solutions, understand best practices, and learn about management innovations. Similarly, access to government expertise, training, and technical assistance can help them understand the resources they have and how best to manage them. When private protected areas are adjacent to large protected areas, such as national parks, collaboration can be particularly important (e.g., managing invasive or migratory species and preventing illegal access).

Conservation Easements as a Private Land and Water Protection Strategy

A conservation easement is a voluntary but legally binding agreement between a landowner and a government or non-government organization that protects land from certain forms of development by dividing the ownership rights from the development rights and transferring the development rights to another party. Activities that are often allowed in a typical conservation easement include low-impact farming, agriculture, and forestry, usually with restrictions that provide general biodiversity protection. The landowner may sell or donate the development rights to an organization. In many countries, the easement runs with the property in perpetuity, even if the land is subsequently sold. The organization that holds the development rights is responsible for monitoring the use of the property and enforcing any violations.

Most conservation easements are held by land trusts, whose missions include conserving land through acquisitions and easements. The establishment of land trusts and the use of conservation easements in the United States have grown from a very small movement in the early 1980s to a major conservation force. This growth is due, in large part, to financial incentives that significantly reduce property taxes on land with a conservation easement.

Internationally, the growth of conservation easements has been limited, in part because the financial incentives and organizational infrastructure are either not in place or are very new. If countries are able to create better incentives for landowners (e.g., legal protection over territory or access to technical assistance), interest in easements could grow and they could become an important complement to other land conservation efforts, such as government protected areas. The following are examples of easements in use internationally:

- In Mexico, Pronatura created the National Land Conservation Program to help private and community landowners establish conservation easements, including one created in 2005 that covers 125,000 acres.

- In Ecuador, the Ecuadorian Center of Environmental Law introduced conservation easements in the late 1990s, and although only a handful of easements have been established to date, these represent a significant legal breakthrough in private land conservation, and more are expected in the future.¹
- In Costa Rica, the Center of Environmental and Natural Resources Law established the country's first conservation easement in the early 1990s and is now the primary NGO responsible for all conservation easements in the country.²
- In Brazil, there has been significant growth of voluntary conservation easements within the past decade. These are generally in the form of private natural heritage reserves that receive tax benefits under the Rural Land Tax Exemption.³ Similar examples and experiences in conservation easements exist for Bolivia, Chile, and Peru.⁴

5.1.2 Sustainable Tourism in the USAID Context (Livelihood, Economic, and Other Incentives)

USAID engages in sustainable tourism development as a platform for achieving other, broader development objectives, such as biodiversity conservation, natural resource management, poverty alleviation, and economic growth. Sustainable tourism development is often seen as an alternative livelihood for communities in impoverished rural areas. Under certain conditions, it has proven to be a powerful incentive for addressing threats to biodiversity conservation, such as poaching, slash-and-burn agriculture, and cattle grazing.

Benefits (perceived or real) from environmental conservation can act as strong incentives and be self-reinforcing. This is demonstrated in several sustainable tourism development initiatives, such as the community-

based wildlife management and joint venture tourism in Namibia, Wild Jordan ecotourism ventures (an initiative of the Royal Society for the Conservation of Nature), and multiple tourism development projects across Latin America.

To encourage conservation, it is important for tourism development to focus on the mitigation of key threats and not to assume that because tourism happens, communities will automatically protect the environment. Communities must understand that the tourists are coming to see a protected environment and that this environment's protection is critical to the success of their livelihoods. Reinforcing this connection requires community education, a businesslike approach to product development and marketing, concrete action to identify and monitor threat abatement, and an emphasis on benefits received (i.e., increased income).

USAID's Approach to Sustainable Tourism

Even when projects focus on a specific objective, such as biodiversity conservation, USAID prefers to take a holistic, cross-sectoral, systems approach. In the case of tourism, there is overlap or interaction with four main sectors: policy (or governance), environment, economics, and society. When considering a sustainable tourism project, the following questions should be addressed. (Some may be more relevant than others, depending on the type of tourism project and where it is occurring.)

Governance: Does a protected area have legislative authority to issue concessions permits to create operating revenue? Do entrance fees return to the general treasury or do some remain in the park budget? If some remain in the park budget, are they adequate? Are there policies that facilitate or impede the process of starting a small business? Does the government understand its role?

Environment: How protected are wildlife and other park features? Is the park being well managed so visitors can see wildlife, enjoy interpretive programs, benefit from professional guiding services, hike trails, or see scenic vistas? What tourism infrastructure is available (e.g., trails, restrooms, and information)? Can businesses operate in the park to provide services through concessions agreements?

¹ Agnès Sibileau, Jorge A. Rojas Tome, Maria Fernanda Morillo, and Caroline Stem, *Experiences from Ecuador and Mexico with the Implementation of Conservation Easements: A Case Study* (New York: The Tinker Foundation, SEPA Project, 2007).

² *Experiences from Costa Rica with the Implementation of Conservation Easements: A Case Study*. Morales, L. Agnès Sibileau, and Caroline Stem, SEPA Project, 2007.

³ Young, CEF. 2005. *Financial mechanisms for conservation in Brazil*. *Conservation Biology* 19: 756-761.

⁴ Environmental Law Institute, *Legal Tools and Incentives for Private Lands in Latin America: Building Models for Success* (Washington DC: Environmental Law Institute, 2003).

Economic Issues: Does the community have access to capital or investors? Do they understand business management? Do they or their partners have access to appropriate markets? Do they have the skills to engage? What is needed in the way of product development and marketing? Have feasibility studies been completed? What about business plans?

Social Issues: What educational opportunities exist for developing a trained workforce? Does the community welcome visitors? Is crime an issue? Is the health of the community or visitors at risk? Does the community value the biodiversity that it harbors?

USAID also takes a **value chain approach** to tourism development, because research and experience in microenterprise development indicate that linkages among members of a value chain increase competitiveness. USAID experience has shown that projects that address the whole value chain and its enabling environment are more successful in strengthening the industry than those that focus on only one section of the value chain (Figure 19).

Involving Stakeholders: USAID has learned that sustainable tourism development is more successful when relevant stakeholders come together to develop

Figure 19. Tourism Industry Value Chain

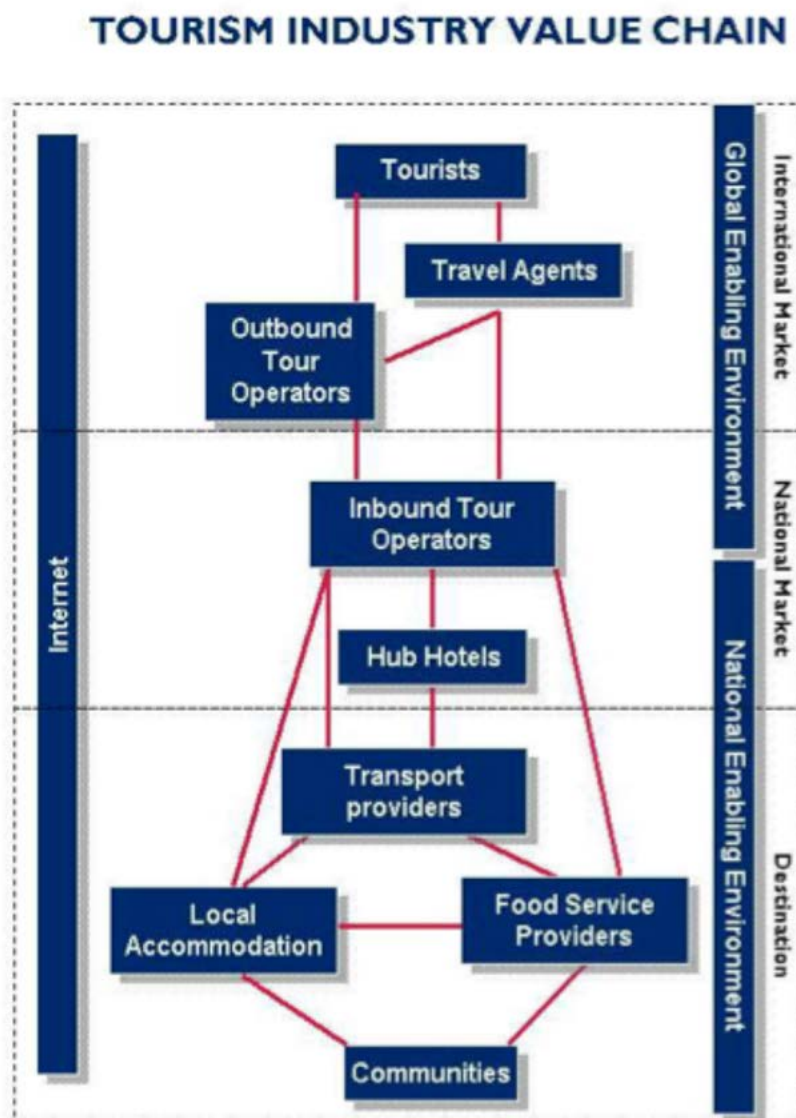


Figure 20. Potential Tourism Stakeholders



a common vision, joint solutions, and a commitment to collaborative action to reach their vision. When contemplating a sustainable tourism project, teams should consider a variety of stakeholders (Figure 20). Teams should also keep in mind, however, that stakeholders whose interests diverge too far from conservation may not be viable partners (see [Section 3.1](#)).

Communities around protected areas and other areas of significant biodiversity have a unique advantage: They are close to the resource people want to see and, if well-prepared, can provide the services tourists need, including lodging, food, guide services, equipment, and transportation. When communities are engaged in the ecotourism value chain, the protected area can become a valued asset because it is the foundation of their economic livelihoods. However, other stakeholders must also be involved in supporting rural tourism efforts, including tour operators who bring tourists to the area, agencies managing environmental resources and tourism, transportation providers, and other specialists. When sustainable tourism works well, all should be working

together to improve their industry and conserve the natural environment upon which it depends.

Fostering Tourism Entrepreneurship: To provide incentives for conservation, ecotourism businesses must succeed. USAID approaches tourism entrepreneurship at two levels:

1. **The enabling environment** – primarily helping governments understand their role. USAID-supported activities might include strengthening economic policy related to fiscal accountability or trade or customs regulations; improving infrastructure, such as communications, utilities, roads, and air travel; providing financing; and addressing social issues, such as workforce, health, and safety and security.
2. **The enterprise level** – strengthening the private sector’s ability to produce a quality product and reach important markets by providing training and capacity building, facilitating product development, and assisting with marketing and promotion. Products that are tailored to specific needs and (differentiated) groups are usually easier to market.

BOX 78. KEY USAID ECOTOURISM PROJECTS

In the past decade, USAID has supported tourism development in more than 72 countries through more than 100 projects. Among the more successful are the [LIFE program in Namibia](#), the [Egyptian Red Sea](#), and [community conservancies in Kenya](#).

USAID's [Global Sustainable Tourism Alliance](#) was a partnership of leading organizations in the sustainable tourism field working together with USAID Missions to apply a holistic and market-driven approach to sustainable tourism development. It involved 15 private partners, including tourism operators, NGOs, and a university graduate program, and was implemented in seven countries: Ecuador, Dominican Republic, Mali, Ethiopia, Uganda, Montenegro, and Albania. The alliance produced a nine-module online training program on sustainable tourism, hosted on the [Natural Resource Management and Development online Learning Management System](#), which can be valuable to USAID Mission staff, host governments, and implementing partners.

At the enterprise level, most rural communities need assistance in developing livelihoods around tourism. This includes training in feasibility studies, creation of business plans and marketing strategies, and small business administration. Communities also might need language training and/or guide, hospitality, and vocational training. In general, workforce development is key to strengthening the tourism industry, and it is often best approached holistically and in partnership with government, the private sector, educators, and communities.

Ensuring Sustainability: USAID has learned that developing tourism clusters, which are also small businesses providing services to fee-paying members,

strengthens the tourism industry. A destination approach can work well to increase tourism expenditure and attract visitors and provide them with quality services while (ideally) equitably distributing benefits at the local level and protecting the natural and cultural foundation on which the tourism is based. The hospitality sector is also important if ecotourists need to stay in a capital city or secondary city before arriving at their destination. The impression of the country made before (and potentially after) the ecotourism experience can influence and even undermine the entire operation, no matter how well the site-based hospitality is managed.

5.1.3 Payment for Ecosystem/ Environmental Services (Livelihood, Economic, and Other Incentives)

Implementing conservation typically requires economic tradeoffs in resource use. Such strategies as restricting logging, limiting fertilizer and pesticide applications, and changing the way water is managed often bear economic costs to users of these resources. Experiences with payment for ecosystem services (PES) offer examples of opportunities to reduce those tradeoffs and provide additional incentives for forest and wetland management and protection.

Ecosystems provide society with a wide range of critical services, such as steady supplies of clean water; flood control, habitat for wildlife and endemic plant species, coastal protection, and the removal of air contaminants and carbon dioxide (Box 79). These services are generally “non-exclusive” economic goods; in other words, goods that are commonly enjoyed by all at no cost. Payments for ecosystem or environmental services are methods that use market and market-like mechanisms to provide incentives to local landowners/ managers to implement improved resource management practices that maintain major ecological services to the broader economy. These systems can be established to comply with government regulations or they can be entirely voluntary. The payments may be made directly, through intermediaries or trading markets, or collected and distributed by designated institutions or government agencies. Payment may also be made through non-financial means, such as increased access to government services, conditional land tenure agreements, or

BOX 79. TYPES OF ECOSYSTEM SERVICES

The Millennium Ecosystem Assessment groups ecosystem services into four broad categories:

- **provisioning:** products obtained from ecosystems (e.g., food, fuel wood, water, pharmaceuticals)
- **regulating:** benefits obtained from regulation of ecosystem processes (e.g., climate regulation, pest control, purification of air and water)
- **supporting:** services necessary for production of all other ecosystem services (e.g., nutrient dispersal and cycling, soil formation)
- **cultural:** non-material benefits obtained from ecosystems through spiritual enrichment, cognitive development, reflection, recreation, and aesthetic experiences (e.g., cultural diversity, knowledge systems, spiritual values)

improved access to economic development programs and employment opportunities.

REDD+: There are many examples of voluntary and regulated PES systems around the world (Table 5). Recently, there has been rapid growth in REDD+ (Reduced Emissions from Deforestation and Forest Degradation). Growing international interest in REDD+ offers opportunities to increase the value of forests by attaching an economic price to their ability to sequester atmospheric carbon. This value, represented as “carbon credits,” can then be sold on national and international markets to industries, governments, and others looking to offset environmental impacts or improve their environmental record. The funds generated help support the ongoing protection of forested areas represented by the credits. The “plus” in REDD+ refers to increasing forest carbon stocks through forest restoration, natural

regeneration, or management techniques that increase the overall carbon density of forests. Many countries are developing strategic plans to reduce their overall greenhouse gas emissions, including more deliberate management of forests for carbon storage. While this trend is encouraging, it is important to consider and monitor biodiversity tradeoffs that could occur under schemes that favor more carbon-rich species.

For more information, see USAID’s [Forest Carbon, Markets, and Communities Program](#) (FCMC), as well as [Section 4.4.2](#).

Water Funds: Another well-established and common application of PES is support for enhanced watershed management, whether for water quality or flow regulation. In such cases, a water management agency or water provider typically collects payments from water users and/or hydropower operators. The funds are used to compensate watershed landowners for landscape protection and restoration. These PES programs are usually limited to specific watershed and downstream water users, but some national schemes, such as those in Costa Rica and Mexico, require most water users to pay for the benefits of watershed protection.

Payments for services do not necessarily lead to poverty reduction. Program designers and administrators can take steps to ensure that the poor participate and that benefits are equitably shared among different stakeholders. Broad stakeholder engagement is critical because many rural people earn their living from natural resource-based activities, and PES schemes can provide new incentives in the form of regular payments that will encourage more sustainable management of targeted areas or resources. Necessary conditions for feasibility are found in Box 80.

Specific actions to improve equitable participation can include instituting regulatory reforms that lower transaction costs, simplifying contracting processes, and mediating disputes between potential stakeholders. Teams should be careful when designing PES mechanisms to benefit poor rural communities, however. Such mechanisms may prove too difficult to implement in areas where institutional capacity and transparency are lacking or where resource access and ownership are undocumented or in dispute. Also, sellers of services

BOX 80. NECESSARY CONDITIONS FOR A PES APPROACH

In order for a PES to be feasible, it should meet the following conditions (Gutman P. 2002):

- clear demand exists for the environmental service
- community has formalized rights to the resource and/or ecosystem service
- strong cooperative institutions exist
- proposed PES scheme is compatible with local legal framework
- supporting institutions are in place

could see their resource use or access rights usurped by more powerful political forces, conflicts with other stakeholders accentuated, or resource-use rights curtailed if such rights are a requirement for PES payments.

Designing a PES System

In addition to the standard steps that a team would follow in designing an activity (see [Chapter 2](#)), project teams should consider the following when designing a PES system:

I. Establish and Manage Clear Expectations.

The goals of PES are to compensate service providers and to secure desired ecosystem services for buyers over the long term. When planning a PES mechanism, all affected stakeholders should have

Table 5. Sample Types of PES

TYPE	POTENTIAL SERVICES PROVIDED	SAMPLE BUYER	RECIPIENT OF PES FUNDS/ PROVIDER OF SERVICES
watershed services	drinking water filtration; reduced sedimentation; reduced salinity; steady water supply; reduced flood risk	water providers and, through them, consumers; hydropower producers; farmers; irrigation associations	landowners; forest managers; farmers or communities that manage upstream lands
biodiversity services	endangered species protection; opportunities for tourism and recreation; wetlands habitat protection; sources of materials for bio-prospecting	land developers; hunters; tour operators; tourists, especially for wildlife and birds; pharmaceutical companies	landowners; land managers; traditional land stewards
climate services	greenhouse gas (GHG) removal or sequestration for climate change mitigation	regulated entities under cap and trade regimes; voluntary purchasers of offsets to reduce carbon footprints; businesses selling carbon-neutral products	forest landowners; reforestation, REDD+, clean energy, energy efficiency, or other GHG mitigation projects
cultural services	viewing opportunities of scenic landscapes and cultural assets	tourism companies and private foundations	landowners; land managers; traditional land stewards

realistic expectations about what is required of them and what they will receive in return. Nobody should expect large windfall profits from PES. Rather, modest incentives that encourage resource conservation or protection should be the aim.

2. Identify the Relevant Payment System.

PES mechanisms fall into three general types:

- a. **Government payments for services.** The government uses tax revenues and dedicated fees to pay for conservation (e.g., China, Costa Rica, Mexico, and the United States).
- b. **Private-sector payments for services.** While still small, the private market has potential for significant growth as water utilities, hydropower facilities (e.g., Vietnam), and beverage companies like Coca-Cola enter the market.
- c. **Trading schemes (especially for polluting rights).** Pollution trading, wetland banks, and similar mechanisms are more complex approaches that require significant government involvement in their design, oversight, and enforcement and robust financial institutions to manage transactions.

3. **Quantify Services and Define How They Are Provided.** Ideally, services are easily measured using methods that are clearly understood by both sellers and buyers. It should be clear what services are currently being provided and what services will be provided in the future. There should also be a way to monitor changes in service over time, with clarity about who will be responsible for the monitoring and how the monitoring will be funded. The seller should understand what actions he or she needs to take to ensure that the ecosystem services are provided. This may include such actions as protecting a specific tract of land from deforestation, fencing waterways to keep out domestic livestock, or reforesting a degraded catchment area.

4. **Determine the Pricing of Services.** Payments can take several forms, including individual or group payment or non-cash rewards, such as conditional tenure rights, employment opportunities, economic development investments, or access to government services. For non-cash rewards, managers should make sure that conditionality is maintained (i.e., that the reward can be withdrawn if the environmental service is no longer supplied). Some non-cash payments, such

as land tenure security, may be difficult or impossible to revoke, however. It is important to keep in mind that different transaction costs are associated with different payment options. For example, intermediaries may select group payments or provide local infrastructure development to reduce the transaction costs of dealing with many individual service providers. Community payments can also introduce transaction costs associated with organizing the individual members into cohesive groups and ensuring that all members receive their fair share.

5. **Define Responsibility for Monitoring Services and Administering Payments.** Both sellers and buyers need to know what organization(s) will take responsibility for validating the services being provided and for ensuring that payments for services reach the intended beneficiaries. This often involves government agencies, especially for water and electricity services, as regulators must approve the collection of PES fees from consumers. Even purely voluntary systems require administration, if only between the buying and selling parties. In some cases, financial institutions serve as the payment administrators, especially for PES commodities, such as carbon credits. In all cases, the administrator takes responsibility for overseeing monitoring, verification, and transparent reporting.

USAID Mission Incorporation of PES in Environmental Portfolios

PES can be incorporated into many USAID programs that focus on improving natural resource management, mitigating climate change, or reducing pollution. The assistance that USAID most commonly provides falls into three main areas:

- **Support for national or local policy/regulation formulation and implementation** – USAID has a long history of helping countries devise policies and regulations to improve natural resources management and environmental protection. For example, in Mexico USAID helped the government establish a national [payment for hydrological environmental services](#) program that is funded from water-user fees and now finances watershed rehabilitation and protection. Similarly, USAID/Regional Development Mission for Asia helped the Government of [Vietnam establish a PES law and pilot projects](#) under which hydropower

facilities paid farmers to reduce soil erosion in their watersheds. This program is now being expanded to include payments for biodiversity and carbon sequestration. USAID can draw upon its diverse experience, as well as that of other donors, to provide countries with the support and guidance required to create the legal and regulatory environment for successful PES schemes.

- **Support for baseline studies and analysis** – Setting up successful PES schemes requires careful analysis and planning to identify the service sellers and buyers, quantify the benefits, and establish a realistic basis for pricing services at levels acceptable to all parties. USAID can provide independent, science-based analyses and studies that define and assess the current quantity and quality of ecosystem services being provided; estimate the value of ecosystem services and explain how the prices for these services can be determined; define how these services can be monitored and verified; and estimate how predicted changes in resource management can enable and support the provision of ecosystem services over time. USAID has played an integral role in supporting such analyses for water funds in both Ecuador and Colombia.

- **Design and piloting of PES schemes** – USAID can also provide stakeholders with the diverse technical support they require to design a PES scheme. Such support could include business and project development, design of improved resource management and marketing strategies, drafting of operating rules and procedures, development of financial plans and payment mechanisms, certification support, and the design of performance monitoring systems.

5.1.4 Public-Private Partnerships

A public-private partnership is an agreement between the public sector and the private sector to deliver a project or a service that has public benefits. Such partnerships have been applied to a wide variety of sectors, including power generation, water and sanitation, hospitals, schools, prisons, and roads and railways, among many others. In conservation, a public-private partnership is any agreement between a government entity and a private entity with the primary aim of conserving biodiversity. Table 7 provides examples of how public-private partnerships for conservation projects might take shape.

Table 6. PES Benefits and Risks

BENEFITS	RISKS
<ul style="list-style-type: none"> • helps link diverse stakeholders involved in forest conservation, water source and quality protection, and climate change and provide cost-effective ways to adapt to changing climatic conditions • can lead to positive behavior change for natural resource management • provides funds for reforestation in important water recharge areas • leads to high productivity of land • creates diverse income streams that support conservation; generates benefits for rural poor (e.g., increased cash income, expanded experience with external actors, increased knowledge of sustainable resource use practices) 	<ul style="list-style-type: none"> • local stakeholders may not adequately understand what is being bought and sold and the long-term livelihood and resource rights implications • may lead to loss of rights to harvest products, loss of employment, or loss of development options • can conflict with cultural values and traditions and threaten community cohesion • unfair/inequitable sharing of costs and revenues and increased competition for land and resources • can take two to five years to design and implement a PES program with full participation and understanding of all service providers and buyers

Table 7. Types of Public-Private Partnerships for Conservation

TYPES OF GOVERNMENT ENTITIES	TYPES OF PRIVATE ENTITIES	TYPES OF PARTNERSHIP ARRANGEMENTS	CONSERVATION ACTIONS AND OBJECTIVES
ministries (e.g., Ministry of Environment) and agencies (e.g., Agency of Natural Resources)	for-profit businesses (e.g., tourism or concession operators, consulting companies, logging companies, investment companies)	formal or informal collaboration, with agreements in place between the government and private entities	spatial planning (e.g., land use planning, biodiversity planning, protected area planning) and sectoral planning (e.g., mainstreaming biodiversity)
government department (e.g., Department of Fisheries)	communities (e.g., game rancher collectives, indigenous communities, local landowners)	formal arrangement, usually with a written memorandum of agreement outlining specific parameters of the partnership	community outreach, consultation, and participation (e.g., communication campaigns)
municipality (e.g., City of Rio de Janeiro)	local NGOs (e.g., Friends of Ruaha Society), as well as national and international NGOs	contractual arrangement, whereby a private entity is legally bound to provide certain services in exchange for fees	funding and investment (e.g., payments for environmental services, tourism concessions)
municipal water supplier	private companies, international NGOs, and CBOs	multi-institutional governing body to determine how to spend funds (with board of directors and membership of entities that contribute money to fund)	funding and investment (e.g., payments for environmental services); management of natural resources (e.g., clean and reliable water flows)
governmental panels, task forces, advisory committees (e.g., National Consortium on Protected Areas)	universities	semi-privatization, where a government leases the rights, uses, and responsibilities to a private entity for a limited amount of time	management of natural resources (e.g., forestry concessions) and protected areas (e.g., restoration, management planning, patrolling)

The types of public-private partnerships that can occur in the field of biodiversity conservation are potentially vast. At the heart of all public-private partnerships is the recognition by governments that the private sector plays a critical role as a set of stakeholders who influence and impact the environment and development. By working together, both parties can gain a greater understanding of their objectives, needs, and relative strengths. For example, USAID's strengths have been its field presence; knowledge of the political climate; and access to host-country governments, institutions, and stakeholders. Private-sector entities provide a market perspective; technical, managerial, and business expertise; market access; employment; and other benefits. Public-private

partnerships enable governments to fill critical gaps in staff, skills, funding, and other types of capacity, while giving the private sector greater access and improved relations. Box 81 provides examples of public-private partnerships that advance conservation.

Key Issues: Despite the wide range of public-private partnerships, some challenges typically occur and should be addressed early on. Both government and private entities should be very explicit about the goals of the partnership, especially since the objectives of some private entities, such as for-profit companies, may conflict with those of biodiversity conservation. A carefully crafted memorandum of agreement,

BOX 81. EXAMPLES OF REAL-WORLD PUBLIC-PRIVATE PARTNERSHIPS

- **Local NGO assists national park:** The [Friends of Ruaha Society](#) educates local villages about the need to protect Ruaha National Park in Tanzania. Through informal agreements with the national park, the NGO also assists with anti-poaching measures.
- **Resort owner and municipality collaborate with national government on turtle conservation:** In the Philippines, a formal memorandum of agreement between the Calamai Tropica Beach Resort, the Hinoba-an municipality, and the [Department of Environment and Natural Resources](#) aims to reduce impacts on and protect nesting sites of Hawksbill turtles.
- **International NGO and Afghan government collaborate on biodiversity planning:** Through a formal memorandum of agreement, the Wildlife Conservation Society is helping the Afghan government conduct a national biodiversity gap assessment and create the [country's first national park](#).
- **Private fund supports public protected areas:** The Mexican Nature Conservation Fund is a private environmental trust fund that benefits Mexico's federal protected areas. Local private conservation organizations administer the fund, while the National Commission for Protected Areas uses endowment interest to conduct management activities.
- **Tourism concessions provide critical park revenue:** In South Africa, the government provides only 20 percent of funding for protected area management. Income from private tourism concessions helps to fill the funding gap (Varghese, 2008).
- **NGO and community organizations help implement national biodiversity plans:** In the country of Georgia, [local environmental and community NGOs help the government](#) implement the National Biodiversity Strategies and Action Plan through species and habitat conservation activities.

spelling out responsibilities and goals, can help ensure that all parties have a shared understanding of the partnership. Governments may need to develop safeguards and management triggers to ensure that financial objectives do not supersede biodiversity conservation objectives. Governments may also want to place special emphasis on communicating the costs and benefits of the partnership to the public and on ensuring that mechanisms for public accountability and transparency are in place, particularly where there are contractual arrangements. In some cases, an intermediary organization, such as an NGO or service provider (i.e., a contractor), can play the role of managing, implementing, or monitoring the partnership. This has tended to be the model used for larger regional and global USAID partnerships, as it relieves governments of having to coordinate such partnerships.

5.1.5 Trusts and Funds and Key Questions in their Development (Conservation Finance)

An environmental fund is a financial account established, governed, and managed to provide long-term funding for conservation, often in the form of grants. Generally, the donor organizations prescribe the governance structures and a fund administrator manages the disbursements. The term “fund” will always refer to the financial account; however, it is frequently used synonymously with the entity that hosts the account, such as the aforementioned fund administrator. Box 82 defines key terms.

By way of example, conservation trust funds (CTFs) are private, legally independent institutions that provide sustainable grant funding for biological diversity conservation. They often finance part of the management costs of a country’s protected area (PA) system, as well as conservation and development

BOX 82. CLARIFYING FUND TERMS

Environmental fund is a broad term that includes funds established for various environmental purposes: carbon, pollution (brown), water/marine (blue), forestry/biological diversity (green), and other issues. This term is more common in Spanish- and French-speaking countries.

Conservation trust funds always emphasize biodiversity conservation as the main purpose. This term is more common in English-speaking countries and at the World Bank.

A **trust fund** can also have a more general meaning, referring to any account or fund kept separate from other funds, earmarked for a specific purpose, and overseen by a third-party trustee. Funds can also be categorized by how their value is (or is not) maintained over the longer term:

- **endowments** are accounts that are intended to exist in perpetuity (e.g. to preserve the corpus value); normally, only the resulting interest income is spent on conservation grants, from the endowment’s long-term capital investment.
- **sinking funds** are temporary accounts that spend down their capital asset (both principal and interest) over 5 to 20 years, until they are completely spent.
- **revolving funds** have revenue sources (e.g., taxes, fees, fines, PES payments) to maintain the value of their grants account. Increasingly, funds of all types are looking to develop revenue-generating business models, such as fee-for-services, to maintain their value over the longer term.

initiatives outside PAs. Within one CTF there may be one or more “funds”; each is often donor specific. Larger CTFs usually manage multiple funds within their portfolios, some of which may be endowments, while others may be sinking funds or revolving funds. A fund may have an oversight body separate from, but acting in concert with, the governing body of the CTF.

The core business of CTFs is to raise and invest funds to make grants to NGOs, CBOs, and sometimes to government agencies (e.g., national protected area agencies). This steady and predictable stream of financing over time (usually 10 to 20 years) helps to stabilize beneficiaries’ planning and budgeting, allows countries to absorb resources more effectively, and facilitates the implementation of multi-year projects.

Environmental funds can complement USAID Mission programming and can also serve as a USAID legacy instrument. While USAID no longer capitalizes endowments, it is often engaged in the governance and oversight of environmental funds created through other authorized U.S. Government programs (e.g., the Enterprise for the Americas Initiative and the Tropical Forest Conservation Act, parts IV and V of the Foreign Assistance Act of 1961 respectively).

Any USAID Mission considering participation in an environmental fund should review the Agency’s statutory authorities and consider the management workload associated with the fund’s creation, governance, and oversight, as well as the opportunity costs of short-term versus long-term access to the capital.

Including Environmental Funds in USAID Mission Portfolios

USAID currently does not have the legislative authority to create endowments; however, the Tropical Forest Conservation Act (TFCA) has enabled eligible countries to reduce their pre-1998 official concessional debt owed to the United States (PL 480 and USAID debt) while generating funds locally for domestic tropical forest conservation activities. Under TFCA, eligible countries may redirect debt payments that they would have made to the United States to local funds. Each local fund is administered by a local board or oversight committee

BOX 83. HISTORICAL BENEFITS OF TFCA PROGRAM

The potential benefits of a TFCA Program include

- **cash flow relief** – The debtor government’s cash flow improves because hard currency payments are converted into local currency payments and loans are restructured to their benefit.
- **financial leverage** – Because outstanding debt is priced below its face value, the country can retire a significant amount of debt. Also, third-party debt swaps are possible, hence leveraging money from other sources.
- **debt reduction** – The U.S. Government may partially subsidize the program. This could result in a partial face value reduction of outstanding debt.
- **forest conservation** – Resources that once went to the U.S. Government for debt payment remain in the domestic economy and are channeled to local organizations that engage in forest conservation.

consisting of representatives of the U.S. Government, the beneficiary government, and local NGOs, with the latter constituting a majority of its members.

As of September 2013, approximately \$222 million in congressionally appropriated funds had been used to conclude 19 TFCA debt-for-nature agreements with 14 countries. International NGOs had contributed an additional \$22 million to 11 of these agreements, enabling more debt to be treated. The TFCA programs will generate more than \$326 million through 2024 for grants and projects to help protect and sustainably manage tropical forests in beneficiary countries.

While an understanding of the TFCA program is valuable, particularly in those countries with existing agreements, the U.S. Congress has thus far discontinued appropriations to the program after FY13. Therefore, no expectations should be raised relative to undertaking new agreements. Interested Missions can direct their inquiries to the E3/FAB Office, which hosts a TFCA Secretariat.

So, if USAID can no longer capitalize endowments, and the TFCA program no longer looks to be appropriated, what other mechanisms exist for a USAID Mission to support environmental funds? In fact, the selection of mechanism, and the nature of the support, is often reflected in the degree of administrative sophistication of the environmental fund's administrator and the extent to which it provides any services other than grant making.

A Mission can certainly co-fund initiatives of mutual interest with an environmental fund through parallel financing. Secondly, a Mission may wish to support the fund's own institutional strengthening through a procurement mechanism with a third party. Lastly, a few funds have successfully gone through the USAID pre-award surveys in order to receive funds through a USAID cooperative agreement or as a sub-contractor. In every instance, the funds continue to implement functions consistent with their existing mission and capabilities. Such support is often viewed as consistent with the guidance of the *USAID Forward* initiative.

5.2 INTERNATIONAL POLICIES AND TREATIES

Definitions

International agreements have important ramifications for the work that USAID does in biodiversity conservation. A **treaty** is "an international agreement concluded between States in written form and governed by international law, whether embodied in a single instrument or in two or more related instruments, and whatever its particular designation." International conventions are a commonly used form of treaty. Conventions generally arise from meetings of representatives of multiple nations that result in general agreement about procedures or actions the signatories to the convention will take on specific topics. Examples include the Convention on Biological Diversity (CBD) and the Convention on Wetlands (Ramsar). United Nations goals, resolutions, and declarations are other forms of international policy that may impact USAID's biodiversity conservation work; for example, the UN Declaration on the Rights of Indigenous Peoples (UNDRIP). This section will review a number of the most relevant international policies.

Significance

International agreements can have a strong impact on national-level policy-setting and action plans. Such agreements often take into consideration the latest science, diverse experiences, and best practices from around the world. They provide important guidelines for how new national-level policies can be implemented to support them. A nation's commitment to adhering to an agreement can spur new approaches, increase political will, and support funding for action.

The U.S. State Department is responsible for negotiating international agreements, and the U.S. Senate ratifies or approves United States participation (or membership). USAID may play a role in providing input into the negotiating process, based on its perspectives and experiences. Once a convention is ratified, USAID is subject to that agreement and must comply with its requirements. Even if the United States has not ratified a given convention (as is the case with the CBD), a host country that USAID is supporting may be a signatory

and thus may need support in fulfilling its responsibilities under the agreement. While UN goals, resolutions, and declarations may not be binding on USAID per se, they may include relevant guidelines and recommendations on a range of related topics (such as the rights of indigenous peoples), and adherence to them may be required for certain mechanisms – e.g., free, prior, and informed consent for Reducing Emissions from Deforestation and Forest Degradation (REDD).

Key Questions

What are the major international conventions related to biodiversity?

Convention on Biological Diversity (CBD):

The UN began work on the CBD in 1988 with a series of meetings to start to flesh out an international agreement on the identification, conservation, and use of biological diversity. Established at the Earth Summit in Rio in 1992, the convention now has 193 countries as members or parties. Although the United States is a signatory to the CBD, the U.S. Senate has yet to ratify it, and therefore the United States is not legally bound by its provisions. Given the nearly universal ratification by other countries, however, it is critical that USAID take the CBD into account in developing and implementing biodiversity conservation programs.

The CBD seeks to conserve biodiversity, promote its sustainable use, and ensure that the benefits of its use (commercial or otherwise) are shared in a fair and equitable way. The convention requires

- the development of national biodiversity plans that outline how biodiversity will be conserved and used sustainably
- integration of biodiversity considerations into other development sectors
- identifying and monitoring biodiversity
- establishing protected area systems while promoting environmentally sound development around protected areas
- rehabilitating and restoring degraded ecosystems and promoting the recovery of threatened and endangered species

- respecting, preserving, and maintaining traditional knowledge of sustainable biodiversity use by explicitly involving indigenous peoples
- preventing, controlling, and eradicating alien species that may threaten biodiversity
- controlling risks associated with the use of biotechnology
- promoting public participation in biodiversity conservation, as well as in the assessment of the impacts of development projects that may threaten biodiversity
- educating people and raising awareness on the importance of biodiversity
- reporting on how each country is meeting its biodiversity goals
- mobilizing financing and resources for the implementation of the convention (Articles 20 and 21)

The CBD has a number of thematic programs covering biodiversity conservation of various biomes or ecosystem types (e.g., inland waters, forests, marine and coastal areas, drylands, and agricultural lands). In addition, the CBD addresses many crosscutting issues that have an impact or are important to all of the thematic areas. These include access to genetic resources and benefit sharing, climate change and biodiversity, gender and biodiversity, tourism and biodiversity, and technology transfer and cooperation. Recently, the CBD has begun to encourage and facilitate the development of subnational and supranational (regional) strategies, plans, and programs for conserving and sustainably using biological resources.

The CBD continues to be updated and enhanced. The Cartagena Protocol was adopted in January 2000 as a supplemental agreement to the CBD and has been widely ratified. This protocol seeks to protect wild, native biodiversity from potential threats from “living modified organisms” resulting from modern genetic-modification technologies. In October 2010 in Nagoya, Japan, the CBD adopted the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from Their Utilization. This protocol covers the sharing of benefits arising from the use of

genetic resources in a fair and equitable way. It has not yet been ratified by the requisite number of signatories and therefore has not gone into effect.

For further information, refer to the [CBD website](#).

Convention on International Trade in Endangered Species (CITES): Development of an international agreement on the trade of endangered species began in the early 1960s, but it was not until July 1975 that CITES entered into force. CITES' primary goal is to ensure that the "international trade of wild animals and plants does not threaten their survival." CITES has been widely ratified; signatories include 175 countries, including the United States. USAID cannot support any activity that violates CITES and has a responsibility to ensure that all activities that use biodiversity are sustainable. USAID staff must determine whether a host country is a party to CITES and, if so, to what extent that country is implementing the convention. The U.S. Fish and Wildlife Service is the lead implementation agency for CITES within the U.S. Government.

Approximately 35,000 species and sub-species are currently "listed" by CITES. CITES listings are organized into three appendices, based on the level of threat the species or sub-species faces from international trade.

Appendix I species are the most threatened and are facing extinction. Trade in Appendix I species is permitted only under exceptional circumstances.

Appendix II species are not necessarily threatened with extinction, but their trade must be regulated in order to avoid over-utilization.

Appendix III species are those that are protected in member countries that have requested support in controlling international trade as a means of enhancing protection within their borders.

It is the responsibility of CITES member states to develop controls on the export, import, re-export, and introduction of species covered by the convention. This is done through a licensing or permitting system that designates procedures based on the appendix listing of the species concerned. Each member state

must designate a management authority in charge of administering that system and one or more scientific authorities charged with advising on the effects of trade on the listed species. National rules and regulations may be more stringent than those required by CITES.

For more information, refer to the [CITES website](#).

United Nations Framework Convention on Climate Change (UNFCCC): Although not directly related to biodiversity conservation, the UNFCCC is very important to USAID Missions and Bureaus. Another of the "Rio Conventions" (like the CBD), the UNFCCC arose from the 1992 Earth Summit and entered into force in March 1994. There are now 195 parties to the convention; the United States was the first industrialized nation to ratify it. The UNFCCC seeks to avoid "dangerous" anthropogenic changes in the Earth's climate system by recognizing that there is a problem and binding member states to "act in the interests of human safety even in the face of scientific uncertainty by"

- setting a goal of stabilizing greenhouse gas emissions at a level that will prevent dangerous anthropogenic interference in the climate system
- putting the onus on developed countries to act and lead the way
- directing new funds to support climate change activities in developing countries
- reporting on the problem and what is being done about it by member states
- striking a balance between climate change actions and the need for economic development in the developing world
- beginning the discussion of "climate change adaptation" and how to protect the most vulnerable

The Kyoto Protocol (KP) to the convention was adopted in 1997 but did not enter into force until 2005. The KP essentially operationalizes the UNFCCC by committing industrialized nations to reduce and stabilize greenhouse gas emissions to a specific level. It places a heavier burden on developed nations. Although the United States is a signatory, the Kyoto Protocol has not been ratified by the U.S. Senate. At the 2011 Conference of

the Parties (COP) in Durban, however, the United States joined other countries in making significant funding commitments to “fast-start financing” of climate change action. USAID has prioritized action on climate change as one of its core investments. In January 2012, the Agency released its [Climate Change and Development Strategy](#). The goal of the strategy is to “enable countries to accelerate their transition to climate resilient, low emission, sustainable economic development.” Although the Agency’s climate change strategy is implemented as a cross-cutting activity, Missions promoting biodiversity conservation will be most involved in the area of “sustainable landscapes.” Under this heading, USAID will prioritize work in countries with globally important forest landscapes; “high demonstration potential” for Reduced Emissions from Deforestation and Degradation (REDD+) programs; commitment “to developing monitoring, reporting, and verification (MRV) systems”; and an enabling policy environment.

For more information, refer to the [UNFCCC website](#).

United Nations Convention to Combat Desertification (UNCCD): The UNCCD was the third convention to come out of the Earth Summit in Rio. It entered into force in December 1996 and has been ratified by 193 countries, including the United States. The UNCCD seeks to combat desertification and mitigate the effects of drought. In 2007, UNCCD signatories adopted a 10-year strategy that refined their goal: “to forge a global partnership to reverse and prevent desertification/land degradation and to mitigate the effects of drought in affected areas in order to support poverty reduction and environmental sustainability.” The UNCCD is committed to an approach that ensures the participation of local communities in combating desertification and land degradation. National, regional, and subregional plans of action are the key implementation instruments used by member states.

For more information, refer to the [UNCCD website](#).

Convention on Wetlands of International Importance (the Ramsar Convention): Named for the Iranian city where it was adopted, the Ramsar Convention came into force in 1975. To date, 162 parties have become parties to Ramsar; the United

States ratified it in 1976. Ramsar seeks “the conservation and wise use of all wetlands through local and national actions and international cooperation, as a contribution toward achieving sustainable development throughout the world.” Parties to Ramsar have committed to implementing the three “pillars” of the convention:

- designate suitable areas for listing as “Wetlands of International Importance” (the Ramsar List) and ensure their “effective management”
- work for the wise use of all wetlands
- cooperate internationally on transboundary wetlands and wetland issues

Ramsar emphasizes national land use planning, supportive regulatory frameworks, management actions, and public education on wetland issues. More than 2,000 wetlands of international importance have been designated to date.

For more information, refer to the [Ramsar website](#).

Other treaties that may be important to USAID biodiversity conservation efforts include

- [Convention on Migratory Species](#)
- [Convention on Persistent Organic Pollutants \(POPS\)](#)
- [International Tropical Timber Agreement](#)
- [UN Watercourses Convention](#)

What other international policies may be important to USAID biodiversity projects and programs?

United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP): This declaration focuses on defining the individual and collective rights of indigenous people, who often live in biodiverse areas of the world. (See the [full text of the declaration](#).) In particular, UNDRIP has led to the development of guidelines around free, prior, and informed consent (FPIC). FPIC provides indigenous peoples with the right to give or withhold consent to any activities that may affect them or their territories. UN programs are required to follow UNDRIP and to get FPIC, which is critical to the successful implementation of REDD+ programs and projects. The U.S. Government supports UNDRIP.

Millennium Development Goals (MDG): Eight MDG goals have been identified by the United Nations and agreed to by most nations and leading development institutions. They include an environmental sustainability goal that has a target of significantly reducing the rate of biodiversity loss. While these goals are set to expire in 2015, the UN has been working on developing a [post-2015 Agenda](#).



HIGH WIRE: Visitors in Rwanda's Nyungwe National Park experience the world's longest canopy walk, one of USAID's investments to increase the value and sustainability of tourism to the park. Revenue helps fund management of this high biodiversity area, home to 13 species of primates and source of 70 percent of the country's freshwater. Photo: Olaf Zerbock, USAID

5.3 ACRONYMS AND ABBREVIATIONS

AAR	after action review	CFR	Code of Federal Regulations
ABCG	Africa Biodiversity Consultative Group	CFS	Committee on World Food Security (UN-FAO)
ABNZ	areas beyond national jurisdiction	CGF	Consumer Goods Forum
ADS	Automated Directives System (USAID operational policy)	CGIAR	Global Agricultural Research Partnership (Formerly the Consultative Group on International Agricultural Research)
AM	adaptive management	CI	Conservation International
APHIS	Animal and Plant Health Inspection Service	CIFOR	Center for International Forestry Research
ARBCP	Asia Regional Biodiversity Conservation Program	CITES	Convention on International Trade in Endangered Species
ARCC	Adaptation and Resilience to Climate Change (The Mekong)	CLA	collaborating, learning, and adapting
ARREST	Asia's Regional Response to Endangered Species Trafficking	CMP	Conservation Measures Partnership
ASEAN	Association of Southeast Asian Nations	CMM	Conflict Management and Mitigation Office (USAID DCHA Bureau)
BALANCED	Building Actors and Leaders for Advancing Community Excellence in Development	CO₂	carbon dioxide
Ba Nafaa	Benefits from the Sea (Gambia-Senegal)	CO/AO	contracting/agreement officer
BBC	British Broadcasting Corporation	COR/AOR	contracting/agreement officer's representatives
BCN	Biodiversity Conservation Network	COHAB	Cooperation on Health and Biodiversity
BSP	Biodiversity Support Program	COP	Conference of the Parties (UNFCCC and CBD)
BUILD	Biodiversity Understanding in Infrastructure and Landscape Development	CRew	Caribbean Regional Fund for Wastewater Management
CA	constraints analysis	CRSP	Collaborative Research Support Program
CAF	conflict assessment framework	CSO	civil society organization
CAMPFIRE	Communal Areas Management Program for Indigenous Resources	CTF	conservation trust fund
CAR	Central African Republic	DCA	Development Credit Office (USAID E3 Bureau)
CARPE	Central African Regional Program on the Environment	DCHA	Democracy, Conflict, and Humanitarian Assistance (USAID Bureau)
CARSEA	Caribbean Sea Ecosystem Assessment	DEC	Development Experience Clearinghouse (USAID)
CBA	cost-benefit analysis	DFID	Department for International Development (UK aid)
CBD	Convention on Biological Diversity	DI	defining indicator
CBNRM	community-based natural resources management	DMZ	demilitarized zone
CBO	community-based organization	DNA	deoxyribonucleic acid (genetic sequences carrier)
CDCS	country development cooperation strategy	DO	development objective
CDCS RF	country development cooperation strategy results framework	DOAG	development objective agreement
CEA	cost-effectiveness analysis	DQA	data quality assessment
CEBC	Center for Evidence-based Conservation	DRG	democratic rights and governance
CEDA	Centro de Derecho Ambiental	E3	Economic Growth, Education, and Environment (USAID Bureau)
CEDARENA	Centro de Derecho Ambiental y de los Recursos Naturales	EC-LEDS	Enhancing Capacity for Low Emissions Development Strategies
CFUG	community forest user group	EEZ	exclusive economic zone

EGAT	Economic Growth, Agriculture, and Trade (USAID Bureau, now E3)	IDB	Inter-American Development Bank
EIA	environmental impact assessment	IEE	initial environmental examination
EMS/EMP	environmental management system/plan	IFI	international financial institutions
EP	Economic Policy Office (USAID E3 Bureau)	IGCP	International Gorilla Conservation Program
EPA	Environmental Protection Agency	IGD	inclusive growth diagnostic
ES	ecosystem service	IIED	International Institute for Environment and Development
EU	European Union	ILO	International Labour Organization
FAA	Foreign Assistance Act	INL	International Narcotics Control and Law Enforcement (U.S. Department of State)
FAB	Forestry and Biodiversity Office (USAID E3 Bureau)	IR	interim result
FAO	Food and Agriculture Organization (UN)	IRB	Institutional Review Board
FCMC	Forest Carbon, Markets, and Communities	ITTO	International Tropical Timber Organization
FLEGT	forest law enforcement, governance, and trade	IUCN	International Union for Conservation of Nature
FONAG	Fondo para la protección del Agua (the Quito Water Fund-UNEP)	IUU	illegal, unreported, and unregulated
FPIC	free, prior, informed consent/consultation	IWRM	integrated water resources management
FRAME	Framing Research for Adaptive Management of Ecosystems	KM	knowledge management
FSC	Forest Stewardship Council	LEDS	low emission development strategies
FUG	forest user group	LFA	limiting factors analysis
FY	fiscal year	LMMA	locally managed marine areas
G2G	government to government	LTPR	land tenure and property rights
GBIF	Global Biodiversity Information Facility	LMTPR	land/marine tenure and property rights
GCC	global climate change	M&E	monitoring and evaluation
GCC	Global Climate Change Office (USAID E3 Bureau)	MCC	Millennium Challenge Corporation
GCC-AD	Global Climate Change Adaptation (pillar funds)	MDB	multilateral development bank
GCP	Global Conservation Program	MDG(s)	Millennium Development Goals
GenBank	The National Institute of Health's annotated database of publicly available DNA sequences	MEA	Millennium Ecosystem Assessment
GenDev	Gender Equality and Women's Empowerment Office (USAID E3 Bureau)	MMDA	Model Mining Development Agreement
GEF	Global Environment Facility	MOU	memorandum of understanding
GEO BON	Group on Earth Observations Biodiversity Observation Network	MPA	marine protected area
GeoCenter	Center for the Application of Geospatial Analysis for Development (within USAID's Global Development Lab)	NBSAP	National Biodiversity Strategies and Action Plans
GHG	greenhouse gas	NGO	non-governmental organization
GIS	geographic information system	NOAA	National Oceanic and Atmospheric Administration
GreenCOM	strategic environmental education and communication	NRM	natural resource management
GSTA	Global Sustainable Tourism Alliance	NTFP	non-timber forest products
HIV/AIDS	human immunodeficiency virus/acquired immunodeficiency syndrome	NWP	nature, wealth, and power
		OS	open standards
		OU	operating unit
		PA	protected area
		PAD	project appraisal document
		PADDD	protected area downgrading, downsizing, and degazettement

PCM	Private Capital and Microenterprise Office (former Office in USAID E3 Bureau)	SLIMF	small and low intensity managed forest
PDA	personal digital assistant	SPAN	Strengthening the Protected Area Network
PDO	project development officer	SSF	small-scale fisheries
PEA	political economy analysis	STAP	Scientific and Technical Advisory Panel
PES	payment for ecosystem services	SWOT	strengths, weaknesses, opportunities, and threats (assessment framework)
PHE	population, health, and environment	TBCA	transboundary conservation areas
PHPA	public hearing and public auditing	TEEB	The Economics of Ecosystems and Biodiversity
PIO	public international organization	TEV	total economic value
PMP	performance management plan	TFA	Tropical Forest Alliance
POPS	Convention on Persistent Organic Pollutants	TFCA	Tropical Forest Conservation Act
PPL	Policy, Planning and Learning (USAID Bureau)	TILCEPA	Theme on Indigenous and Local Communities, Equity and Protected Areas
PPP	public-private partnership	TNC	The Nature Conservancy
PPR	performance plan and report	TOC	theory of change
ProgramNet	USAID's internal community of practice and key source of support related to the program cycle	TRAFFIC	wildlife trade monitoring network (formally, the Trade Records Analysis of Flora and Fauna in Commerce)
PWS	payment for watershed services	TRR	Trade and Regulatory Reform Office (USAID E3 Bureau)
RAFT	Responsible Asia Forest and Trade	UK	United Kingdom
RDCS	regional development cooperation strategy	UN	United Nations
RECOFTC	The Center for People and Forests (formerly the Regional Community Forestry Training Center)	UNCCD	United Nations Convention to Combat Desertification
REDD/REDD+	reducing emissions from deforestation and forest degradation/+ plus the role of conservation, sustainable forest management, and enhancement of forest carbon stocks	UNDRIP	United Nations Declaration on the Rights of Indigenous Peoples
RESILIM	Resilience in the Limpopo River Basin	UNDP	United Nations Development Programme
RF	results framework	UNEP	United Nations Environment Programme
RFA	request for application	UNESCO	United Nations Educational, Scientific and Cultural Organization
RFMO	regional fisheries management organization	UNFCCC	United Nations Framework Convention on Climate Change
RFP	request for proposal	USAID	United States Agency for International Development
RLO	resident legal officer	USDA	United States Department of Agriculture
SANREM	sustainable agriculture and natural resource management	USG	United States Government
SARS	Severe Acute Respiratory Syndrome	VA	vulnerability analysis
SCALE	System-wide Collaborative Action for Livelihoods and the Environment	WASH	water supply, sanitation, and hygiene
SCAPES	Sustainable Conservation Approaches in Priority Ecosystems	WCPA	World Commission on Protected Areas (IUCN)
SDC	Swiss Agency for Development and Cooperation	WEN	Wildlife Enforcement Network
SEA	strategic environmental assessment	WHO	World Health Organization
SEPA	Servidumbres Ecológicas: Progreso a través del Aprendizaje	WII	Wetlands of International Importance (the Ramsar Convention on Wetlands)
SESA	strategic environmental and social assessment	WISP	World Initiative for Sustainable Pastoralism
SIDS	small island developing states	WSC	Wildlife Conservation Society
		WWF	World Wildlife Fund for Nature

5.4 GLOSSARY

Accountability: The responsibility of political actors to all members of society for their actions and decisions.

Acquisition: The buying or contracting for goods or services to achieve “results,” in most cases through contracts with for-profit, private-sector organizations. Through this mechanism, consulting firms implement much of USAID’s support for biodiversity conservation.

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

Agro-tourism: Tourist venues and experiences that feature agricultural terrains and products such as vineyards and coffee or tea plantations. An ecological attraction such as a forest or mountain is often incorporated into the experience.

Applied/Operational Research: Research conducted to increase understanding of a development or conservation problem, including its context and impacts at a site or in a country.

Biodiversity: Short for biological diversity, biodiversity refers to the variety and variability of life, including the diversity of genes within species, the diversity of species, the diversity of communities and ecosystems, and the diversity of ecological processes.

Biodiversity Code: USAID guidance to help determine what projects are included in the accounting toward the biodiversity earmark. The code comprises four criteria, all of which must be met to be considered a biodiversity project.

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

Community-conserved Areas: Areas of natural or semi-natural habitat that have been conserved by local communities for a variety of ecological and cultural reasons. They may or may not be legally recognized by national governments or designated for management and protection. Thousands of small sites are conserved as village forests and pastures, sacred groves, and restricted hunting or fishing areas by communities worldwide.

Consent: As used within the principle of free, prior, and informed consent (FPIC), “consent” refers to the decision reached by indigenous peoples and other local communities through their customary decision-making process. The collective right to give or withhold consent applies to all projects, activities, and legislative and administrative measures and policies (and their associated processes and phases) that directly impact the lands, territories, resources, and livelihoods of indigenous peoples and other local communities. Consent must be sought and granted or withheld according to the

unique formal or informal political-administrative dynamic of each community.

Conservation Measures Partnership (CMP): A joint venture of conservation organizations and collaborators committed to improving the practice of conservation. By participating, member organizations seek to capitalize on their individual and collective experience to avoid duplication of effort, bypass tried-but-failed approaches, and quickly identify and adopt best practices.

Conservation Trust Fund: The provision of more sustained, long-term funding of conservation, usually of three main types: endowments, in which the principal is invested and income generated by that investment is used to finance activities, preserving the principal itself as a permanent asset; sinking funds, in which the principal and any investment income over a set period of time – generally a relatively long time – are used to finance activities; and revolving funds, in which new funding is received on a regular basis (such as from grants, taxes, user fees, etc.) to replenish, or even increase, the original principal.

Consultation: A process by which key stakeholders and/or potential beneficiaries are consulted about their potential interest and involvement in a development strategic approaches and the potential positive and negative impacts, costs, and benefits that may accrue from such activities.

Cooperative Agreement: An agreement between USAID and implementing partners, awarded to provide funds or other resources. This type of agreement dictates “substantial involvement” among the parties during the performance of the proposed activity. “Substantial involvement” is statutorily limited and does not allow the Agency to exercise a high level of control over the cooperating organization(s).

Criteria: “Content” level of a standard that sets out the conditions that need to be met in order to deliver a principle. It can be possible to verify criteria directly but they are usually further elaborated by indicators.

Debt-for-nature Swap: A third party (often an NGO or bilateral donor) will arrange to purchase a portion of a country’s public debt at a discount. The third party then “forgives” the debt in exchange for a negotiated level of investments in conservation on the part of the country’s government.

Enabling Condition: A condition that needs to be in place to overcome barriers to conservation. Enabling conditions are generally interrelated and can include legal, institutional, social, and security factors.

Ecoregion: A large area of land or water containing a geographically distinct assemblage of natural communities that share a large majority of species and ecological dynamics, as well as similar environmental conditions, and interact

ecologically in ways that are critical for their long-term persistence.

Ecosystem: A dynamic system of interactions between all of the species inhabiting an area and the nonliving physical environment. Ecosystems vary spatially and change with time, and no ecosystem is closed with respect to exchanges of organisms, matter, and energy. Priority areas or sites for conservation exist within ecosystems.

Ecosystem Management: How to manage the complex interactions between ecological and social systems in order to provide sustainable values to societies, even when scientists and managers do not know enough to accurately predict the behavior of those systems.

Ecosystem Services: Services provided by ecosystems and ecological processes, including regulation of water flows and maintenance of water quality; the formation of soil, prevention of soil erosion, and nutrient cycling that maintains soil fertility; degradation of wastes and pollution; pest and pathogen control; pollination; and climate regulation through carbon storage and sequestration.

Ecotourism: Responsible travel to natural areas that conserves the environment and improves the well-being of local people. The Ecotourism Society defines ecotourism as “purposeful travel to natural areas to understand the culture and natural history of the environment, taking care not to alter the integrity of the ecosystem while producing economic opportunities that make the conservation of natural resources beneficial to local people.”

Endemic Species: Species found only in a relatively small geographic area and nowhere else, such as Galapagos finches.

Engagement: Engagement means active participation of stakeholders, where they take ownership of the activity and process.

Environmental Assessment (EA): Analysis to determine whether a proposed action will have a harmful effect on the environment; an environmental impact assessment.

Environmental Impact Assessment (EIA): Analysis to determine whether a proposed action will have a harmful impact on the environment, often comparing the impact of this proposed action with that of other alternatives and options.

Equity: A key component of sustainable development, equity concerns fairness of outcomes both now and in the future – who benefits and who is included in development actions. Equity is also about inclusion in development decision-making. Thus, equity is both an instrumental process and a right, concerned with both distributional and procedural justice.

Forest Certification: Programs to audit and certify to consumers that wood and other forest products are produced

in forests managed in environmentally and socially responsible or sustainable ways.

Gender: A social construct that refers to relations between and among the sexes, based on their relative roles. Gender encompasses the economic, political, and sociocultural attributes, constraints, and opportunities associated with being male or female. As a social construct, gender varies across cultures and is dynamic and open to change over time. Because of this variation, gender roles should not be assumed, but investigated. Note that “gender” is not interchangeable with “women” or “sex.”

Gender Analysis: Identification and interpretation of gender differences and relations and their impact on achieving development objectives. Gender analysis also gauges the implications of development strategic approaches that may shift the power dynamic between women and men.

Gender Equality: The broad concept and development goal that is achieved when men and women have equal rights, freedoms, conditions, and opportunities for realizing their full potential and for contributing to and benefiting from economic, social, cultural, and political development. Equality does not mean that women and men become the same, but that women’s and men’s rights, responsibilities, and opportunities do not depend on whether they are born male or female. It means that society values men and women equally for their similarities and differences and for the diverse roles that they play. Gender equality is not a “women’s issue” but should concern and fully engage men, as well as women. It signifies the results of gender equity strategies and processes.

Gender Integration: Identifying and then addressing gender differences and inequalities during project planning, design, implementation, monitoring, and evaluation. Since the roles and relations of power between men and women affect how an activity is implemented, it is essential that project and activity planners address these issues on an ongoing basis.

Gender Roles: Social roles assigned to men and women according to cultural norms and traditions. Often, gender roles are not based on biological or physical imperatives.

Genes: A heritable molecular unit of an organism. Genes combine in unique patterns to form individuals and populations of each species.

Governance: How public institutions conduct affairs and manage resources in partnership with civil society and the private sector. “Good governance” is taken to include accessibility, peoples’ participation, transparency, accountability, rule of law, predictability, justice, and sustainability. “Good governance” is contrasted to ineffective or corrupt economies or political bodies.

Grants: Gifts of funds or other resources.

Green Accounting: An accounting method that attempts to factor environmental costs into the financial results of operations.

Human Rights: Legal, social, or ethical principles of freedom or entitlement; i.e., fundamental normative rules about what is allowed of people or owed to people, according to some legal system, social convention, or ethical theory. A number of human rights have been recognized through international conventions or treaties.

Implementation: The actual execution of a program, project, plan, or strategy, including ongoing planning and decision-making, as well as the implementation of activities.

Indicators: Variables that are influenced by project strategic approaches or management activities and that can be monitored to provide evidence of progress or success.

Indigenous and Traditional Peoples: Groups of people who have resided in a region for generations and can be distinguished from the rest of the national community based on social, cultural, and economic conditions. Indigenous areas are areas traditionally inhabited by these groups. Indigenous and traditional peoples have unique cultures that may be closely integrated with the local natural environment. Such communities typically have a strong stake in the natural resources around them, on which they depend for their livelihoods and cultures. These groups are often marginalized.

Informed: As used within the principle of free, prior, and informed consent (FPIC), "informed" refers to information that should be provided prior to seeking consent and also as part of the ongoing consent process. Among other factors, the information should be clear, consistent, accurate, and transparent and should be delivered in the appropriate language and format (including radio, video, graphics, documentaries, photos).

Institutions: Customs, behavioral patterns, and rules that define forest-related access, rights, and duties; benefit sharing; and decision-making. The term can also be used to refer to educational or governmental institutions.

Invasive Species: A species, often introduced inadvertently or deliberately by human activities from another continent or ecosystem, that can crowd out native species and take over habitats, thereby threatening native biodiversity.

Keystone Species: A species that plays a disproportionately large ecological role in determining the composition and structure of an ecological community; if a keystone species disappears, the whole community will change. The African elephant is one example of a keystone species.

Kyoto Protocol: An international agreement linked to the United Nations Framework Convention on Climate Change, which set binding targets for a group of industrialized countries and the European Community for reducing

greenhouse gas (GHG) emissions. The initial commitment period covered 2008-2012.

Livelihoods: Means of subsistence based on social, cultural, human, financial, natural, physical, and political capabilities and assets.

Local Laws: Laws or legal norms that apply at subnational or lower-level jurisdictions. Local laws may include both formal laws and customary norms.

Low Emissions Development Strategies (LEDS): A strategic framework that articulates concrete actions, policies, programs, and implementation plans to advance economic growth, improve environmental management, and meet development objectives. This framework provides a foundation for achieving long-term, measurable greenhouse gas emission reductions.

Marine Protected Area (MPA): An area of sea especially dedicated to the protection and maintenance of biodiversity and natural and associated cultural resources, and managed through legal or other effective means. MPAs range from small, locally managed and enforced fisheries or ecological reserves (no-take reserves) to larger national marine parks that are zoned for multiple use.

Natural Resources: Aspects of the biophysical environment that humans use or find of value, such as timber, fresh water, or minerals, and that include ecosystem services provided by these resources.

Nature, Wealth, Power (NWP): A framework that posits that conservation outcomes (nature) are influenced by how biodiversity and natural resources are used to generate and sustain livelihoods and economic growth (wealth) and by governance of the land and resources (power). The NWP framework also implies that economic growth is underpinned by how natural resources and biodiversity are managed.

Non-Timber Forest Products (NTFP): All biological materials other than wood that are extracted from forests for human use.

Participation: Involvement of stakeholders in planning, priority-setting, implementation, monitoring, and evaluation of activities and programs.

Private Protected Area: An area that is managed for biodiversity conservation objectives; protected with or without formal government recognition; and owned or otherwise secured by individuals, communities, corporations, or NGOs. Private conservation areas, like publicly protected areas, vary greatly in terms of management objectives, allowable activities, and level of protection. They may include formally declared private areas, lands subject to conservation easements, game ranches, mixed commercial operations based on sustainable use, and land trusts.

Privatization: Converting land or resources formerly under public or communal tenure into private property or private concession or lease.

Protected Areas: Areas managed to maintain certain elements of biodiversity and the values they provide.

Rapid Environmental Assessment: An assessment that provides relief workers and disaster-affected communities with a simple and straightforward analytical and decision-making framework to identify significant environmental issues in relation to the prime humanitarian objectives of saving lives and reducing damage.

Site: A relatively small and circumscribed area of natural habitat, whether land or water, and/or the area in which a conservation project works, regardless of size.

Social License: Formal or informal approval by the local community and other relevant stakeholders for a biodiversity conservation project to operate. A social license means that local actors will not obstruct the organization's work and, at best, will see it as a good neighbor and collaborator.

Social Marketing: The application of models and techniques derived from commercial marketing and behavioral psychology to promote new behaviors that have positive social values, such as biodiversity conservation.

Social Soundness Approach: An approach that incorporates and goes beyond safeguards that avoid harm through proactive assessment, planning, and implementation of biodiversity conservation in culturally and socially effective ways.

Species: An identifiable group of (potentially) interbreeding organisms that is able to produce viable offspring.

Stakeholders: Any person, group, or organization that has an interest in the use and management of some aspect of biodiversity in a given place, or that affects or is affected by a particular conservation action. Stakeholders range from local users to government agencies, NGOs, and the private sector and operate at local, national, and international levels.

Sustainable Forest Management: According to the U.S. Forest Service, "management regimes applied to forest land that maintain the productive and renewal capacities, as well as the genetic, species, and ecological diversity of forest ecosystems."

Sustainable Use: The use of biological products and ecological services of ecosystems in a manner and at a rate that does not reduce the system's ability to provide those products and services to future generations.

REDD (Reduced Emissions from Deforestation and Forest Degradation): The mechanism by which the conservation and/or restoration of forest ecosystems can play a key role in reducing atmospheric greenhouse gases.

REDD+ (REDD Plus): An enlarged concept that goes beyond deforestation and forest degradation to include conservation, sustainable management of forests, and enhancement of forest carbon stocks.

Safeguards: Measures, such as policies or procedures, to protect against, or minimize, social and environmental risks, damage, or harm. Safeguards ensure that environmental and social issues are evaluated in decision-making, helping to assess and reduce risks. Some safeguards provide an explicit mechanism for consultation and disclosure of information or for redress of grievances.

Tenure: Agreement(s) held by individuals or groups, recognized by legal statutes and/or customary practice, regarding the rights and duties of ownership, holding, access, and/or usage of a particular land unit or specific resources therein. Rights may be individual and separable, or they may be bundled.

Theory of Change: What and who needs to change to achieve the desired results, and how direct threats are linked to broader drivers and trends.

Threats: Refers to threats to processes and actions that may diminish biological diversity, including conversion of natural habitats; overexploitation of valuable species; introduction of invasive species; and environmental change, such as climate change, desertification, and pollution.

Threats-based Approach: An approach that emphasizes the development of a logical plan for determining which threats will be addressed, and how. The plan must clearly identify the linkages between threats and proposed activities.

Traditional Ecological Knowledge: Knowledge, practices, and beliefs that traditional cultures use to conceptualize and interact with their environments.

Transboundary Conservation Area: Cross-border collaboration to achieve biodiversity conservation and development goals. Transboundary conservation areas can include two or more contiguous protected areas across a national boundary; a cluster of protected areas separated by other land uses; a cluster of separated protected areas without intervening land; a transborder area including proposed protected areas; or a protected area on one side of a political boundary along with complimentary land use across the border.

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

Women's Empowerment: A critical aspect of promoting gender equality, focusing on identifying and redressing power imbalances and giving women more autonomy to manage their lives. Women's empowerment occurs when women achieve increased control and participation in decision-making that leads to better access to resources and improved socioeconomic status.

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