



USAID
FROM THE AMERICAN PEOPLE

Conservation is Development

Everything is Connected

Sound stewardship of natural resources is essential to the journey to self-reliance. By promoting development that benefits both people and nature, biodiversity conservation activities strengthen the capacity of countries to manage their natural resources, increase resilience, and deliver development results across sectors.

The USAID Policy Framework and Journey to Self-reliance Metrics and Country Roadmaps highlight the critical linkages among biodiversity conservation, natural resource management, and development goals such as economic growth, food security, human health, climate change adaptation and mitigation, and resilience to recurrent crises. The USAID Biodiversity Policy and Environmental and Natural Resource Management (ENRM) Framework serve as Agency-wide guiding documents to ensure sound stewardship of natural resources both through biodiversity programming and programming across sectors.

Since the release of its Biodiversity Policy in 2014, USAID has increasingly focused on exploring the evidence base and identifying entry points in the program cycle for integrating biodiversity conservation considerations with other development outcomes. This resource provides an overview of programming examples, tools and approaches, and evidence that support cross-sectoral collaboration to achieve shared development goals.

Light blue text throughout the body of this document links to other biodiversity integration resources.

“Sustainable economic growth often follows a commitment to effective economic policy and responsible stewardship of a country’s natural resources.”

USAID Policy Framework



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DISCLAIMER

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

Integration through Collaboration

Bureaus for **Food Security** and **Global Health**, and the Office of **Food for Peace**, on a [report](#) on the contributions of wild-caught fisheries to development outcomes in Africa.

Bureaus and Offices across USAID on [biodiversity integration reference sheets](#) to help environment and non-environment staff collaborate.

Office of **Global Climate Change** on a series of [evidence summaries](#) and [case studies](#) to help decision-makers identify ecosystem-based adaptation approaches to address climate vulnerabilities and contribute to development results.

Integration of biodiversity objectives and considerations with other development sectors has the potential to increase the sustainability of USAID programming, amplify results, and save costs.

Collaboration is a key component to successfully integrating biodiversity conservation with other development outcomes. USAID's collaborating, learning, and adapting framework emphasizes the role of collaboration in identifying key internal and external stakeholders and strategically working with them to add value, fill gaps, avoid duplication, and achieve shared goals.

Collaboration also increases the potential that the research, evidence, tools, and approaches that support cross-sectoral programming will be helpful and relevant.

The USAID Office of Forestry and Biodiversity collaborates across the Agency to build the evidence base, adapt and apply different tools and approaches, and build constituencies in support of biodiversity integration.

Such collaboration strengthens the enabling conditions needed to effectively promote cross-sectoral integration and create sustainable outcomes.

Office of Forestry and Biodiversity
staff collaborated with
colleagues from:



Office of **Economic Policy** on [recommendations](#) for including ecosystem service valuations in USAID cost-benefit analyses.

Center for Excellence on **Democracy, Human Rights, and Governance** on a [document](#) that highlights ways to design biodiversity conservation activities with a political lens and create the conditions needed to strengthen resilient, democratic societies.

A USAID Feed the Future project worked with five community forests in Cambodia in 2013, helping villagers plant 160,000 seedlings on 127 hectares of dry and flooded forest. Photo by Fintrac, Inc.



Experience from the Field

The Biodiversity Results and Integrated Development Gains Enhanced (BRIDGE) project documented examples of cross-sectoral integration in USAID programming.

South America Regional

USAID's Amazon Regional Environment Program strengthened the administrative and financial management capacity of ten Amazonian Indigenous organizations to directly manage donor-funded projects and enhanced the capacity of Amazonian Indigenous Peoples to advocate for their rights and economic interests.

Guatemala
Honduras
Dominican Republic

Liberia

The **USAID/Liberia Mission** combines community forestry management with support for communities to advocate on behalf of their interests, resulting in integrated activities that address deforestation and biodiversity loss, support rural, forest-based enterprises, and increase access to justice. As a result, the Blei Community Forest Management Body successfully evicted illegal miners and the Numba County Court awarded \$10,000 in restitution for local communities.

Philippines

USAID/Philippines Mission developed and implemented the first local government-led seasonal fishing closure in the Philippines, including a cash-for-work program, which resulted in increases in juvenile fish stocks, reef fish biomass, and catch rates without financially displacing the 3,000 affected fishers.



The **USAID/Peru Mission** designed an integrated project that supports biodiversity conservation, combats illegal logging and deforestation, addresses negative impacts of extractive industries, strengthens Indigenous People's rights and resources, and expects to contribute to a 16 percent to 20 percent reduction in greenhouse gas emissions over the next five years.

Peru

USAID Operating Units with Cross-sectoral Programming Examples

USAID/Kenya and East Africa Mission partners worked with local communities to build peace and stability through conservation. USAID has supported 39 community-owned, locally led and managed conservancies spread over 10 counties in one of Kenya's major wildlife migration corridors. Nearly 2,000 people are currently involved in conservancy-led savings and credit cooperatives, and 71,000 people benefit from 83 conservancy-funded and community-identified development projects. An additional 3,000 students receive education bursaries each year from the conservancies' commercial revenue.



Explore how biodiversity conservation is critically linked to the journey to self-reliance in a collection of 17 cases from the **USAID Biodiversity Integration Case Study Competition**.

Enabling Conditions for Biodiversity Integration

Integrating biodiversity conservation with other development efforts, where appropriate, may vary based on context and geography. In some instances, a mission may deliberately integrate two or more sectors during project or activity design; at other times a mission may incorporate new components into existing programming in response to changing conditions.

Although each case is unique, there are several common enabling conditions and factors that have been identified through case studies and polling as critical in facilitating integrated programming:

- Mission leadership support
- Flexible funding
- An integration champion
- Washington leadership support
- An Agency culture of adaptive management

Other important factors include regular coordination among staff and technical offices; joint work planning and monitoring, evaluation, and learning; program office support; flexible procurement mechanisms; and a culture of inclusiveness and adaptive management. For example:

- USAID/Kenya and East Africa's environment staff shared experiences and evidence with **mission leadership and other colleagues** to enhance their understanding of how biodiversity investments generate benefits for other sectors. This has helped generate additional interest in and support for biodiversity integration across the mission.
- USAID/Mozambique used the **flexibility under the Global Development Alliance** to develop a co-conceptualized and co-designed integrated activity.
- USAID/Philippines' ECOFISH activity engaged representatives from the **local governments, national government agencies, commercial fishing industry groups, and small-scale fishing associations** by providing continuous reporting of monitoring results, which enabled evidence-based decision-making and adaptive management.



PHOTO RIGHT: Communities around Lake Titicaca in Peru look for trout and silverside on Lake Titicaca. Photo by Enrique Sarmiento Calagua.

PHOTO BELOW: Better availability of water for home use is one of the benefits the village of Kailas, Nepal has seen as a result of conservation of the uphill forests. Photo by Jason Houston for USAID.



Tools and Approaches Across the Program Cycle

A range of tools and approaches support biodiversity integration throughout the program cycle, some of which include:

Ecosystem Valuation in Cost-benefit Analysis can help identify links between development sectors by quantifying the value of nature's goods and services and including it explicitly in development decision-making and the design of innovative programming.

Foreign Assistance Act Sections 118 and 119 Analyses help missions identify cross-sectoral linkages and actions that support both tropical forest and biodiversity conservation and other development sector objectives.

Political Economy Analysis can promote thinking and working politically throughout the program cycle and strengthen the tools already used for design and adaptive management in the biodiversity sector.

Geospatial Analysis allows data from multiple sectors to be displayed in a single place. It facilitates the identification of shared priorities, challenges, and opportunities for cooperation or collaboration throughout the program cycle.

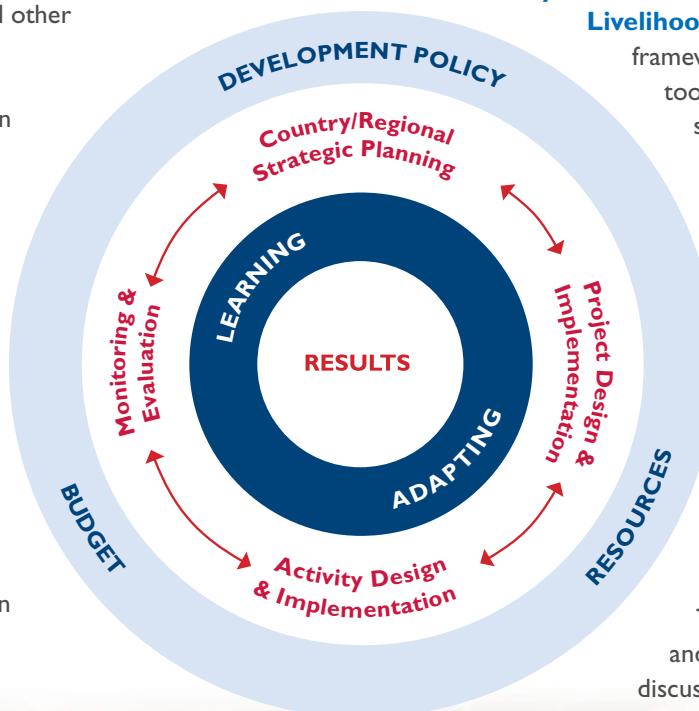
Monitoring, Evaluating, and Learning for integrated programming is critical to assess the nuanced nature of complex integrated theories of change, communicate the aggregate impact of integrated approaches, and reflect on and learn from evidence and experience in order to inform adaptive management and improve implementation.

Mobile Applications to Secure Tenure (MAST) is an innovative technology that utilizes participatory methods to document land and natural resources to enhance rights and tenure. Mapping and documenting land and resources are critical to strengthening tenure so that both individuals and communities can make decisions that promote sustainable resource use.

System-wide Collaborative Action for Livelihoods and the Environment (SCALE) framework is a process and a set of practical tools and techniques that catalyze system-wide change and result in enhanced livelihoods, improved governance, increased civil society participation, and the adoption of best practices.

Women's Economic Empowerment and Equality (WE3) Dashboard provides a quick assessment of women's inclusion in the economy, showcasing the extent to which women have attained economic, social, and political empowerment. This interactive tool provides USAID and partners with a starting point for discussions about ways to advance gender in sustainable natural resources management.

Nature, Wealth, and Power 2.0 (NWP2) is a framework that enables practitioners, planners, and policymakers to see the various interlinked dimensions of rural development, and develop and implement programs that are more successful and sustainable.



Supporting Evidence



Natural ecosystems play an important role in preventing disease and promoting health

- An analysis of data from Demographic and Health Surveys of 35 countries found that higher upstream tree cover was associated with lower probability of diarrheal disease among rural children living in downstream communities.¹
- At least 10 percent of the global population could face deficiencies of micronutrients such as zinc, iron, and vitamin A and fatty acids like DHA omega-3 due to declines in wild fisheries productivity.²
- A 27-country study found that children living within 3 km of forests had 25 percent greater dietary diversity and reduced vitamin A and iron deficiencies compared to children living farther away from forests.³



Biodiversity conservation supports food production and livelihoods

- Wild fisheries in Africa provide an affordable and accessible source of nutritious, protein-rich food for about 400 million people. Africa's fish industry employs several million people, about half of whom are women.⁴
- Wild pollinators provide services worth an estimated \$235-577 billion annually; high-value pollinator-dependent commodity crops such as coffee, oilseed rape, and cocoa contribute significantly to developing country economies and provide employment and income for millions of people.⁵
- An analysis of data from almost 8,000 rural households in 24 developing countries found that over three-quarters of households harvested non-cultivated foods from local ecosystems for subsistence and/or sale.⁶



Biodiversity conservation strengthens the resilience of vulnerable communities

- Ecosystem-based adaptation (EbA), a nature-based approach, can improve resilience in a variety of settings. EbA approaches were used to strengthen food security in Bangladesh, improve water security in Peru, protect coastal communities from storm surge in the Seychelles, and decrease the impacts of extreme events in the Philippines.⁷
- Nature-based approaches to building resilience, such as EbA, can offer cost savings compared with other approaches like the construction of hard infrastructure, and provide benefits including carbon sequestration, provision of non-cultivated foods like fish, and habitat for wild pollinators.⁷
- Non-cultivated foods like edible nuts, fruits, mushrooms, fish, snails, and wild meat can often serve as a safety net during times of crisis; for example, studies from Niger, Tanzania, Ghana, and Thailand found that local communities increased their reliance on non-cultivated foods during periods of higher food insecurity.^{8,9}



Biodiversity conservation programming promotes democratic governance and strengthens the voice and influence of civil society

- Namibia's community-based approaches to wildlife management support institutions and systems that strengthen democratic governance and offer income and development opportunities for impoverished local people, which in turn motivates support for biodiversity conservation.¹⁰
- In Ghana, a political economy analysis of the political and institutional factors that have blocked necessary reforms to halt the potential collapse of the country's crucial artisanal fisheries sector contributed key recommendations for strengthening fishing associations and the organizations of female traders and processors.¹¹
- In Nepal, local community forest user groups improved internal governance, increased access to resources, and built leadership capacity. In the 2017 elections, 1,976 community forest user group members were elected to government positions,¹¹ 32 percent of whom were women.¹²

¹ Herrera, Diego, Alicia Ellis, Brendan Fisher, Christopher D. Golden, Kiersten Johnson, Mark Mulligan, Alexander Pfaff, Timothy Treuer, and Taylor H. Ricketts. "Upstream watershed conditions predict rural children's health across 35 developing countries." *Nature communications* 8, no. 1 (2017): 81.

² Golden, Christopher, Edward H. Allison, William WL Cheung, Madan M. Dey, Benjamin S. Halpern, Douglas J. McCauley, Matthew Smith, Bapu Vaitla, Dirk Zeller, and Samuel S. Myers. "Fall in fish catch threatens human health." *Nature* 534, no. 7607 (2016): 317-320.

³ Rasolofoson, Ranivo A., Merlin M. Hanauer, Ari Pappinen, Brendan Fisher, and Taylor H. Ricketts. "Impacts of forests on children's diet in rural areas across 27 developing countries." *Science Advances* 4, no. 8 (2018): eaat2853.

⁴ USAID. "The role of wild-caught fisheries in African development." 2018.

⁵ Potts, Simon G., Vera Imperatriz-Fonseca, Hien T. Ngo, Jacobus C. Biesmeijer, Thomas D. Breeze, Lynn V. Dicks, Lucas A. Garibaldi, Rosemary Hill, Josef Settele, and Adam J. Vanbergen. *The assessment report on pollinators, pollination and food production: summary for policymakers*. Secretariat of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, 2016.

⁶ Hickey, Gordon M., Mariève Pouliot, Carsten Smith-Hall, Sven Wunder, and Martin R. Nielsen. "Quantifying the economic contribution of wild food harvests to rural livelihoods: A global-comparative analysis." *Food Policy* 62 (2016): 122-132.

⁷ USAID. "Ecosystem-based Adaptation Series Synthesis." 2019.

⁸ Powell, Bronwen, Amy Ickowitz, Stephie McMullin, Ramni Jamnadass, Christine Padoch, Miguel Pinedo-Vasquez, and Terry Sunderland. "The role of forests, trees and wild biodiversity for nutrition-sensitive food systems and landscapes." In *Expert background paper for the International Conference on Nutrition*. 2013.

⁹ Ahenkan, Albert, and Emmanuel Boon. "Improving nutrition and health through non-timber forest products in Ghana." *Journal of Health, Population and Nutrition* (2011): 141-148.

¹⁰ USAID. Advancing Reforms to Promote Sustainable Management of Ghana's Small Pelagic Fisheries.

¹¹ Federation of Community Forestry Users, Nepal. "FECOFUN's Success in Local Election." January 24, 2018, unpublished.

¹² USAID. Democracy, Human Rights and Governance and Biodiversity Conservation Linkages. 2018.

Additional Resources



BIODIVERSITY RESULTS AND INTEGRATED DEVELOPMENT GAINS ENHANCED (BRIDGE) PROJECT

The **USAID BRIDGE** project builds on lessons learned from decades of USAID investments to promote and support the integration of biodiversity conservation **with other development sectors**.

FOOD SECURITY



Natural systems provide key ecosystem goods and services that **support food production** including fish provision, water provision for agriculture, pest control, and pollination.

HEALTH



Intact, biologically diverse ecosystems can help **promote health and fight disease** by providing goods and services including non-cultivated foods, natural medicines, and clean air and water.

WATER AND SANITATION



Forests and wetlands can provide ecosystem services that help **maintain water quality**.

DEMOCRACY, HUMAN RIGHTS, AND GOVERNANCE



Biodiversity conservation and democracy, human rights, and governance integration can improve open and accountable participation to help **support stable and sustainable** development.

CLIMATE



Healthy, intact ecosystems can help **improve climate resilience and reduce greenhouse gas emissions**, and are more resilient to the impacts of climate change.

CONTACT

Olaf Zerbock, Biodiversity and Forestry Advisor, E3 Office of Forestry and Biodiversity, USAID
Ozerbock@usaid.gov

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Biodiversity Results and Integrated Development Gains Enhanced Project