



USAID
FROM THE AMERICAN PEOPLE

USAID BIODIVERSITY POLICY



Front Cover Photos

Brazil – Surui Reforestation Project (José Caldas): An indigenous Surui man stands next to a sign for a USAID-supported reforestation and sustainable-management project in Rondonia, Brazil.

Thailand – Engaging Thai Youth in Protecting Threatened Ecosystems (Somsak Soonthornnawaphat): Schoolgirls learn about riparian health and water-quality testing at a USAID-supported training camp in the Mae Sa-Kog Ma Biosphere Reserve.

Timor-Leste Coral Reef (Nick Hobgood, DAI): Coral reefs in Southeast Asia are some of the most biologically diverse and extensive in the world. They are also among the most threatened, due to destructive fishing practices.

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List of Acronyms

BRM	Office of Budget and Resource Management	KM	Knowledge Management
CBD	Convention on Biological Diversity	MEA	Millennium Ecosystem Assessment
CDCS	Country Development Cooperation Strategy	NBSAP	National Biodiversity Strategy and Action Plan
CFR	Code of Federal Regulations	NGO	Nongovernmental Organization
CFUG	Community Forest User Group	OECD/DAC	Organization for Economic Cooperation and Development/ Development Assistance Committee
CGIAR	Consultative Group on International Agricultural Research	OSTP	White House Office of Science and Technology Policy
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora	PES	Payments for Environmental Services
E3	Bureau for Economic Growth, Education, and Environment	PPL	Bureau for Policy, Planning, and Learning
EBA	Ecosystem-based Adaptation	SSC	Species Survival Commission
FAA	Foreign Assistance Act	RDCS	Regional Development Cooperation Strategy
FAO	Food and Agriculture Organization	UNCCD	United Nations Convention to Combat Desertification
FTA	Free Trade Agreement	UN	United Nations
GEI	Green Economy Initiative	UNEP	United Nations Environment Programme
GBI	Global Benefits Index	UNFCCC	United Nations Framework Convention on Climate Change
GEF	Global Environment Facility	USAID	United States Agency for International Development
G-FISH	Global Fish Alliance	USG	United States Government
GHG	Greenhouse Gas	WCPA	World Commission on Protected Areas
IPBES	Intergovernmental Platform on Biodiversity and Ecosystem Services	WHO	World Health Organization
ITTO	International Tropical Timber Organization	WWF	World Wildlife Fund
IUCN	International Union for Conservation of Nature		

Message from the Administrator

I am pleased to share with you USAID's new Biodiversity Policy, which builds on our Agency's long history of conserving a global biological heritage for future generations and reflects our recognition of the essential role that healthy natural systems play in advancing resilient societies and ending extreme poverty. This Policy provides a blueprint for how we will work to achieve our vision of conserving biodiversity for sustainable long-term development.

Today, at least 1.6 billion people worldwide rely on forests for some part of their livelihood, and about 2.6 billion people in developing countries depend on fish for protein and income. The poor management of both forests and fisheries means that these precious resources will not meet human demand over the long term – compromising global food security and straining the resilience of these systems and society. Unbridled exploitation is also leading to unprecedented rates of species extinction. These trends threaten the ability of families to lift themselves out of extreme poverty and communities to protect against economic or environmental shocks.

With this new Policy, we are harnessing the power of innovation and proven approaches to effectively protect and manage the environment that supports us – the fertile farms, water basins, and clean air that will sustain our growth and spur our prosperity for generations to come. The Biodiversity Policy represents our recommitment to conserve some of the world's most cherished resources, including swift action to stamp out global wildlife trafficking. It also emphasizes a new focus on integrating biodiversity into our broader mission, through evidence-based approaches and high-impact partnerships that will deliver meaningful results.

The development of this Policy was analysis based and participatory through several rounds of review that culminated in a public consultation period. The Policy has benefited greatly from this level of expert engagement, consultation, and transparency, and we are proud to be heeding President Obama's call for open government.

We consider the stewardship of nature a critical and effective strategy for achieving equitable and sustainable development results. With this Policy, USAID is well positioned to chart a development path that nourishes, rather than depletes, natural capital. Achieving this vision will require creativity to address our world's most pressing conservation problems; it will require us to act decisively in the face of uncertainty and work across traditional divides to create new pathways to sustainability.



Rajiv J. Shah
Administrator

Acknowledgements

The USAID Biodiversity Policy was developed by an Agency steering committee under the leadership of Holly Ferrette and Hannah Fairbank, in close coordination with USAID's Bureau for Policy, Planning, and Learning (PPL). Members of the steering committee who worked tirelessly on the analytical, strategic, and political aspects of policy development included Alex Dehgan, Cynthia Gill, Alicia Grimes, Hadas Kushnir, Bronwyn Llewellyn, Kathryn Stratos, and Kathryn Stevens, with strong technical inputs from Spike Millington and administrative support from Shereen Abdelaaty.

The work of the steering committee was supported by analytical working groups made up of a broad range of USAID staff in Washington and field missions, too numerous to list here. Members of the USAID Forestry and Biodiversity Office contributed many hours, reviewing drafts and providing critical feedback to the steering committee. Will Gibson, Bruce Bayle, Christy Johnson, Mary Melnyk, and Tim Resch provided robust technical inputs from their regional perspectives. Julie Kunen, Genevieve Maricle, and Ashley Marcus of PPL and Mark Murray of the Office of Budget and Resource Management provided critical guidance for the process and smoothed the way for the Policy as it developed. The Policy also benefited greatly from the close involvement and wise counsel of USAID's Bureau for Economic Growth, Education, and Environment (E3) leadership, Eric Postel and Christian Holmes.

The development of this Policy was highly consultative, with several rounds of review that culminated in a public consultation period through which USAID received valuable feedback from civil society, academia, and private-sector and U.S. government entities. The Policy is much stronger because of this level of expert engagement, consultation, and transparency, and the input of all those reviewers who participated in the consultations is very much appreciated.

I. Executive Summary

The 21st century holds much promise and peril for human well-being and for biodiversity. There is tremendous opportunity to advance development while protecting the natural systems on which the world depends, as well as a global acknowledgement of the very real costs to humanity of biodiversity loss. Through USAID's first Biodiversity Policy, USAID and its partners will support and mobilize resources to chart a development pathway that nourishes, rather than depletes, natural capital.

The USAID Biodiversity Policy builds upon the Agency's long history of conserving a global biological heritage for current and future generations and reflects a deep understanding of the role that healthy natural systems play in achieving the Agency's human-development goals. The Policy recognizes that biodiversity loss can be driven by unsustainable development, that there may be trade-offs that must be understood and managed between biodiversity conservation and development goals, and that biodiversity conservation itself can be a critical tool in the Agency's toolkit for achieving sustainable development.

While there has been much progress in overall economic prosperity around the world over the last decades, the challenges for countries and the international development community remain daunting. Roughly 1.2 billion people worldwide are still living in extreme poverty.¹ Conflict and corruption continue to be some of the greatest barriers to prosperity, and lack of good governance excludes the poor and other disadvantaged groups from contributing to decisions that affect their lives.²

Added to this list of challenges is the loss of biodiversity at an unprecedented rate. The Millennium Ecosystem Assessment (MEA), the most comprehensive evaluation ever undertaken of the state of the world's ecosystems and their capacity to support human well-being, found that *"over the past 50 years, humans have changed these ecosystems more rapidly and extensively than in any comparable period of time in human history."*³

These losses are tearing the very fabric of the natural systems that sustain global development – systems

that provide clean and plentiful water and fertile soils, pollination of crops, resilience to climate shocks, fish- and forest-based food security, and ecological dynamics that keep pests and diseases in check. Further, the actions leading to biodiversity loss, such as wildlife trafficking, can have negative impacts on core elements of development, such as rule of law and national security.

The USAID Biodiversity Policy provides a blueprint for how the Agency will work to achieve its vision of conserving biodiversity for sustainable, resilient development. (See USAID's *Blueprint for Biodiversity Conservation* box, below.) The Policy deepens the Agency's appreciation of the intrinsic value of biodiversity. It also recognizes that human well-being and progress are dependent on the health of biodiversity systems and that durable development gains are not possible unless these systems are valued and safeguarded. To this end, USAID will work hand in hand with host countries and the global

USAID'S BLUEPRINT FOR BIODIVERSITY CONSERVATION

VISION: TO CONSERVE BIODIVERSITY FOR SUSTAINABLE, RESILIENT DEVELOPMENT

GOALS: 1) conserve biodiversity in priority places, and 2) integrate biodiversity as an essential component of human development

OBJECTIVES:

- support enabling conditions for biodiversity conservation;
- reduce priority drivers and threats to biodiversity;
- integrate conservation and development for improved biodiversity and development outcomes;
- build partnerships to mobilize resources in support of biodiversity conservation;
- influence key international policies in support of biodiversity conservation; and
- apply science, technology, and learning to enhance biodiversity conservation practice

community to conserve biodiversity for sustainable, resilient development.

This Policy represents a recommitment of USAID to conserve biodiversity through strategic actions to reduce threats and drivers, as well as a new focus on integrating biodiversity conservation with other development sectors. A roadmap for implementation highlights the most critical steps necessary for implementing this Policy. (See Annex II.)

Effective immediately, the Policy promotes the selective, focused, and strategic use of biodiversity resources through modifications to the Agency's Biodiversity Code and through identifying priority countries/regions for biodiversity programming. USAID will focus on high-biodiversity-priority geographies where the Agency has a comparative advantage for making positive change and can support host-country conservation and development priorities. USAID will support the conservation of priority sites, species, and genetic diversity and align biodiversity resources to national and regional development goals and the global public good.

Through an **Agenda for Change** in support of achieving the Policy goals, USAID will

- apply the principles of **selectivity and focus** in prioritizing the strategic use of Agency biodiversity resources;
- embark on **evidence-based action and learning efforts** with a focus on the nexus of biodiversity and other development sectors;
- support **gender equality and women's and indigenous peoples' empowerment** in leadership and decision making in the biodiversity conservation context and strengthen the legal and/or traditional land and resource rights of communities and indigenous peoples;
- make limited **revisions to USAID's Biodiversity Code**, which defines Agency programs in the sector;
- forge **innovative partnerships** with the private and public sectors, civil society, indigenous peoples, and academia to leverage resources and skills that can magnify results and avoid duplication of effort;
- harness innovations in **science and technology** to improve the practice of conservation and increase impact; and



Photo: Andrew Watson, DAI

USAID projects have helped support orangutan conservation efforts in Indonesia. Fewer than 6,000 Sumatran orangutans remain in the wild.

- develop a five-year implementation plan for the Policy that builds on the **Biodiversity Policy Roadmap** to outline and guide critical steps and stakeholders in Policy implementation.

What will not change under this Policy? In order to build on and mobilize current USAID human and institutional capacities under the Policy, the Agency will

- continue USAID's comprehensive approach to conserve biodiversity through strategic actions to reduce threats in high-biodiversity geographies and target key transboundary and global drivers, such as wildlife trafficking and illegal, unreported, and unregulated fishing, that contribute to biodiversity loss;
- build on the Agency's strong legacy and experience in biodiversity conservation to demonstrate international leadership and influence key policy fora for improved conservation outcomes; and
- renew commitment to knowledge management (KM) drawing on and enhancing the Agency's rich reservoir of experience and use that knowledge to better inform policy and program design, foster innovation, and improve performance and collaboration.

USAID's first Biodiversity Policy builds on the Agency's experience and legacy of achieving conservation results while also contributing to the well-being of people who rely on these resources through creation of sustainable livelihoods, transparent and accountable systems of governance, secure resource tenure, and other development dividends.

II. Introduction

IS DEVELOPMENT SUSTAINABLE?

Over the past half-century, the world has seen more progress toward economic prosperity and human development than during any other time in human history. Global income per capita in real terms has increased by 70 percent in the past 30 years. More than 2 billion people gained access to improved sources of drinking water, and the number of people living in extreme poverty has fallen at an unprecedented rate – a reduction of more than 700 million people since 1990.⁴ During this same time period, however, humans have altered natural ecosystems at a greater rate and more extensively than in any comparable period in history, with biodiversity in a state of precipitous decline.⁵

The UN *Millennium Development Goals Report* confirms that environmental sustainability is under extreme threat, with forests lost at an alarming speed and fish stocks overexploited.⁶

As the international community grapples with the challenges of lifting up the estimated 1.2 billion people living in extreme poverty worldwide, doubling the global food supply in the next several decades to meet increasing demand,⁷ and promoting resilient

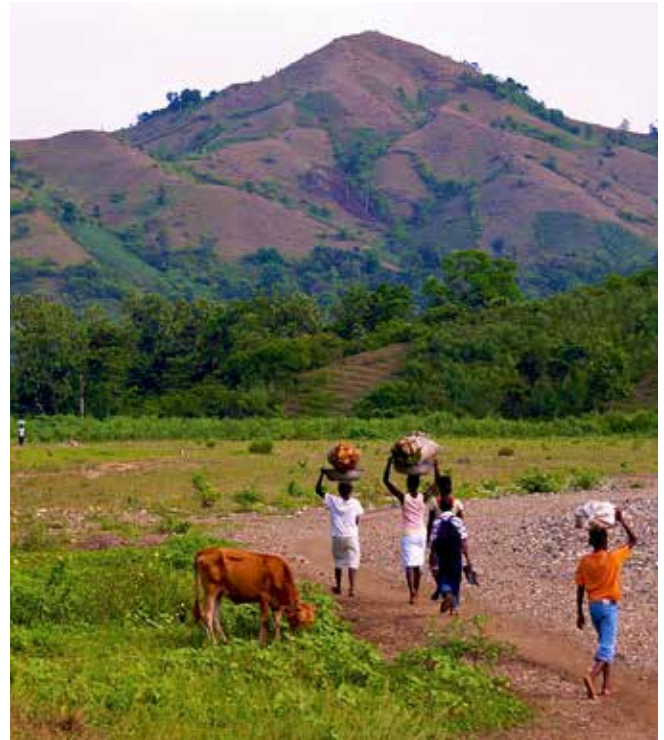


Photo: Nick Hobgood, DAI
Haitians taking charcoal to market through the Limbé valley's denuded hillsides. Deforestation, soil erosion, and low agricultural productivity all play a part in cycles of extreme poverty in many parts of the world.

BOX I: CALL FOR CHANGE

- The President's Council of Advisors on Science and Technology, in its report on *Sustaining Environmental Capital: Protecting Society and the Economy*, urged the U.S. Government to address "the threats to both the environmental and the economic aspects of well-being that derive from the accelerating degradation of the environmental capital."^{*}
- InterAction, an alliance of nearly 200 U.S.-based international relief and development NGOs, calls for an integrated approach between conservation and development that "requires new partnerships, capacity building for effective resources management, and better ways of measuring success."^{**}
- The UN's Green Economy Initiative seeks a "development path [that] should maintain, enhance, and, where necessary, rebuild natural capital as a critical economic asset and source of public benefits, especially for poor people whose livelihoods and security depend strongly on nature."^{***}

^{*} Executive Office of the President, President's Council of Advisors on Science and Technology, *Report to the President: Sustaining Environmental Capital: Protecting Society and the Economy*, Washington, DC: Executive Office of the President, 2011.

^{**} See www.interaction.org.

^{***} United Nations Environment Programme, "Green Economy."

democratic societies, the interconnectedness of development and the health of natural systems comes into clear focus.

Though the concept of sustainable development based on economic, social, and environmental pillars has been widely accepted, implementation and progress toward success have proven difficult.⁸

Increasingly, however, a growing consensus recognizes that development cannot be sustainable if it results in the degradation of the natural capital that supports economic activity and progress in other areas such as public health, food security, and resilience to climate change. (See Box 1: *Call for Change*.) Further, there is increased understanding that effective sustainable development, including environmental stewardship, thrives in situations characterized by a free and fair political system, respect for human rights, a vibrant civil society, and public confidence in the police and the courts.

BIODIVERSITY CONSERVATION AND DEVELOPMENT

Biodiversity refers to the variety and variability of ecosystems, species, genes, and habitats in the world and underpins ecosystem goods and services, although the precise nature and extent of that relationship is complex.⁹ (See Box 2: *Key Definitions and Concepts*.) The loss of biodiversity can make ecosystems and societies less resilient and threaten the production of ecosystem services.

The conservation of biodiversity has traditionally been framed as a challenge to protect species, habitats, and ecosystems; stop extinctions; and conserve what is a shared global heritage with intrinsic value. This is an important rationale for conservation, but it is not the only one.

Biodiversity conservation efforts, including sustainable use, help to maintain natural earth processes that create the environmental goods and services that enable development – food, fiber, fodder, pollination, clean water, fertile soils, and wood. For example, a recent study concluded that high-biodiversity areas provide over half of the ecosystem services on which the poor depend, and conserving just 25 percent of those areas would sustain 50 percent of realized ecosystem goods and services.¹⁰

BOX 2: KEY DEFINITIONS AND CONCEPTS

- **Biodiversity:** “The variability among living organisms from all sources including, *inter alia*, terrestrial, marine, and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species, and of ecosystems.”*
- **Sustainable Use:** “The use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations.”**
- **Ecosystem:** “A dynamic complex of plant, animal, and microorganism communities and their non-living environment interacting as a functional unit.”***
- **Ecosystem Services:** The short- and long-term benefits people obtain from ecosystems. They include 1) provisioning goods and services, or the production of basic goods such as food, water, fish, fuels, timber, and fiber; 2) regulating services, such as flood protection, purification of air and water, waste absorption, disease control, and climate regulation; 3) cultural services that provide spiritual, aesthetic, and recreational benefits; and 4) supporting services necessary for the production of all other ecosystem services, such as soil formation, production of oxygen, crop pollination, carbon sequestration, photosynthesis, and nutrient cycling.
- **Natural Capital:** “The stock of natural ecosystems that yields a flow of valuable ecosystem goods or services into the future. ...Since the flow of services from ecosystems requires that they function as whole systems, the structure and diversity of the system are important components of natural capital.”****

* Convention on Biological Diversity. “Article 2: Use of Terms, Convention on Biological Diversity.”

** Ibid.

*** Ibid.

**** Robert Costanza, “Natural Capital,” *The Encyclopedia of Earth*.

“Biodiversity is not just a luxury for the rich, it is a necessity for the poor.”

Pavan Sukhdev, study leader

The Economics of Ecosystems and Biodiversity (June 2012)

In addition to maintaining the stocks and flows of ecosystem goods and services, biodiversity conservation actions can create development “co-benefits” such as building empowered local communities, diversifying livelihoods, promoting gender equality, increasing government transparency and accountability, and contributing to peace and security. Seen in this light, biodiversity conservation is not an afterthought or special-interest issue, but rather an essential component of achieving sustainable development.

The following facts exemplify ways in which biodiversity and healthy ecosystems can contribute to development outcomes:

- 2.6 billion people in developing countries derive a substantial part of their animal protein consumption from fish, making it an important staple for food security.¹¹
- The total economic value of insect pollination worldwide is estimated at about \$210 billion, representing 9.5 percent of world agricultural output in 2005.¹²
- The risk of disease and malnutrition increases when biodiversity is lost. Roughly 75 percent of emerging infectious diseases, transferred to humans from animals, are driven by land-use change and altered human/wildlife interactions.¹³ The decline in wildlife populations, an important food source in the developing world, is contributing to iron and zinc deficiency in humans.¹⁴
- Biodiversity has a key role in mitigating climate change through carbon storage and sequestration. One study determined that the net benefits of halving deforestation could amount to \$3.7 trillion over the long term.¹⁵
- Biodiversity is the basis for profitable and sustainable enterprises. For example, in Namibia, long-term investment in community-based conservancies has improved wildlife populations and resulted in \$451 million Namibian dollars¹⁶ (\$41 million U.S. dollars) in revenue¹⁷ from sustainable-use activities, such as tourism, for more than 12 percent of the population.¹⁸
- Biodiverse ecosystems play an important role in helping societies mitigate and adapt to natural disasters and are a cost-effective alternative to building infrastructure; for example, coral reefs provide a natural buffer against the impact of storms on coastal populations.¹⁹ During the 2004 Indian Ocean tsunami, areas with healthy mangroves experienced less loss of human life than those where forests had been destroyed.²⁰
- Trafficking of wildlife parts, such as from tigers, rhinos, and elephants, threatens the survival of these important species; imperils livelihoods; contributes to organized crime, terrorism, and other kinds of trafficking; and diminishes rule of law and national security.²¹

Despite the clear linkages, there is still much to learn about how to effectively conserve biodiversity; achieve development results; and understand when there are trade-offs between the two in terms of scale, timeframe, responsibilities, and distribution of costs and benefits. A community or local government, for example, might be able to maximize short-term economic benefits by granting a forest concession to the highest bidder; however, they then forgo the



Photo: Michelle Baird

Local officials and members of the police force work together to plant mangrove seedlings on Samal Island, Philippines, where a marine park has been established with USAID assistance.

opportunity to sustainably manage their forest and derive steady and longer-term economic benefits that might be more equitably shared. Longer-term benefits may come from sustainable forest-based enterprises and ecosystem goods and services, such as non-timber forest products and watershed-protection services. Improved understanding and management of trade-offs will require a strong evidence base to inform decision making, including a better understanding of the distribution of the costs and benefits of growth, how to value the natural capital that enables development, and best practices to conserve biodiversity. It will also require recognition of the linkages between biodiversity and development and finding better ways to integrate conservation and development practices.²² (See Box 3: *Linkages between Biodiversity and Development: Integration Pathways.*)

The way forward will require larger-scale, long-term planning that brings together diverse stakeholders – both from the fields that can be the major drivers of biodiversity loss, such as energy, agriculture, security, trade, and investment, and from among those who are most often affected by the lack of development and environmental sustainability, such as women, the poor, indigenous peoples, and other marginalized groups. Given the rapid rate of biodiversity loss, it is also important to take more immediate actions to address critical drivers and threats to globally significant biodiversity that contributes to national and regional development goals and conservation priorities.

“The challenge for the [biodiversity] conservation and development community is to engage in a social process that allows for compromise and the explicit acknowledgement of risks and costs, while at the same time gaining ever more clarity and purpose regarding those things that should not be traded off.”

Convention on Biological Diversity Secretariat
Global Biodiversity Outlook 3 (2010)

BOX 3: LINKAGES BETWEEN BIODIVERSITY AND DEVELOPMENT: INTEGRATION PATHWAYS

Biodiversity can no longer be seen as an issue separate from the core concerns of society: tackling extreme poverty, increasing food security, improving public health, managing the growing impacts of global climate change, and building resilience to recurrent crises. Conservation and sustainable use of biodiversity can produce a variety of human development dividends, and development can shape biodiversity outcomes. This complex and dynamic relationship has multiple pathways:

- Biodiversity and healthy ecosystems provide goods and services critical to human well-being (clean water, food, reduced natural disaster risk) and can help sustain development outcomes.
- Biodiversity conservation activities can yield development co-benefits, such as diversifying livelihoods, promoting gender equity, increasing government transparency, and contributing to peace and security; thus, biodiversity conservation is an important development strategy.
- Development is a major source of pressure on biodiversity, and proactive engagement can produce a spectrum of results, from avoidance or mitigation of impacts and compensation for biodiversity loss to delivering positive conservation outcomes.

Approaches from other development sectors can enhance biodiversity conservation practice (e.g., value chain analysis, conflict analysis, land registration, social media) and in turn other development sectors can benefit from the adoption of biodiversity conservation approaches (e.g., ecosystem-based approaches, land-use planning).

THREATS AND DRIVERS OF BIODIVERSITY LOSS

The speed and degree of global biodiversity loss is alarming by any measure: The world is losing species at a rate that is 100 to 1,000 times faster than natural extinction rates,²³ and the extent and health of natural habitats continue to decline globally, particularly in marine and coastal areas. Most large forest, river, and grassland ecosystems face extensive fragmentation and degradation.²⁴

A powerful combination of human-induced threats and drivers is causing biodiversity loss globally. (See Box 4: *Biodiversity Drivers and Threats*.) Although there are a variety of terms and taxonomies that the conservation community uses to refer to threats and drivers, for purposes of this Policy, a threat is a proximate human activity or process that explicitly causes degradation or loss of biodiversity;²⁵ whereas a driver is the ultimate social, economic, political, institutional, or cultural factor that enables or exacerbates one or more threats.²⁶

BOX 4: BIODIVERSITY DRIVERS AND THREATS

	Drivers	Threats
Definition	A driver is the ultimate factor, usually social, economic, political, institutional, or cultural, that enables or otherwise adds to the occurrence or persistence of one or more threats.*	A threat is a proximate human activity or process that explicitly causes degradation or loss of biodiversity.**
Categories	<ul style="list-style-type: none"> ■ demographic factors ■ economic factors ■ sociopolitical factors ■ cultural and religious factors ■ scientific and technological factors 	<ul style="list-style-type: none"> ■ habitat loss and degradation ■ climate change ■ pollution and excessive nutrient load ■ over-exploitation and unsustainable use ■ invasive alien species
Examples	<ul style="list-style-type: none"> ■ demographic change ■ boom in the biofuels market; increased wealth driving increased consumption ■ liquidation of natural capital to fund elections ■ use of ivory in religious idols; belief that rhino horn cures cancer ■ industrial-scale freezers on fishing vessels 	<ul style="list-style-type: none"> ■ deforestation resulting from agricultural expansion ■ increased ocean temperatures ■ high levels of E.coli stemming from nonpoint source water pollution ■ overfishing/wildlife poaching ■ lionfish populations in the Caribbean

* Based on “A Standard Lexicon for Biodiversity Conservation: Unified Classifications of Threats and Actions.”

Drivers are also known as “contributing factors/indirect threats/root causes/drivers” (“A Standard Lexicon for Biodiversity Conservation: Unified Classifications of Threats and Actions;” “indirect drivers” (CBD *Global Outlook 2*, CBD *Global Outlook 3*, and MEA 2005); and “underlying causes” (CBD *Global Outlook 3*).

** Based on “A Standard Lexicon for Biodiversity Conservation: Unified Classifications of Threats and Actions.”

Threats are also known as “direct drivers” (CBD *Global Outlook 2*, CBD *Global Outlook 3*, MEA 2005) and “direct threats, sources of stress, and proximate pressures” (“A Standard Lexicon for Biodiversity Conservation: Unified Classifications of Threats and Actions,” and *The IUCN Red List of Threatened Species*).

BOX 5: ANATOMY OF A THREAT: WILDLIFE TRAFFICKING

Wildlife trafficking is reaching epic proportions – measuring billions of dollars a year and threatening the survival of iconic species such as elephants, rhinos, tigers, sharks, and sea turtles. Demand for wildlife parts and products has rapidly increased in recent years, driven in part by increasing incomes in Asian countries that have attracted the transnational criminal networks that have helped to make wildlife trafficking the fourth-largest illicit trade in the world. Wildlife trafficking threatens national and regional security, undermines economic development, and impacts public and ecosystem health.



Photo: ©Operation Cobra
Inspectors sort ivory confiscated in Nairobi, Kenya, during a transregional operation to counter wildlife trafficking.

Wildlife trafficking has become more organized, more lucrative, and more technologically advanced than ever before. Park rangers and resource managers must patrol vast areas and are often out-manned and out-gunned by poachers, who employ warlike hunting techniques that include helicopters, night-vision goggles, and a variety of weaponry from guns to poisons, traps, and machetes. Customs and border officials are often ill equipped to meet the challenges of increasing illegal trade, and wildlife products move with ease across porous borders and over oceans, transported in hidden compartments or mislabeled to escape detection. Corruption is a major impediment to stopping wildlife crime. President Obama signed an Executive Order in July 2013 to combat wildlife trafficking that will mobilize the U.S. Government to address this important challenge.

Threats interact in ways that magnify their impacts. Climate change, for instance, is a dramatic threat that not only creates its own direct impacts (e.g., increased ocean acidity, stress from temperature fluctuations, increased drought, and glacier melting) but also exacerbates impacts from other threats, particularly from invasive species, fire, and fragmentation.

There are also a variety of barriers to effective conservation, including the presence and degree of institutional capacity, policies and their implementation, scientific understanding, stakeholder engagement and support, economic incentives, and financing for conservation.²⁷ These factors can act as barriers to producing durable conservation results and need to be considered along with biodiversity threats and drivers.



Photo: Rhett A. Butler/mongabay.com
Expanding oil palm cultivation is a global driver of tropical forest loss.

USAID'S EXPERIENCE IN ADDRESSING BIODIVERSITY CONSERVATION AND DEVELOPMENT

USAID is a development agency with a robust biodiversity portfolio. Historically, the U.S. Congress provides funds for biodiversity conservation, with a priority of conserving biodiversity of national importance and global public good. U.S. legislation also mandates that USAID take actions that support conservation and sustainable management of tropical forests²⁸ and has directed the Agency to give high priority to preventing biodiversity loss.²⁹ All USAID development programs, projects, and activities must also follow Title 22, Code of Federal Regulations, Part 216 (22 CFR 216) environmental impact assessment procedures, which consider the environmental impacts, including impacts on biodiversity, of these development investments.

USAID's approach to conservation has evolved since the 1980s, from programs that primarily focused on protected-area management to programs that implement biodiversity conservation across large landscapes and seascapes; provide essential ecosystem goods and services for development at the local and national levels; and integrate with other

sectors, such as health, agriculture, and governance.³⁰ (See Box 6: *Contributions of Forest Governance to Development in Nepal.*)

USAID's programs are comprehensive. USAID looks at the big picture to achieve site- and species-based conservation gains at various scales and recognizes that sustainability is dependent on a supportive enabling environment for conservation that includes the availability, integrity, and use of information; effective laws and policies; capable institutions; supportive economic conditions and incentives; a strong constituency for conservation; and a commitment to promoting social soundness, gender equity and women's empowerment, and the rights of indigenous peoples.

Looking to the future, USAID is increasingly focused on addressing persistent conservation and development challenges that include expanding development of agricultural commodities such as oil palm, rubber, and pulpwood species; expansion of artisanal and industrial-scale mining; reconciliation of new physical infrastructure development with the need to retain functioning natural infrastructure; and combating international wildlife and timber trafficking.

BOX 6: CONTRIBUTIONS OF FOREST GOVERNANCE TO DEVELOPMENT IN NEPAL

Throughout Nepal's civil war, USAID supported communities in high-biodiversity regions of the country to improve the management and governance of forest resources and to develop environmentally sustainable livelihoods. Work with local Community Forest User Groups (CFUGs) – a governance structure aimed at increasing local rights to forest resources and improving their management – continued despite challenging conditions during the violent conflict. Beyond improved management of forest ecosystems, CFUGs provided economic and governance benefits where the government may have been weak or absent during the conflict. These benefits included increased transparency in decision making, decreased corruption, increased equity of benefits sharing, improved social networks, and economic empowerment of *Dalit* (low caste, marginalized) women. CFUGs provided a basis for post-conflict reconstruction and development once the war ended, and they continue to advocate for community rights and economic opportunities, both individually and collectively through the Federation of Community Forestry Users Nepal.*

*See Tara Prasad Gnyawali, *Sustainable Livelihoods: Building on Good Governance: A Case Study on Interlinkages between Conservation, Livelihoods, and Good Governance Practices in Dolpa, Nepal* (Baluwatar, Kathmandu, Nepal: World Wildlife Fund Nepal, 2007).



Photo: USAID-supported SCAPES program
Community members participate in the assessment of red pandas in the Sacred Himalayan Landscape, Nepal. Increasingly, communities manage their natural resources through forest user groups and anti-poaching patrols.

III. USAID's Vision, Goals, and Objectives for Biodiversity Conservation

VISION: TO CONSERVE BIODIVERSITY FOR SUSTAINABLE, RESILIENT DEVELOPMENT

USAID envisions a future in which biodiversity thrives and human well-being increases through improvements in economic prosperity, social equity, and environmental stewardship.

GOALS

USAID will work toward two mutually reinforcing goals in pursuit of this vision: 1) conserve biodiversity in priority places, and 2) integrate biodiversity as an essential component of human development.

CONSERVE BIODIVERSITY IN PRIORITY PLACES

In pursuit of this goal, USAID will focus on high-biodiversity-priority countries and regions where prospects are good for positive change and where the Agency can support host-country conservation and development efforts. USAID will support the conservation of priority sites, species, and genetic diversity; align biodiversity resources to contribute to national and regional development goals; and conserve biodiversity for the global public good. The Agency will undertake bilateral, transboundary, regional, and global programming, which can include *in situ*, site-specific conservation work; targeted, high-priority *ex situ* conservation activities;³¹ and efforts that address global and regional drivers of biodiversity loss, such as wildlife trafficking and illegal timber trade in priority places.

USAID has identified global priorities at the country and regional levels through a dynamic, data-driven process that takes into consideration technical and institutional criteria. This will steer how the Agency allocates funds and focuses efforts. At the regional and subnational level, USAID will make tactical and strategic decisions based on the best information available regarding biodiversity threats, drivers, and

opportunities; host-government priorities; cost; probability of success; and other contextual factors, such as how climate change may affect an area. The global prioritization process and the resulting country tiers are outlined in more detail in Section IV: Agenda for Change.

INTEGRATE BIODIVERSITY AS AN ESSENTIAL ELEMENT OF HUMAN DEVELOPMENT

USAID will take steps to transform the relationship between biodiversity conservation and development to increase or sustain conservation and development outcomes. This will entail increasing understanding of how biodiversity and healthy ecosystems provide goods and services that can sustain development outcomes and how conservation investments yield development co-benefits; strengthening internal USAID systems and capacity to integrate biodiversity conservation with other development sectors; and using programs, partnerships, and policy engagement to link across sectors and inform understanding and management of trade-offs between conservation and other development goals. USAID will promote integration with key sectors such as agriculture, food security, climate change, health, democracy and governance, economic growth, and trade.

OBJECTIVES

To conserve biodiversity in priority places and to integrate biodiversity to advance human well-being, USAID will undertake work focused on six objectives:

- 1) support enabling conditions for biodiversity conservation;
- 2) reduce priority drivers and threats to biodiversity;
- 3) integrate conservation and development for improved biodiversity and development outcomes;

- 4) build partnerships to mobilize resources in support of biodiversity conservation;
- 5) influence key international policies in support of biodiversity conservation; and
- 6) apply science, technology, and learning to enhance biodiversity conservation practice.

I. SUPPORT ENABLING CONDITIONS FOR BIODIVERSITY CONSERVATION

Underlying social, economic, and legal conditions (or “enabling conditions”) can have a profound influence on governance; on power dynamics among stakeholders and their rights, use, and access to biodiversity; and on the ability to achieve and sustain conservation impact at scale. (See *Box 7: Governance and Power in Conservation*.) Conducive enabling conditions can address and counteract some of the key barriers to conservation, including lack of financial sustainability, corruption, and insecure land and resource tenure. Ensuring that enabling conditions are considered on relevant temporal (e.g., short-term gains vs. long-term impacts) and spatial scales (e.g., landscape scale or political units) will influence the extent to which biodiversity and development outcomes can be sustainably achieved. USAID will address legal and regulatory factors, accountable and capable institutions, economic factors, and constituencies for conservation.



Photo: Delphin King, Laikipia Wildlife Forum
Schoolgirls in Kenya’s Laikipia District participate in reforestation efforts while learning about the importance of protecting natural resources.

Legal and Regulatory Factors: Some policies, legal frameworks, and government regulations can encourage the sustainable management of ecosystems (such as those enabling community rights, customary tenure, and management of forest resources), while others may drive biodiversity loss (such as those that incentivize clearing and settling forested land or perpetuate gender and social inequality). Even the best laws may be ineffectual due to a lack of capacity or will to implement and enforce them, or because of unintended negative

BOX 7: GOVERNANCE AND POWER IN CONSERVATION

Governance is the process by which decisions are made and carried out through formal legal and regulatory systems and informal elements at many scales and sectors of society. Governance includes the rule of law, public-sector accountability, communication with citizens, anti-corruption measures, and the ability to deliver goods and services. Governance impacts the rights, use, and access to natural resources, making it a key leverage point for conservation action. Improvements in governance can also be a clear benefit of biodiversity activities.

Effective governance depends on the legitimacy, capacity, and power of the governance group. Aspects of legitimacy and capacity may influence the power of a group, and power often trumps formal governance systems or structures. Governing power impacts the use and access to biodiversity, and therefore has numerous dimensions and levels of operation, from the household to the global scale. There are overt and hidden dimensions of power; inequalities in power can be both real and perceived and are shaped by history, gender, culture, and social and economic factors. Improving governance involves understanding these inequalities and crafting strategies to enable stakeholders with different levels of power to work together in a way that does not harm the less powerful.

consequences. Issues of transparency, accountability, corruption, and participation in the policy-development process may impact the legitimacy of laws and policies. Key laws and regulations to consider are not just those that are directly related to biodiversity, but also those that govern commodity markets, regulate infrastructure planning, and define tenure and property rights.

Accountable and Capable Institutions:

Investing in local-, regional-, and national-level actors and institutions to manage biodiversity resources effectively must be at the forefront of USAID’s efforts. Without effective institutions with capacity, authority, resources, and systems to govern, even the most well-written laws and policies will do little to conserve biodiversity. Transparent decision-making processes should be evidence based and include a broad range of stakeholders. Additionally, the articulation of trade-offs of various decisions, and a consideration of cumulative impacts of individual decisions, are signals of accountable and capable institutions and systems. Efforts to strengthen institutions and systems should be gender sensitive and socially inclusive.

Economic Factors: Markets, accounting systems, and financing have the potential to incentivize sustainable management and use of biodiversity for development or to hasten the exploitation of natural capital. Who stands to benefit and who will bear the cost of economic incentives and choices are important considerations for decision makers. USAID will employ a variety of market- and non-market-based measures to create economic conditions that safeguard and strengthen, rather than deplete, ecosystems; these include Payments for Environmental Services (PES) systems (see Box 8: *Payment for Ecosystem Services in Vietnam*), revenue sharing, and holistic cost-benefit/ effectiveness analysis and accounting.

Constituencies for Conservation: Conservation gains will only be sustainable if there is participation from informed constituencies. A strong constituency will include all groups within society, with special attention given to indigenous peoples, women, the disabled, and other traditionally excluded groups;

Box 8: PAYMENT FOR ECOSYSTEM SERVICES IN VIETNAM

USAID supported the government of Vietnam to establish and implement a successful Payment for Forest Environmental Services (PFES) pilot program, which led to the approval of a national decree on PFES. This effort, the first of its kind in Southeast Asia, created the legal framework necessary to collect and distribute a portion of the economic value of ecological services provided by forests in two pilot areas (Lam Dong and Son La provinces). The policy facilitated payments, ensuring continuous forest protection and management services while improving the economic condition of local communities providing those services.

By December 2010, PFES payments totaling approximately U.S. \$4.46 million were made to 22 Forest Management Boards and forestry businesses and to 9,870 households, nearly 70 percent of which were ethnic minorities. PFES activities have also resulted in enhanced protection of 209,705 hectares of threatened forest land and a 50 percent decrease in reported cases of illegal logging and wildlife poaching in the Da Nhim watershed area.

Excerpted from the summary of a Winrock International report titled *Payment for Forest Environmental Services: A Case Study on Pilot Implementation in Lam Dong Province, Vietnam, 2006-2010*.

their inclusion promotes rights-based approaches, collective action, and stewardship. Some of the most profound biodiversity conservation impacts have been achieved through strong champions for conservation in government, communities, the private sector, and civil society organizations. Religious and faith-based groups, for example, have been agents of change, effectively mobilizing to address such threats as climate change and wildlife trafficking. Some private-sector entities have made efforts to ensure sustainable sourcing of key natural inputs to their products by supporting more sustainable fishing and forestry practices.

2. REDUCE PRIORITY DRIVERS AND THREATS TO BIODIVERSITY

Although enabling conditions are necessary for conservation success, they are not sufficient. Successful implementation of sustainable practices aimed at reducing threats and drivers of biodiversity loss is required. To meet this objective, USAID will conserve biodiversity through strategic, site-based activities that advance conservation opportunities and reduce threats in high-biodiversity geographies through a variety of approaches. “Sites” may vary from delineated protected areas, to indigenous peoples’ territories, to larger-scale land or seascapes (e.g., from a species range to a watershed), depending on the biodiversity target and the nature of the threats or opportunity being addressed. USAID has the flexibility of working at a variety of scales. This may mean transboundary, site-based work to protect important habitat (e.g., migratory corridors) or other ecological targets (e.g., the Coral Triangle) or activities at the subnational level (e.g., municipal or private protected areas). USAID programs will also focus on transboundary and global drivers (e.g., wildlife trafficking) that contribute to the loss of biodiversity in priority places and will work at various scales to address these drivers.

USAID also recognizes the value of pursuing conservation efforts in more remote and intact natural areas that may not face immediate, proximate threats, but which trends indicate will eventually face the specter of human-induced change, such as a changing climate. (See Box 9: *Biodiversity and Climate Change Adaptation*.) Further, there is a greater chance of preventing future habitat loss due to impending threats (e.g., road building, artisanal mining, and illegal migration) if there are strong management mechanisms in place, including comprehensive land-use plans, indigenous territorial rights, and protected areas. Working in remote and intact areas can thus provide an opportunity for the conservation of unique and significant biodiversity, provide valuable ecosystem services for present and future generations, and play a crucial role in local livelihoods.

The drivers of biodiversity loss are wide-ranging, and the tools available for conservation interventions are equally broad. USAID will take a strategic approach to biodiversity conservation through the application of practices that are targeted, evidence based, flexible, and adaptive. For example, USAID may support

- efforts to identify sustainable financing, such as PES and business planning with national parks;
- expansion of women’s employment opportunities and economic empowerment through value chains linked to biodiversity conservation;
- marine and terrestrial protected areas management;
- the strengthening of tenure governance and property rights; and
- the strengthening of indigenous peoples’ traditional resource-management strategies.

Innovative partnerships with the private sector and with nontraditional allies are essential to sustainably address biodiversity loss from activities such as infrastructure development, oil palm and pulpwood production, and mining. Information on these and other approaches will be captured in an update to USAID’s *Biodiversity Handbook*.³²

BOX 9: BIODIVERSITY AND CLIMATE CHANGE ADAPTATION

Climate change affects the distribution and abundance of vulnerable species, with changes in temperature, precipitation, seasonal patterns, and ocean conditions shifting suitable habitat. Changes in climate play an important role in ecosystem transitions and potential shifts as tipping points are reached. Aside from the ecological impacts of climate change on biodiversity, human communities without sustainable climate change adaptation options can put pressure on ecosystems, resulting in further degradation.

Ecosystem-based adaptation (EBA) is an approach that incorporates biodiversity and ecosystem services; it can be a cost-effective way to help people adapt to climate change and buffer from climate-related shocks, while providing livelihood benefits that increase social resilience to such shocks. For vulnerable people dependent on ecosystem goods and services, ensuring that the protective and productive functions of ecosystems are maintained is crucial to successfully adapting to climate change. As a result, factoring in climate change and taking more adaptive approaches to conservation is becoming increasingly important to achieving conservation results and reducing people’s vulnerability.



Photo: Eric Stoner

Felled and charred forest surrounds rows of ovens in an illegal charcoal operation that exemplifies the unsustainable land-use practices still taking place in the Brazilian Amazon.

3. INTEGRATE CONSERVATION AND DEVELOPMENT FOR IMPROVED BIODIVERSITY AND DEVELOPMENT OUTCOMES

USAID will promote the use of integrated approaches that support both biodiversity conservation and improved development outcomes. Much of the focus of this objective is on “internal change for external impact”; that is, building USAID’s internal capabilities and systems to more effectively integrate biodiversity conservation and development in support of achieving external results through Agency programs.

Some processes and tools are already utilized by USAID and simply need to be strengthened so that they can serve as an entry point for integrating conservation and development. Such changes, once systematized and supported through increased staff awareness and capacity, can help to transform the way the Agency does development.

For example,

- improving the rigor and use of USAID approaches to the U.S. Foreign Assistance Act (FAA) of 1961, as amended by Sections 118 and 119, which requires periodic country analyses of the conservation and sustainable use of tropical forests and biological diversity;

- improving the rigor and use of the Title 22, Code of Federal Regulations, Part 216 (22 CFR 216) environmental impact assessment procedures that apply to all USAID programs, projects, activities, and substantive amendments to better consider the impacts on biodiversity and tropical forests in strategic processes and project implementation;
- integrating biodiversity values and externalities into USAID’s Cost-Benefit Analysis and Growth Diagnostic models;
- following USAID’s project design guidance, which includes the use of quality information and required analyses and the application of theories of change and results frameworks that incorporate the full range of project impacts and assumptions throughout the USAID project cycle (See Box 10: *The USAID Program Cycle and Integration*);
- integrating biodiversity conservation approaches into other existing sectoral trainings; and
- refining development practices and tools, such as value chain analysis, land registration, and use of traditional knowledge systems, to support achievement of biodiversity conservation outcomes.

Other opportunities to promote integration of biodiversity and development may be best addressed in the context of engagement with specific development sectors, i.e., as they relate to sustaining or increasing access to biodiversity goods and ecosystem services to support development outcomes in those sectors. USAID will pursue opportunities in key sectors such as agriculture, food security, climate change, health, governance, economic growth, and trade. Gender equality and equity are issues that can affect all aspects of biodiversity conservation. As such, USAID will explore the root causes of existing gender inequality and the potentially adverse impacts or risks of gender-based exclusion resulting from biodiversity activities, in order to proactively address them in project design. (See Box 11: *Advancing Gender Equality and Women’s Empowerment through Biodiversity Conservation*.)

BOX 10: THE USAID PROGRAM CYCLE AND INTEGRATION

The USAID Program Cycle is a planning framework for implementing USAID programs. It serves as the foundation upon which project teams develop their programs and is informed by continuous learning and adapting. There are numerous opportunities for integrating biodiversity conservation and development throughout the cycle. Illustrative examples are described below.

Country Development Cooperation Strategy (CDCS)

A CDCS is a five-year USAID mission strategy that lays out development hypotheses and a results framework with goals, development objectives, results, and indicators. The CDCS process provides an entry point to integrate biodiversity conservation by

- using the results of the mission's required periodic analysis of the conservation and sustainable use of tropical forests and biodiversity (FAA Sections 118 and 119 analysis);
- evaluating the importance of biodiversity and ecosystem-based approaches to achieving national development goals (e.g., in food security, health, and mitigating and adapting to climate change);
- providing opportunities to analyze trade-offs between conservation and development objectives;
- studying and adopting development pathways that support biodiversity conservation; and
- recognizing and managing the potential negative impact on biodiversity of pursuing some development objectives.



Project Design and Implementation

An important step in project design is to develop objectives based on a “development hypothesis,” also called a “theory of change,” meaning the way in which the design team believes the proposed intervention will effect change in the problem(s) identified. The team can then test against the expected change through the use of metrics and evaluation methods. Options for integration and collaboration during activity design include

- working with a multidisciplinary activity design team;
- conducting an integrated problem analysis that focuses on the intersection of biodiversity conservation and the development sectors of interest;
- promoting use of common theories of change that integrate activities and outputs across sectors (e.g., using the Nature, Wealth, and Power model);
- selecting interventions where opportunities for outcomes in biodiversity and other sectors coincide; and
- adopting land/sea scape-scale approaches to achieve spatial integration.

Monitoring and Evaluation

Effective adaptive management requires the development of indicators and other metrics for monitoring and evaluation during activity planning stages. While the Agency does have standard indicators for biodiversity that are used to track resources and tell the USAID story, performance-management indicators should be directly tied to the project's theory of change. Options for integration and collaboration through monitoring and evaluation include

- developing indicators that capture both biodiversity and other development outcomes, and
- identifying opportunities to capture and track development co-benefits and impacts of biodiversity activities, such as the food security and economic impacts of coral reef conservation efforts.

BOX 11: ADVANCING GENDER EQUALITY AND WOMEN'S EMPOWERMENT THROUGH BIODIVERSITY CONSERVATION

Access, management, and control of biodiversity can vary greatly along gender lines due to cultural traditions, status, and responsibilities. Recognizing and responding to the different behaviors, roles, and responsibilities of men and women is critical when seeking to affect biodiversity conservation.

Biodiversity conservation activities are most effective when they adopt a gender-sensitive approach. Men and women may be involved in different aspects of land and natural resource management and household livelihoods. Often, women have less secure land and resource tenure and are thus less able to effect long-term improvements in management. On the other hand, women may be more active in the production or market spheres than men. A gender-sensitive approach to biodiversity conservation implies working to increase the leadership and decision-making power and to uphold legal and/or traditional rights of historically disenfranchised groups that often include women.

In practice, a gender-sensitive approach goes beyond disaggregated data collection, identifying how different groups within a community use resources and determining how specific management practices may foster sustainable use and conservation of biodiversity or ecosystems. USAID can have a significant impact on social and gender equity and equality and advancing women's empowerment by conducting gender analyses and using their findings to influence the design, implementation, and management of its programs.

Additionally, improvements in gender equality and related educational, economic, and empowerment benefits over time can decrease historically high rates of fertility, easing both the economic burden on families and pressure on the natural environment. USAID has pioneered Population, Health, and Environment programs that intentionally integrate activities that address these development linkages.



Photo: Asuncion Sia

A warden at the USAID-supported Decalve Marine Sanctuary in Palawan, Philippines, keeps close tabs on activities.

4. BUILD PARTNERSHIPS TO MOBILIZE RESOURCES IN SUPPORT OF BIODIVERSITY CONSERVATION

Governments, the private sector, indigenous peoples, and other institutions depend on, and impact, the sustainability of biodiversity. Building partnerships among these players is key to tackling the vast conservation and development challenges the world confronts. USAID will seek to collaborate with a wide range of organizations that can contribute resources and skills, including other U.S. Government (USG) agencies, the private sector, universities, bilateral and multilateral donors, nongovernmental organizations (NGOs), and community-based and indigenous peoples' organizations, to magnify results and be strategic without duplication of effort.

Private-sector partners can add value to USAID's work by bringing their financial resources, technologies, networks, contacts, and specialized expertise or knowledge to bear on solving conservation and development challenges. They can also be important catalysts for change; the private sector is an engine for economic growth, and the process by which growth is achieved can positively or negatively impact biodiversity. USAID will work with the private sector in pursuit of business models that support more sustainable growth, including increasing the contribution of supply chains to biodiversity outcomes while minimizing negative impacts. (See Box 12: *The Global FISH Alliance: Partnering with the Private Sector for Sustainability*.) USAID will also seek to influence and shape domestic, international, and host-country economic and trade policies that drive private-sector investment, such as subsidies for agriculture-related industries and energy.

USAID can harness the intellectual power of research institutions to generate new tools to solve conservation and development problems. Partnerships with these institutions can contribute to increased understanding of biodiversity challenges and solutions through better data and analytics; provide a more rapid channel for new technologies, innovations, and research to be deployed in the field; and harness the enthusiasm and interest of students in development. These partnerships can also provide opportunities to build a cadre of qualified conservation professionals from the developing world, enabling capacity development of a constituency for biodiversity and sustainable development in the countries and regions where USAID works.

USAID plays an active leadership and convening role with a “whole-of-government” approach for international biodiversity conservation, supported by its strong in-country presence globally and a dedicated budget for biodiversity conservation. The Agency already works with a wide array of USG entities with experience in forest, terrestrial, and marine wildlife management; monitoring; research; climate change; agricultural trade; food security; clean energy; and

economic and trade policy. USAID can support global biodiversity conservation and sustainable development goals while advancing U.S. interests by continuing to coordinate and collaborate with other USG agencies in areas such as delivery of technical assistance and training to host countries, research, and international policy engagement.

USAID values communication and coordination with other biodiversity donors, including bilateral institutions, multilaterals, and foundations, and works collaboratively to increase program impacts by leveraging funds and other resources. Country-specific coordination with bilateral and multilateral donors and foundations will continue to occur primarily at the USAID mission level, led by the technical staff located in-country. Donor coordination relating to international treaties and agreements and multilateral institutions, such as the Organization of Economic Cooperation and Development/Development Assistance Committee (OECD/DAC), the G-8, and the United Nations, will primarily be managed from USAID/Washington, in consultation with the field missions.

BOX 12: THE GLOBAL FISH ALLIANCE: PARTNERING WITH THE PRIVATE SECTOR FOR SUSTAINABILITY

The Global FISH Alliance (G-FISH) was a USAID partnership with the private sector and a variety of international and local NGOs, trade associations, community groups, and financial and government institutions. USAID’s investment of \$4.25 million leveraged an additional \$5 million from partners. The alliance was designed to improve livelihoods, biodiversity, and food security through sustainable fisheries and responsible aquaculture in Honduras, Cambodia, and Mozambique. G-FISH improved the sustainability of the spiny lobster fishery in Honduras and empowered the indigenous Miskito Indians, the primary divers for lobsters, to participate in decision making and gain exclusive territorial rights over their coastal waters. The alliance also promoted nondestructive practices to conserve the Mesoamerican Reef. In Cambodia, the alliance brought together key stakeholders to conserve biologically diverse fisheries for food security. This project established conservation areas, replanted flooded forests, and strengthened community patrols.



Photo: Toby Jorin

A fisher holds up a spiny lobster caught off the coast of Honduras. USAID-sponsored activities engaged all the actors along the value chain to reform the fishery.

USAID has been successful in partnering with a range of international and local nongovernmental and civil society organizations in support of biodiversity conservation. Groups such as indigenous federations, agricultural producer and business associations, and conservation nongovernmental organizations, both large and small, have all effectively partnered with the Agency in support of achieving sustainable conservation and development outcomes. USAID will continue to pursue these kinds of partnerships.

Finally, an important aspect of partnership is investment in local institutions, public and private, in the countries in which USAID has programs. Working through local institutions helps build the capacity that will enable countries to confront development challenges effectively over the long term. Through a recent set of implementation and procurement reforms, USAID is able to work more closely with local civil society organizations and the private sector to strengthen capacity and make more effective use of host-government systems. The Agency will continue to amplify these efforts in pursuit of USAID Forward³³ targets and commitments under the Paris Declaration on Aid Effectiveness.³⁴

5. INFLUENCE KEY INTERNATIONAL POLICIES IN SUPPORT OF BIODIVERSITY CONSERVATION

USAID engagement in the international policy arena is crucial to achieving and supporting the goals of USAID's Biodiversity Policy. The Agency's participation in dialogues directly related to biodiversity conservation, as well as those in non-environment fora, can help to ensure that biodiversity conservation and development considerations are given due attention in deliberations.

There are a wide variety of policy dialogues and fora that fall within this definition of international engagement, ranging from formal United Nations conventions³⁵ to informal stakeholder dialogues at a variety of scales. In general, USAID engagement on policy issues in support of biodiversity conservation can be grouped into the three main, overlapping categories described below.

Trade or Use of Biodiversity: Trade has a significant impact on biodiversity, as market demand drives unsustainable use and exploitation of natural resources. The rising global demand for natural resources has led to a variety of trade-related policy measures and multiple opportunities for USAID to engage. Free Trade Agreements (FTAs), for example, often contain language and requirements related to biodiversity that are clearly within USAID's interests. There are a number of international trade fora where the Agency will support biodiversity conservation, including the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)³⁶ and the International Tropical Timber Organization (ITTO).³⁷

Improved Management of Biodiversity: Policies, agreements, and collaborative arrangements that aim to improve the management of ecosystems and address specific biodiversity threats are a central focus of the Agency's policy agenda; these include the Convention on Biological Diversity, the UN Framework Convention on Climate Change, the UN Convention to Combat Desertification, the Ramsar Convention, the Intergovernmental Platform on Biodiversity and Ecosystem Services, the UN Forum on Forests, and river basin agreements. USAID has a clear comparative advantage in influencing international ecosystem policy due to the Agency's technical experience in most global ecotypes in developing countries and because USAID has been at the forefront in fostering a variety of implementation approaches.

Donor Engagement: Extensive donor engagement and coordination occurs between USAID regional, Washington, and country-level operating units and bilateral and multilateral entities, including the Food and Agriculture Organization (FAO), the Consultative Group on International Agricultural Research (CGIAR) Centers, the Global Environment Facility (GEF), and multilateral development banks (World Bank, Asian Development Bank, African Development Bank, and Inter-American Development Bank). Engagement with these entities covers a wide array of topics. For example, USAID and other USG agencies have been actively participating in discussions related to social and environmental safeguard policies among the multilateral development banks.

6. APPLY SCIENCE, TECHNOLOGY, AND LEARNING TO ENHANCE BIODIVERSITY CONSERVATION PRACTICE

One of the major goals of USAID Forward is to invest in pioneering scientific, technological, and innovative approaches to development challenges. Toward this aim, USAID works with experts across academia and the private sector, and with technical experts among USAID and other USG agency staff, to strengthen biodiversity conservation and development impacts using sound science. (See Box 13: *Principles for Sound Science*.)

Learning through Adaptive Management, Evaluation, Research, and Knowledge

Management: Biodiversity conservation activities are often implemented within complex and changing natural and human systems. In order to effectively implement activities in such dynamic contexts, USAID will adopt a strategic yet adaptive approach to project management, as well as a means to obtain systematic, meaningful feedback about the successes and shortcomings of its endeavors. USAID will promote an adaptive management approach that integrates project design, management, and monitoring to test assumptions, adapt actions, and learn. It will also emphasize the design and use of rigorous evaluations as part of the USAID Program Cycle and ensure that key lessons are disseminated.

BOX 13: PRINCIPLES FOR SOUND SCIENCE

- As research advances quickly, use current data/methods from all relevant disciplines.
- Utilize research that has undergone peer review.
- Leverage existing tools and databases.
- Establish scientifically sound baseline data, collected using appropriate methods.
- Use scientifically relevant indicators.
- Ensure that scientific tools and indicators are easy to use by relevant stakeholders.
- Integrate local knowledge into scientific data collection.
- Report results in a format that is easy to access and understand.

In addition, the Agency will develop a Biodiversity and Development Research Agenda that will support key research in priority gaps, either through primary or secondary data analysis or through strategic impact evaluations, and will encourage missions to fill data gaps through well-designed programs and impact evaluations. USAID will prioritize strengthening the evidence base for biodiversity conservation programming with a focus on improving biodiversity outcomes and better understanding the linkages and trade-offs between biodiversity conservation and development.

Knowledge management efforts will draw on USAID's rich experience and help turn it into meaningful information that can inform policy, foster innovation, improve performance and collaboration, solve problems, and generate efficiencies by avoiding the proverbial "reinvention of the wheel." USAID is updating and creating tools for sharing knowledge and best practices that include the *Biodiversity Handbook*, syntheses of evaluation findings, and case studies on biodiversity conservation with other sectors. These products will be publicly available to support planning and project design by implementing partners, host governments, and peers in the donor community. Other KM efforts may include

- development of communities of practice;
- cross-project learning;
- stocktaking;
- increasing staff capacity for program design and adaptive management;
- best practice transfer;
- distance and face-to-face learning;
- evidence summits and knowledge repositories (e.g., web portals, databases, wikis); and
- identifying and implementing a means for measuring the effectiveness of KM efforts in support of the adoption of best practices and approaches.

Engagement with external stakeholders will also allow USAID to draw on best practices from the international conservation and development communities, from sources of traditional knowledge, and from others, to inform Agency programming. As appropriate, USAID will coordinate and liaise with knowledge management efforts of other entities, such as the Intergovernmental Platform on Biodiversity and Ecosystem Services.



Photo: OSFAC

A trainer from the Central African Forest Satellite Observatory demonstrates the use of a Global Positioning System receiver. Data collection supports conservation and land-use planning in the Congo Basin forest.

Data: The amount of publicly available biodiversity data is growing, along with the bioinformatic tools to analyze and apply these data to conservation problems. For example, open-access DNA databases can facilitate the design and use of genetic markers in conservation efforts, such as DNA barcoding³⁸ to combat illegal logging and forensic tracking of illegal wildlife products. Another example is the digitization of biological specimens at the world’s natural history museums, which provides open access to images from these invaluable biodiversity collections. USAID will promote use of such existing databases in order to enhance and expedite evidence-based biodiversity programming.

USAID will leverage in-house technical resources, such as its Center for the Application of Geospatial Analysis for Development (GeoCenter), to support spatial analysis, strategic planning, and monitoring and evaluation of biodiversity projects. USAID is also exploring ways to turn “big data”³⁹ into actionable information for development. For example, the ability to mine large data streams can help the Agency conduct predictive analyses for wildlife-trafficking routes or economic trends and incorporate these findings into programming. Finally, as part of the Open Government Initiative, USAID will release its own data sets and tools in order to increase transparency and provide the fuel for innovators and decision makers to solve problems.

Technology and Innovation: Technology and innovation have contributed to huge achievements in economic growth in the last century, yet there is unrealized potential to channel efforts in these areas toward sustainable development. USAID has a history of investing in technology and innovation in support of conservation and development outcomes. Examples include using barcodes to improve the legality of wood supply chains; applying geospatial tools and data for development; using cell phone technologies for community-based conservation monitoring; creating species identification “apps” to help with enforcement of anti-poaching laws; and investing in clean technologies that use less inputs, create less pollution, and generate financial benefits for the industries that utilize them.

USAID is committed to sourcing, incubating, and accelerating solutions that overcome critical barriers to conservation and development. The Agency is building in-house capability to identify innovative, scalable solutions and use cutting-edge tools; incentivizing and partnering with a wide array of problem solvers to focus their attention on developing sustainable, effective solutions; creating new modalities for generating these solutions (e.g., through the use of prize programs and Grand Challenges); and seeking ways to accelerate the scale-up of new or adapted technologies and innovations.

IV. Agenda for Change

This Policy represents a recommitment by USAID to conserve biodiversity through strategic actions to reduce threats and drivers, as well as a new focus on integrating biodiversity conservation with other development sectors. A roadmap for implementation highlights the most critical additional steps necessary for implementing this Policy. (See Annex II.)

Effective immediately, the Policy promotes the selective, focused, and strategic use of biodiversity resources through modifications to the Agency's Biodiversity Code and through identifying priority countries and regions for biodiversity programming.

BIODIVERSITY CODE

In order to ensure that the Agency meets the intentions of the legislative imperative to support biodiversity conservation, USAID has a Biodiversity Code that guides it in determining which activities meet the "direct" programming biodiversity requirement. All USAID programs and activities that use biodiversity funds must comply with this Code; this is not a new requirement.

The Code has four key criteria, all of which must be met if the operating unit receives biodiversity funds and the activity is considered a direct biodiversity program. Each year, the country-level and centrally funded programs are reviewed in USAID/Washington for consistency with the Code.

This Policy provides some modest improvements to the existing Code (changes noted in italics below) that will allow management units to better justify working on some of the key drivers of biodiversity loss, in addition to the immediate threats. This will also encourage more rigor in designing programs that address the stated drivers or threats to biodiversity.

- 1) The program must have an explicit biodiversity objective; it isn't enough to have biodiversity conservation result as a positive externality from another program;
- 2) Activities must be identified based on an analysis of drivers and threats to biodiversity and a *corresponding theory of change*;

- 3) Site-based programs must have the intent to positively impact biodiversity in biologically significant areas;⁴⁰ and
- 4) The program must monitor indicators *associated with a stated theory of change* for biodiversity conservation results.⁴¹

Note that these criteria represent a minimum standard of compliance for direct programs supported with biodiversity funds, not the full articulation of biodiversity conservation best practices. However, operating units are encouraged to embrace best practices in biodiversity programming, as articulated in the Agency's *Biodiversity Handbook*, whenever possible.

Integrated programs that mix biodiversity funds with other funding streams, such as climate change, health, governance, or food security, are permitted. However, it is important to note that integrated programs that utilize biodiversity funds are still required to comply with the Biodiversity Code.

GEOGRAPHIC PRIORITIES

USAID undertook a global biodiversity prioritization process that drew on a mix of biological and institutional criteria. Two tiers of operating units were established for USAID investments with biodiversity funds.

Tier One Operating Units are responsible for activities in USAID-assisted countries or regions that are the highest ranked in terms of biological criteria based on the Global Environment Facility's Global Benefits Index for Biodiversity and that contain a preponderance of globally significant ecoregions as determined by the World Wildlife Fund's Global 200 list. (See Annex III for more detail on the data sets used for this analysis.)

The list of Tier One Operating Units can be found in the chart below. It will be reviewed when significant new data on global biodiversity is released or to take into account changing priorities of the Agency.

Countries that were on the list for biological reasons but are places where USAID is unable to work on this issue (e.g., Russia and Bolivia) and middle-income countries where there is no recent, significant history of USAID work in the sector (e.g., India and Mexico) were removed.

USAID expects that more than half of Agency biodiversity resources will focus on these Tier One Operating Units.⁴²

Tier One Operating Units

- are expected to identify biodiversity as a priority in their Country Development Cooperation Strategies (CDCS) or Regional Development Cooperation Strategies (RDCS), ensuring that biodiversity is covered in sufficient detail in the CDCS/RDCS to define strategic direction, particularly with respect to key threats, and request sufficient biodiversity funds to have an impact on target biodiversity;

BOX 14: TIER ONE OPERATING UNITS

Operating Unit	GEF Ranking	WWF Global 200 Ecoregions
Brazil	1	globally important tropical forest, grassland/savanna/shrubland, freshwater, and marine/coastal ecoregions
Indonesia	2	globally important tropical forest, grassland/savanna/shrubland, freshwater, and marine/coastal ecoregions
Colombia	5	globally important tropical forest, grassland/savanna/shrubland, freshwater, and marine/coastal ecoregions
Peru	7	globally important tropical forest, grassland/savanna/shrubland, freshwater, and marine/coastal ecoregions
Madagascar	8	globally important tropical forest, grassland/savanna/shrubland, freshwater, and marine/coastal ecoregions
Philippines	9	globally important tropical forest, freshwater, and marine/coastal ecoregions
Tanzania	17	globally important tropical forest, grassland/savanna/shrubland, freshwater, and marine/coastal ecoregions
Congo DR*	18	globally important tropical forest, grassland/savanna/shrubland, and freshwater ecoregions
Papua New Guinea**	19	globally important tropical forest, grassland/savanna/shrubland, freshwater, and marine/coastal ecoregions
Vietnam	20	globally important tropical forest and freshwater ecoregions
Kenya	27	globally important forest, grassland/savanna/shrubland, freshwater, and marine/coastal ecoregions
USAID Regional Development Mission – Asia (RDM/A)		key investments in illegal wildlife and timber trade, Coral Triangle Initiative, and the Mekong
USAID Central Africa Regional		key investment in regional program, the Central Africa Regional Program for the Environment (CARPE), including wildlife trafficking
USAID South America Regional		key investments in the conservation of the Andean Amazon
* high-priority country; needs currently met by regional CARPE program		
** limited mission presence makes investment inadvisable at this time		



Photo: Toby Jorin

In Bangladesh, the co-management of protected areas has improved the sustainable use of wetland resources and related livelihood activities.

- are expected to focus on globally significant biodiversity targets in their countries or regions (See endnote 40 for more information on global significance);
- can expect to be prioritized for biodiversity technical assistance from USAID/Washington and for placement of Foreign Service Environment Officers.

Tier Two Operating Units are responsible for activities in countries or regions that have some combination of the following characteristics: contains a globally significant ecoregion; provides important habitat for endangered/threatened species; adds to global representation of the USAID portfolio; and is an area where USAID has a comparative advantage or previous record of success. The Tier Two list is more subject to institutional factors in determining which operating units are priorities (e.g., emerging strategic interests in programming in a given country), and thus the list is potentially more dynamic and not presented here. It will be made available on the USAID website, which will be updated regularly.

Tier Two Operating Units

- should strongly consider undertaking biodiversity programs, reflect the planning in their CDCS, and request sufficient biodiversity funds to achieve the desired biodiversity conservation outcome, and

- should focus on globally significant biodiversity targets in their countries or regions.

USAID's Bureau for Economic Growth, Education, and Environment (E3) and Bureau for Policy, Planning, and Learning (PPL) will work closely with those Tier One and Two Operating Units with a previously approved CDCS or RDCS to align with the Policy. Operating units that are not included in Tier One or Tier Two may choose to undertake biodiversity programming. The list of USAID operating units will be reviewed at least every five years to take into account changing priorities of the Agency and when significant new data on global biodiversity is released. The list will also be responsive to Congressional and other USG priorities that may emerge more frequently.

Tier One and Two Operating Units will make tactical and strategic decisions that apply to the regional or subnational level, based on the best information available regarding biodiversity actual and emerging threats, drivers, and opportunities; priorities of host governments; cost; probability of success; and other contextual factors. (See Box 14: *Setting Subnational Priorities.*)

BOX 15: SETTING SUBNATIONAL PRIORITIES

There are many ways to identify areas where USAID can work on biodiversity conservation within a country or region, with or without biodiversity funds. For example,

- Select sites that are considered globally significant (See endnote 40).
- Use the results of the mission's periodic analysis of the conservation and sustainable use of tropical forests and biodiversity.
- Select sites that both conserve globally significant biodiversity and also contribute to a national or sectoral development plan objective.
- Assist the country in meeting its obligations under the CBD or other agreements by supporting biodiversity conservation in sites identified through national Biodiversity Strategy and Action Plans or other planning documents.
- Seek opportunities to support conservation of locally important biodiversity, as identified through consultation with indigenous peoples, local communities, universities, nongovernmental organizations, and subnational levels of government.
- Identify high-biodiversity areas that are not under extreme or urgent threat yet are important to achieving a significant conservation or development outcome. Consider supporting areas that are still intact and under relatively reduced threat, to put in place the enabling environment to manage future pressures.
- Consult the numerous indices and ranking exercises that identify species and areas of biological importance. For example, the International Union for Conservation of Nature (IUCN) has maintained the "Red List of Threatened Species," which measures extinction risk for nearly 70,000 species, and is currently undertaking the creation of a "Red List of Ecosystems" – a global standard for the status of ecosystems and their risk of collapse.
- Consider the niche that USAID can fill vis-à-vis conservation funding by other organizations and donors.
- Consider selecting areas that can contribute to addressing transboundary threats and opportunities that may have an impact at the national level.
- Consider the likelihood of success of a potential conservation program with respect to time and funding available.

V. Roles and Responsibilities

Much of the success of the Biodiversity Policy implementation will depend on the clarity of roles and responsibilities and the commitment of staff to carrying them out collaboratively. Some of the key entities involved in the implementation of the Policy are listed below.

FIELD MISSIONS (Bilateral and Regional) are responsible for

- applying the Biodiversity Policy to inform the content and structure of RDCS/CDCS documents, with particular attention to integration through consideration of biodiversity across the mission portfolio;
- applying the Policy to analysis, program design, implementation, and monitoring;
- planning for the human, financial, and technical resources needed to deliver results under the Policy;
- working with regional and pillar bureaus in USAID/ Washington to ensure compliance with the Biodiversity Code and use of strategic approaches; and
- consulting and coordinating with host-country government institutions, the private sector, civil society organizations, communities, donors, and other USG agencies on the design of strategies and projects.

GEOGRAPHIC BUREAUS (e.g., Africa, Asia, Europe and Eurasia, Latin America and the Caribbean, and the Middle East) are responsible for

- engaging with field missions to reach agreement on strategy and program transition needed to implement the Policy or potential exceptions to alignment;
- ensuring, in coordination with the Economic Growth, Education, and Environment Bureau (E3), that the Policy is implemented by field missions and that critical results and impact data flow back to headquarters;
- communicating missions' annual biodiversity budget needs;

- delivering technical assistance, in coordination with E3, to help missions align to the Biodiversity Policy; and
- representing the respective bureaus on technical matters related to the Biodiversity Policy in the Interagency and with the U.S. Congress, partners, donors, and multilaterals.

PILLAR BUREAUS (e.g., Bureaus for Food Security; Global Health; and Democracy, Conflict, and Humanitarian Assistance) are responsible for

- ensuring that the Policy is being applied in coordination with regional bureaus;
- reviewing progress toward Policy objectives and communicating findings; and
- translating and communicating results into lessons learned and best practices to improve Agency-integrated programming and broader conservation efforts.

E3 FORESTRY AND BIODIVERSITY OFFICE, in coordination with the E3 Front Office and other E3 technical offices,⁴³ is responsible for

- representing the Agency on technical matters related to the Biodiversity Policy in the Interagency and with the U.S. Congress, partners, donors, and multilaterals;
- advising bureau and Agency leadership on Biodiversity Policy alignment, implementation, and resource allocation, in coordination with USAID/ Bureau of Policy, Planning, and Learning (PPL);
- leading annual reviews via Agency Operational Plans and Performance Reports for alignment with biodiversity earmark criteria;
- creating a targeted research agenda; disseminating, demonstrating, and providing training related to biodiversity practices and policies; engaging in international policy fora; and promoting knowledge management in coordination with PPL; and
- providing targeted assistance to field missions in support of the Policy through virtual and in-person technical training and field support for strategy development, analysis, activity design, and evaluation.

BUREAU OF POLICY, PLANNING, AND LEARNING (PPL) is responsible for

- coordinating with technical bureaus to ensure that the Agency’s Biodiversity Policy and programs comply with USG and Agency policy and guidance, are high quality, and will achieve strategic results;
- supporting biodiversity sector efforts to improve learning and knowledge management and to capture and scale-up best practice;
- serving as the “neutral arbiter” to ensure resolution of Biodiversity Policy alignment decisions on which regional bureaus and pillar bureaus cannot come to consensus; and
- supporting biodiversity sector efforts to engage with bilateral and multilateral entities on biodiversity conservation.

OFFICE OF BUDGET AND RESOURCE MANAGEMENT (BRM) is responsible for

- leading USAID’s internal budget process, and thus plays a key role in budget formulation and allocation. Funding is provided in such a manner as to maximize development and humanitarian impact and comply with legislative directives; and
- serving with PPL as a “neutral arbiter” in resolving disputes related to resource prioritization and allocation that arise through the policy alignment process.

BUREAU FOR MANAGEMENT (M) is responsible for

- leading the USAID operating-expense budget, in close coordination with BRM;
- ensuring appropriate alignment of operational resources for implementation of programmatic and Administration priorities; and
- along with E3, monitoring progress toward achieving planned results.

U.S. GLOBAL DEVELOPMENT LAB is responsible for

- supporting the implementation of the Biodiversity Policy by improving conservation and development outcomes through data and analytics; creating better solutions through revolutionary, high-payoff research; and incubating new technologies and accelerating their scale-up;
- implementing the Policy through Grand Challenges for Development, leveraging the resources of other federal agencies and academic research institutions to support development, and enhancing the Agency’s scientific and technical expertise; and
- cooperating with pillar and regional bureaus and missions to increase the Agency’s ability to leverage partnerships, innovations, and platforms that accelerate and amplify sustainable development in support of the Biodiversity Policy.



Photo: Steve Felton

Members of the Marienfluss Conservancy meet in the shade in Namibia, where USAID supported government and NGO initiatives to promote sustainable wildlife management on communal land.

VI. Conclusion

Biodiversity is increasingly seen as both a local and a global public good with economic and societal value. USAID is well placed as an international development agency to chart a development pathway that nourishes, rather than depletes, natural capital for the benefit of current and future generations.

Through this Policy, USAID will lead by example, applying its knowledge, experience, and resources to forge new partnerships and remove barriers to achieving development outcomes within ecological limits. USAID will build on its experience throughout the world to design, apply, and test conservation solutions; pioneer integrated approaches; and generate, document, and disseminate the evidence base for improved biodiversity and development outcomes.



Photo: WCS/Mark Atkinson

The success or failure of transfrontier conservation area initiatives, such as in Botswana's Chobe National Park, has significant implications for the world's largest population of elephants.

ANNEX I – GUIDING PRINCIPLES FOR BIODIVERSITY POLICY

The *USAID Policy Framework 2011–2015** lays out a set of core operational principles that guide all USAID programs. These principles are articulated below as they relate to biodiversity conservation, along with several additional principles relevant to the sector. Guidance on how to operationalize these principles can be found in the *USAID Biodiversity Handbook*.

Guiding Principles	
<i>Build in sustainability from the start</i>	USAID biodiversity programs should consider environmental, economic, and social sustainability and the long-term viability of benefits and results throughout the program cycle. A sustainable approach enables countries to devise and implement solutions and resilience to recurrent shocks and development challenges over time – beyond the period of USAID support. USAID’s mandatory Sustainability Analysis addresses these elements early in program design.
<i>Be strategic</i>	USAID biodiversity programs should reflect sound strategic planning. Programs should develop biodiversity conservation targets based on analysis of threats and drivers of biodiversity loss and consideration of opportunities and barriers to effective conservation. Programs should be designed to monitor progress, generate timely information, and adapt as needed.
<i>Promote inclusion, social equity, and gender equality</i>	Conservation programs that identify, address, and monitor gender, indigenous, and social issues are more sustainable and can have increased impact. Primary gender issues of concern for conservation practitioners include rights of participation in resource governance, rights to land and other resources, and access to economic and other benefits.
<i>Partner with communities and indigenous peoples</i>	Many people, especially indigenous peoples and communities, depend on biodiversity for their livelihoods and source of food, medicine, fuel, construction materials, and monetary income. The spiritual and aesthetic value of biodiversity is also important to the cultural identities of many indigenous and rural peoples. Conservation programs can promote the effective participation of communities and indigenous peoples; incorporate traditional knowledge and systems; support the strengthening of indigenous organizations and local institutions to manage biodiversity; and develop feasible alternatives that do not displace indigenous peoples and community groups from their traditional lands.

*USAID, *USAID Policy Framework 2011–2015*, Washington, D.C.: USAID, 2012. USAID Guiding Principles are 1) building in sustainability issues from the start; 2) promoting gender equality and female empowerment; 3) applying science, technology, and innovation strategically; 4) applying selectivity and focus; 5) measuring and evaluating impact; 6) applying integrated approaches to development; and 7) strategically leveraging partners.

<i>Minimize climate impacts and reduce greenhouse gas (GHG) emissions</i>	To minimize the impacts of climate change and to reduce GHG emissions, USAID biodiversity efforts will consider that 1) climate change directly impacts biodiversity and exacerbates impacts from other threats; 2) healthy, biodiverse ecosystems can help to relieve the impacts of climate change on people; and 3) biodiversity programming offers opportunities to invest in land-use practices that slow, reverse, or stop GHG emissions.
<i>Apply systems thinking and integrated approaches</i>	A systems approach looks at the “big picture,” manages for the long term, identifies multiple entry points for effective interventions, and identifies trade-offs. An integrated approach to biodiversity programming can identify patterns, linkages, and pathways to impact. Integrated approaches help to identify and focus on drivers, even if USAID cannot directly address them.
<i>Facilitate country-led development</i>	USAID embraces “country ownership” as a critical element of aid effectiveness and results-driven development. By accessing the resources of diverse in-country partners, USAID can increase the impact of its development initiatives.
<i>Promote conflict-sensitive programming</i>	Conflict analysis should inform the design and implementation of biodiversity conservation programs, policies, and financing in conflict-affected areas and fragile states. Biodiversity activities should not inadvertently exacerbate or create conflict, and they should be designed and implemented with a view toward reducing grievances and promoting social and institutional resilience.
<i>Support democracy, rights, and governance</i>	Effective environmental stewardship is likely to thrive in situations characterized by a free and fair political system, respect for human rights, a vibrant civil society, and public confidence in the police and the courts. Biodiversity conservation activities may help improve transparency and accountability in policy, support enforcement and stakeholder participation, and strengthen the judiciary and civil society.

ANNEX II – ROADMAP FOR BIODIVERSITY POLICY IMPLEMENTATION

The following roadmap for implementation highlights the most critical additional steps necessary for implementing this Policy. The Forestry and Biodiversity Office in USAID/E3 will work closely with technical experts and Agency leadership in missions and across the pillar and regional bureaus; the Policy, Planning, and Learning Bureau; the U.S. Global Development Lab; and other management units to address the following issues as part of a work program over the next five years:

- revision to the Agency's *Biodiversity Handbook* on best biodiversity conservation practices;
- strategic allocation of human and budgetary resources to support Tier One and Tier Two countries and regions;
- creation of a guide to support compliance with the Biodiversity Code;
- identification of adjustments needed to required policy and analytical and programmatic tools/processes in support of biodiversity and development;
- identification and pursuit of opportunities for integration of biodiversity with targeted sectors of agriculture, food security, climate change, health, economic growth, and trade;
- development and delivery of training in support of Biodiversity Policy goals and outcomes, including state-of-the-art meetings for the Agency's cadre of Environment Officers;
- development of guidance and tools to implement the USAID Gender and Women's Empowerment Policy as it relates to biodiversity conservation programming;
- development of an Agency Biodiversity and Development Research Agenda;
- investment in the development of improved indicators and methods for data collection to monitor conservation and development impact of USAID programs;
- increased outreach to key operating units to raise awareness and share best practices and opportunities for strategic partnerships for biodiversity conservation and development;
- increased outreach to operating units to raise awareness and share best practices on innovative use of technology and data in support of biodiversity conservation outcomes;
- improved knowledge management and learning efforts to support mission programming through pillar bureaus and PPL; and
- planning and allocation of resources for strategic international policy engagement.

USAID will assess the implementation of this Policy using a number of internal change and external impact performance benchmarks. These benchmarks will be used to assess how USAID is progressing in meeting the intentions of the Policy.

ANNEX III – GEOGRAPHIC PRIORITIZATION PROCESS

All countries contain biodiversity that is important to lives and livelihoods, but some are home to globally important biodiversity due to a range of factors, including species richness, species endemism (uniqueness), level of threat, or because the country may have an area of particular importance in a single biome* (representativeness) or a particularly broad range of biome types (megadiversity).

To increase the focus of USAID’s biodiversity portfolio, the Agency prioritized its biodiversity investments based on a combination of biodiversity and institutional factors:

BIOLOGICAL FACTORS

USAID conducted a thorough review of existing global biodiversity data sets and determined that the World Wildlife Fund’s (WWF’s) ranking of “Global 200” ecoregions, in combination with data from the GEF’s Global Benefits Index (GBI) for Biodiversity, presented the most comprehensive coverage and mix of relevant biological criteria meeting the Agency’s data needs for a global ranking. Below is more information on each of these data sets.

WWF’s Global 200 is a science-based global ranking of the earth’s most biologically outstanding terrestrial, freshwater, and marine ecoregions.** It is the first comparative analysis of biodiversity to cover every major habitat type, spanning five continents and all of the world’s oceans. This analysis ranks countries according to the number of biomes (i.e., collections of ecoregions grouped into five main categories);*** and the importance of that country in representation of a biome.**** The Global 200 is not a country-based analysis; hence, any ecoregion that spans multiple countries is counted as occurring within each relevant country.

USAID’s prioritization process began by extracting USAID-supported countries that made the Global 200 list because they had the most biomes and/or because they had particular importance in a single biome. USAID’s initial list was then cross-checked with the GEF’s Global Benefits Index for any additional countries that should be added.

Global Environment Facility’s Global Benefits Index for Biodiversity seeks to measure the potential global benefits from biodiversity-related activities in a country. The index produced a biodiversity score for each country that represents a weighted average of the country’s scores against characteristics for terrestrial (75 percent) and marine (25 percent) biodiversity. It reflects the complex, highly uneven distribution of species and threats across the world’s ecosystems, both within and across countries. It recognizes the richness of available data in some areas of biodiversity through detailed indicators and acknowledges the data gaps in others through broad indicators. The GBI for Biodiversity is aligned with the Convention on Biological Diversity and draws on work by the scientific and NGO communities.

USAID reviewed the GEF’s GBI for Biodiversity list for any USAID-assisted, highly ranked countries that did not make the WWF Global 200 list. The result is a list that represents the world’s richest, rarest, and most biologically distinctive habitats and achieves coverage of the broadest range of species and ecological and evolutionary processes. Countries that did not have globally significant biomes but did provide habitat to globally important endangered species (e.g., gorillas, tigers, snow leopards) were also added to the list. Decision making was influenced by representativeness of ecosystems within the regions in which USAID works on biodiversity conservation.

*A “biome” is defined as a “major portion of the living environment of a particular region (such as a fir forest or grassland), characterized by its distinctive vegetation and maintained largely by local climatic conditions.” (International Conservation Union, “IUCN Definitions – English.”)

**An “ecoregion” is defined as a “large unit of land or water containing a geographically distinct assemblage of species, natural communities, and environmental conditions.” (World Wildlife Fund, “What is an Ecoregion?”).

*** The categories: tropical forest, temperate forest, grassland/savanna/shrubland, freshwater, and coastal/marine.

****For example, the number of tropical forest ecoregions in a country/total number of tropical forest ecoregions globally.

INSTITUTIONAL FACTORS

USAID also considered a set of institutional factors in determining a final set of priority countries. These factors include countries where USAID has a demonstrable comparative advantage based on long-standing, successful biodiversity programs and/or countries or regions where there may be a strategic interest in programming. Countries that were on the list for biological reasons but where USAID is unable to work (e.g., Russia and Venezuela) and middle-income countries where there is no recent, significant history of work in the sector (e.g., India and Mexico) were removed. Additionally, USAID analyzed country commitment to conservation to help design biodiversity activities that take into account the level of host-country commitment.

Endnotes

1. Martin Ravallion, Shaohua Chen, and Prem Sangraula, "Dollar a Day Revisited," policy research working paper 4620, Washington, DC: World Bank Development Research Group, 2008.
2. Yap Kioe Sheng et al., *Access to Basic Services for the Poor: The Importance of Good Governance* (Bangkok, Thailand: United Nations Economic and Social Commission for Asia and the Pacific [ESCAP], 2007).
3. Walter V. Reid et al., *Millennium Ecosystem Assessment. Ecosystems and Human Well-Being: Synthesis* (Washington, DC: Island Press, 2005).
4. United Nations, *The Millennium Development Goals Report 2013* (New York: United Nations, 2013).
5. Reid et al.
6. United Nations, *The Millennium Development Goals Report 2013*.
7. Jonathan A. Foley et al., "Solutions for a Cultivated Planet," *Nature* 478, no. 7369 (2011): 337-342. doi:10.1038/nature10452.
8. John Drexhage and Deborah Murphy, "Sustainable Development: From Brundtland to Rio 2012" (background paper prepared for consideration by the High Level Panel on Global Sustainability at its first meeting, New York: United Nations International Institute for Sustainable Development, 19 September 2010).
9. Georgina M. Mace, Ken Norris, and Alastair H. Fitter, "Biodiversity and Ecosystem Services: A Multilayered Relationship," *Trends in Ecology & Evolution* 27, no. 1 (2012): 9-26. doi: 10.1016/j.tree.2011.08.006.
10. Will R. Turner et al., "Global Biodiversity Conservation and the Alleviation of Poverty," *BioScience* 62, no. 1 (2012): 85-92. doi:10.1525/bio.2012.62.1.13.
11. Food and Agriculture Organization of the United Nations (FAO). *The State of World Fisheries and Aquaculture 2008* (Rome: FAO, 2009).
12. Nicola Gallai et al., "Economic Valuation of the Vulnerability of World Agriculture Confronted with Pollinator Decline," *Ecological Economics* 68, no. 3 (2009): 810-821. doi: 10.1016/j.ecolecon.2008.06.014.
13. S.S. Myers et al., "Health Impacts of Ecosystem Alteration," *Proceedings of the National Academy of Sciences U.S.A.*, 19 November 2013, 110 (47):18753-60. doi: 10.1073/pnas.1218656110. Epub 2013 Nov 11.
14. M. Ezzati et al., eds., *Comparative Quantification of Health Risks: Global and Regional Burden of Disease Attribution to Selected Major Risk Factors*, vol. 1 (Geneva: World Health Organization, 2004), 163-280.
15. In net present value. Johan Eliasch, *Climate Change: Financing Global Forests: The Eliasch Review* (UK: Earthscan, 2008).
16. Net present value.
17. Figure is net national income.
18. L. Chris Weaver, "The Namibia CBNRM Program: Achievements & Impacts at Scale" (presentation at the USAID CBNRM Workshop: Contributions to Multiple Development Objectives, Washington, DC, 17 January 2013).
19. Richard Munang et al., "The Role of Ecosystem Services in Climate Change Adaptation and Disaster Risk Reduction," *Current Opinion in Environmental Sustainability* 5, no. 1 (2013): 47-52. doi:10.1016/j.cosust.2013.02.002.
20. International Union for the Conservation of Nature (IUCN), "Early Observations of Tsunami Effects on Mangroves and Coastal Forests: Statement from the IUCN Forest Conservation Programme," Gland, Switzerland, 7 January 2005.
21. Liana Sun Wyler and Pervaze A. Sheikh, *International Illegal Trade in Wildlife: Threats and U.S. Policy*, CRS Report RL34395 (Washington, DC: Library of Congress, Congressional Research Service, 2 February 2009).
22. Drexhage and Murphy.
23. Stuart L. Pimm et al., "The Future of Biodiversity," *Science* 269: 347-350. doi: 10.1016/0006-3207(96)85981-7.
24. Convention on Biological Diversity Secretariat, *Global Biodiversity Outlook 3* (Montreal: Convention on Biological Diversity, 2010).
25. Based on Nick Salafsky et al., "A Standard Lexicon for Biodiversity Conservation: Unified Classifications of Threats and Actions," *Conservation Biology* 22, no. 4 (2008): 897-911. doi: 10.1111/j.1523-1739.2008.00937.x.
26. Ibid.
27. USAID, *Evaluation of the Global Conservation Program (GCP): Final Evaluation Report* (Washington, DC: USAID, 2008).
28. *Foreign Assistance Act. 1961. U.S. Code. Title 22, Sec. 118.*
29. *Foreign Assistance Act. 1961. U.S. Code. Title 22, Sec. 119.*

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30. USAID, *Protecting Hard-Won Ground: USAID Experience and Prospects for Biodiversity Conservation in Africa* (Washington, DC: USAID, 2008).

31. USAID may support *ex situ* conservation of wild, native species, and their germplasm, when the activity is being undertaken explicitly for the purpose of biodiversity conservation and meets all USAID biodiversity funding requirements.

32. The USAID *Biodiversity Handbook*, first published in 2005, provides technical best practices and approaches on biodiversity conservation for USAID staff and conservation practitioners. It is currently being updated.

33. USAID Forward is a large-scale reform agenda initiated by USAID with the purpose of strengthening the Agency by embracing new partnerships, investing in the catalytic role of innovation, and demanding a relentless focus on results.

34. The 2005 Paris Declaration on Aid Effectiveness is an international agreement aimed at improving the quality of aid and its impact on development. It is organized around five key principles of effective aid: 1) ownership by countries; 2) alignment with countries' strategies, systems, and procedures; 3) harmonization of donors' actions; 4) managing for results; and 5) mutual accountability.

35. The United States is a signatory of several multilateral environmental agreements, including the United Nations Convention to Combat Desertification (UNCCD), the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the United Nations Framework Convention on Climate Change (UNFCCC), and the Ramsar Convention on Wetlands. The U.S. signed the Convention on Biological Diversity (CBD) treaty in 1993, but has not yet ratified.

36. "CITES... is an international agreement between governments. Its aim is to ensure that international trade in specimens of wild animals and plants does not threaten their survival." From "What is CITES?," Convention on International Trade in Endangered Species of Wild Fauna and Flora.

37. ITTO is an intergovernmental organization promoting the conservation and sustainable management, use, and trade of tropical forest resources. Its members represent about 80 percent of the world's tropical forests and 90 percent of the global tropical timber trade.

38. DNA barcoding is a system of species identification and discovery using a short section of DNA from a standardized region of the genome.

39. "Big data" is an umbrella term for the explosion in the quantity and diversity of high-frequency digital data.

40. A country or region may possess relatively high overall biological diversity; however, this does not mean that all areas within the country or region are equally significant for biodiversity. Many areas are already widely recognized as biologically significant, based on existing analyses and priority-setting exercises conducted by governments (such as National Biodiversity Strategy and Action Plans (NBSAP) required under the Convention for Biological Diversity), research organizations, conservation NGOs, etc. The International Union for Conservation of Nature (IUCN) is in the process of finalizing the consolidation of an umbrella standard for the identification of such sites contributing significantly to the global persistence of biodiversity. (See IUCN, "IUCN WCPA/SSC Biodiversity and Protected Areas Task Force.") If an area not found within existing biodiversity documentation is selected, the burden of proof for biological significance lies with the USAID operating unit. The documentation does not have to refer to a formally designated protected area, but to an area that has global, regional, or national significance for biodiversity.

41. These biodiversity conservation indicators can be custom indicators, foreign assistance standard indicators, or a combination of both. The development and/or selection of biodiversity conservation indicators should be based on their effectiveness in measuring results along the logical sequence detailed in the program's theory of change. If in the program (project or activity level) design process it is determined that standard biodiversity indicators are appropriate as main or complementary indicators, then their use is encouraged, particularly given their usefulness in collecting and reporting on Agency wide results.

42. Between 49 and 56 percent of USAID biodiversity resources have gone to the highest-priority biodiversity countries for the Agency over the last several years.

43. Several E3 offices may have a role in implementing the Biodiversity Policy; these include the offices of Economic Policy, Energy and Infrastructure, Gender Equality and Women's Empowerment, Global Climate Change, Land Tenure and Resources Management, Trade and Regulatory Reform, and Water. E3's Office of Forestry and Biodiversity has primary responsibility for ensuring implementation of the Policy.

Back Cover Photo

Namibia (Steve Felton): Nomadic Himbas ride through the Marienfluss Conservancy in Namibia, where USAID supported government and NGO initiatives to promote sustainable wildlife management on communal land.



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