



# IDENTIFYING AND USING EVIDENCE IN BIODIVERSITY PROGRAMMING

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## USAID POLICY ON EVIDENCE

USAID's strategic approach to policies and programmatic investments is informed by experience and cutting-edge evidence and analysis.

As part of the USAID Forward reform effort, the project design process is based on evidence of what works and what is supported by analytic rigor. Projects should define a clear logic and purpose and develop detailed plans for evaluation, monitoring, and learning ([USAID, 2013a](#)).

## WHAT IS MEANT BY "EVIDENCE?"

Empirical evidence is different from anecdotes, hearsay, or opinions. An evidence-based approach to decision-making uses the latest information collected from applicable and valid research ([The Cochrane Collaboration, 2013](#)) and information harnessed from assessments, evaluations, and performance monitoring ([USAID, 2012](#)).

Empirical evidence can vary in strength. While all empirical evidence has its limitations, data quality is determined by validity, reliability, timeliness, precision, and integrity ([USAID, 2013b](#)).

## EVIDENCE IN BIODIVERSITY AND INTEGRATED PROGRAMMING

Several sources of evidence can be accessed to inform biodiversity conservation and integrated programming including:

- Biodiversity-focused required analyses (e.g., National or regional-level Biodiversity and Tropical Forestry (118-119) Analyses);
- Non-biodiversity focused required analyses (e.g., gender analyses) that can shed light on key social or policy issues;
- Impact evaluations, performance evaluations and other reports that may provide evidence about the effectiveness of strategic approaches found in project design, requests for proposals and workplans; and
- Research that might provide evidence about effectiveness, threats, emerging concepts and approaches, linkages between biodiversity and other sectors, and development trends.

National or regional-level Biodiversity and Tropical Forestry (118-119) Analyses and targeted Biodiversity Threats Analyses identify key threats and drivers of biodiversity loss, conservation and ecosystem targets, enabling conditions, and key actors. They also shed light on relationships among biodiversity and other development sectors, and they identify key approaches used by USAID, host governments, and partners to foster biodiversity conservation and integrated objectives.

Evidence may also come from outside of the biodiversity sector. For instance, it can be instructive to learn about the evidence for the efficacy of capacity building approaches, women's empowerment strategies, media campaigns, or livelihood alternatives, all of which can be integrated into conservation programming.

Evidence relevant to biodiversity and integrated programming can be synthesized and incorporated at different stages of the Program Cycle:

- When defining the problem:** Reviews and syntheses of published and grey literature on key geographic areas and topics can inform program scope and scale.
- When selecting interventions:** Reviews and syntheses of common theories of change or approaches present evidence on effectiveness, appropriateness, scale, risks, and benefits of the proposed actions.
- During implementation:** Implementers should generate evidence about effectiveness through monitoring and evaluation as well as targeted research to fill evidence gaps.

# HOW TO USE EVIDENCE

Evidence synthesized from research, assessments, monitoring and evaluation data, and systematic reviews of grey and published literature can be used to identify knowledge gaps that a project might fill, support project design by reviewing interventions or common approaches; and point to emerging trends, threats, and needs.

Examples of incorporating evidence into the Program Cycle include the following strategies:

- Use of a recent Biodiversity and Tropical Forestry Analysis (118-119) to inform the development hypothesis section of a Regional or Country Development Cooperation Strategy (CDCS). What can the Mission do to foster biodiversity conservation while achieving other key objectives?
- Evidence about the location and magnitude of specific threats for a Biodiversity Threats Analysis.
- Specification of conservation and ecosystem targets through review of recent biodiversity science and [National Biodiversity Strategy and Action Plans](#).
- Identification or development of an explicit theory of change that lays out a plan to reduce threats and achieve desired results based on systematic literature reviews on targets, threats, social context, and enabling conditions.
- Specification of evidence needed to test the theory of change at key points and development of a monitoring and impact evaluation plan that includes collecting both quantitative and contextual data to facilitate understanding what changed and why. Ideally, the project should build impact evaluation into the design.
- Adjustment to the theory of change and program using the results of impact evaluations and other evidence.

## USAID required analyses

- Tropical Forest and Biodiversity Analysis (118-119 or Environmental Threats and Opportunities Analysis) (CDCS level)
- Initial Environmental Examination as required by 22 CFR 216
- Gender Analysis
- Sustainability Analysis

## Analyses that can provide context and detail related to specific approaches

- Biodiversity Threats Assessment
- Political Economy Analysis
- Conflict Assessment
- Climate Change Vulnerability and Adaptation Assessment
- Land Tenure and Property Rights Assessment
- Institutional and Human Capacity Development Assessment



## EXAMPLE: Identifying and Using Evidence to Develop a Program to Reduce Threats to Biodiversity from Oil Palm Plantations in a High-Value Forest Area

A Mission's Biodiversity and Tropical Forestry (I18-I19) Analysis identified deforestation from oil palm plantations as a national-level threat to biodiversity. The [National Biodiversity Strategy and Action Plan](#) identifies a high-value forest area as a priority. USAID has been working in and around this area for ten years. A more detailed Biodiversity Threats Analysis reveals that large-scale palm plantations have spawned smallholder plantations, which are spreading throughout the forest. While these plantations are important revenue generators for local populations because of the lack of livelihood opportunities, a recent gender analysis showed the smallholder plantations favor men's over women's food crop production.

Using this evidence, a land use planning strategic approach is selected, based on the theory of change that if forest land is set aside for conservation, the threat will be mitigated. However, further research of grey and published literature from an international research institution, together with the Mission's conflict and land tenure assessments, shows that land use planning will not stop biodiversity loss where there is land conflict and insecure tenure. Also, with few other economic opportunities, little incentive to give up oil palm production is available.

With this additional evidence, the Mission reframes the strategic approach and theory of change as "Creation and Implementation of Business Plans" and actions are added, including forging private sector partnerships for sustainable palm oil, diversifying economic options, and empowering women in forest use. This theory of change is also guided by an additional gender analysis and an institutional assessment, including a private sector analysis.

The project team develops a monitoring, evaluation, and learning plan that includes measures of the number of business plans developed, diversity of revenue streams, and households with more secure tenure that adopt sustainable practices in the area being monitored, and deploys forest cover monitoring using remote sensing.

Further along, analysis of the data collected for program monitoring and site visit interviews indicate that deforestation rates are not declining because women are now clearing larger food crop fields as the families need revenue. This evidence is incorporated in the design for a new project, which sets up an impact evaluation framework to test different business plan models.

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### Disclaimer

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

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