MEASURING IMPACT

CROSS-MISSION LEARNING AGENDA FOR CONSERVATION ENTERPRISES

April 2016
Front Cover: Fishing nets, istock.com/Robert O. Brown Photography; coffee beans, istock.com; textiles, istock.com; bee hive, istock.com/Andrey Davidenko; African wicker baskets, istock.com/Eugene Sergeev

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.

About Measuring Impact: This work is made possible by the generous support of the American people through the United States Agency for International Development (USAID) under the terms of its requisition number REQ-EGAT-12-000014 (Measuring Impact) implemented by Environmental Incentives, LLC; Foundations of Success; and ICF International. Measuring Impact has been issued under contract number AID-OAA-C-12-00078 and supports the same program objectives as described in RFP number SOL-OAA-000050. The Measuring Impact initiative is funded and managed by the USAID Office of Forestry and Biodiversity/Bureau for Economic Growth, Education, and Environment.
## TABLE OF CONTENTS

I. WHAT IS A LEARNING AGENDA? ................................................................. 4

II. WHY A LEARNING AGENDA FOR CONSERVATION ENTERPRISES? ........................ 5

III. FRAMEWORK FOR THE LEARNING AGENDA: THE THEORY OF CHANGE FOR CONSERVATION ENTERPRISES ..................................................... 6

IV. IDENTIFYING AND PRIORITIZING LEARNING QUESTIONS .................................. 7
   Input from USAID Staff .............................................................................. 7
   What Experience Says .............................................................................. 7

V. THE LEARNING AGENDA .......................................................................... 9

APPENDICES

APPENDIX A: USING A THEORY OF CHANGE AS A FRAMEWORK FOR CROSS-MISSION LEARNING ................................................................................. 10

APPENDIX B: INTERVIEW RESPONSES ................................................................ 11

APPENDIX C: POINTS OF ANALYSIS ON LEARNING QUESTIONS .................. 16

TABLES

TABLE 1: Learning questions, envisioned activities, and proposed products .................. 9

TABLE 2: Summary of specific learning questions identified by Mission staff interviewed for the Learning Agenda ........................................................................... 16

FIGURES

FIGURE 1: Proposed theory of change (illustrated as a results chain) and learning questions for a Learning Agenda on the effectiveness of conservation enterprises ................................................................. 6

FIGURE 2: Results Chain ................................................................................ 10

ACRONYMS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBNRM</td>
<td>Community-Based Natural Resource Management</td>
</tr>
<tr>
<td>E3</td>
<td>Bureau for Economic Growth, Education, and Environment</td>
</tr>
<tr>
<td>FAB</td>
<td>Office of Forestry and Biodiversity</td>
</tr>
<tr>
<td>IIED</td>
<td>International Institute for Environment and Development</td>
</tr>
<tr>
<td>MI</td>
<td>Measuring Impact</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Governmental Organization</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
<tr>
<td>PMP</td>
<td>Performance Management Plan</td>
</tr>
</tbody>
</table>
An intentional and collaborative strategy for continuous learning through all stages of the Program Cycle is essential to achieve development results. As a strategy for continuous learning, the United States Agency for International Development (USAID)’s Bureau for Economic Growth, Education, and Environment/Office of Forestry and Biodiversity (E3/FAB) is implementing a Biodiversity Cross-Mission Learning Program to increase the effectiveness of strategic approaches that are commonly implemented in the Agency’s biodiversity programs. This Learning Program is designed to improve understanding of the conditions under which a specific strategic approach is successful in achieving desired outcomes, and why, in order to improve USAID’s biodiversity programming.

The Learning Program takes a community of practice approach to knowledge creation, sharing, and synthesis. Collaborative Learning Groups will develop and pursue shared Learning Agendas with support from E3/FAB’s Measuring Impact (MI) activity. A Learning Agenda defines the specific learning questions that a Learning Group will collaborate to answer, the learning activities involved, and the intended learning products and outcomes that will result.

Learning Agendas are framed around the specific theory of change underlying a common strategic approach. A theory of change or development hypothesis articulates how a team believes a set of actions or strategic approach will lead to the desired outcomes. It lays out the sequence of expected intermediate results and assumptions made in implementing a specific strategic approach, as well as important enabling conditions and limiting factors. The Learning Program uses results chain diagrams as a tool to illustrate theories of change to make explicit the expected results and any underlying assumptions, and to identify learning questions based on those assumptions. See Appendix A on page 10 for further explanation of the use of theories of change and results chains in developing learning questions for learning programs.

Conservation enterprises can involve the production of goods from nature, like honey.
USAID biodiversity programming has supported conservation enterprises of different types, at different scales, and involving different actors to create an economic incentive for stakeholders to reduce threats to biodiversity. Over the past two decades, a conservation enterprise approach has become a common component of many USAID biodiversity activities. Yet, little information has been collected in a systematic way to test key assumptions regarding the effectiveness of this approach.

In general terms, conservation enterprises are defined by the following:

- They involve the production of goods, usually from the environment (e.g., honey) and services (e.g., tourism)
- They generate income and non-cash benefits for stakeholders
- They provide the motivation and ability for stakeholders to change their behavior (such as improving their management of resources or discontinuing overuse)
- They are aimed at reducing threats and improving the status of biodiversity (the specific ecosystems and species that activities seek to conserve)

Conservation enterprises are frequently part of a larger sustainable livelihood or community-based natural resource management (CBNRM) approach, so they may be thought of as a sub-set of these broader approaches.

The key assumption in the general conservation enterprise development hypothesis or theory of change is that enterprises provide income and other benefits to stakeholders, such that they are motivated and able to both discontinue unsustainable activities and exclude others from unsustainable uses that result in threats to biodiversity. The theory of change for an enterprise approach to conservation may be distinguished from other approaches in that actions are focused on improving the capacity of stakeholders to generate income via an enterprise – improved income generation provides them with the motivation and ability to change behavior, as opposed to other approaches aimed at directly changing their management and use of resources (such as law enforcement or capacity building for resource management).

To date there is little evidence for the key assumption that income leads to a change in attitudes and behavior. With USAID staff commonly using this strategic approach as they program biodiversity funds, there is a need and opportunity to build the evidence base about the effectiveness of conservation enterprise approaches across USAID Mission programming.
III. FRAMEWORK FOR THE LEARNING AGENDA: THE THEORY OF CHANGE FOR CONSERVATION ENTERPRISES

A generalized theory of change for conservation enterprises (see Figure 1) was developed based on a review of USAID documents, published and grey literature, and input from USAID staff (see Appendices B and C on pages 11 and 16). Assessing the soundness of assumptions in the theory of change will help inform what works, what does not, and why. Specific questions regarding the assumptions in the theory of change will be explored by the Learning Group.

The theory of change includes the following key assumptions (represented by the arrows in the results chain in Figure 1):

1. If the enabling conditions (for instance, market potential verified) are in place, then there will be enterprise revenues and the enterprise will be sustainable.

2. If the enterprise generates revenues and is sustainable, then stakeholders will realize benefits (primarily a marginal increase in income, but also additional non-cash benefits).

3. If stakeholders realize benefits from the enterprise, that will lead to positive changes in attitudes and behaviors (in other words, stopping or reducing threat-inducing practices).

4. If there are positive changes in stakeholders’ attitudes and behaviors, those changes will lead to an overall reduction in threats (such as reduced overfishing, poaching, logging) induced by the stakeholders themselves (internal threats) and controlling outsiders (external threats), or restoration.

5. If there is an overall reduction in threats (or restoration), then biodiversity focal interests will be conserved.

Figure 1. Proposed theory of change (illustrated as a results chain) and learning questions for a Learning Agenda on the effectiveness of conservation enterprises
IV. IDENTIFYING AND PRIORITIZING LEARNING QUESTIONS

The Learning Group facilitators identified and prioritized an initial set of learning questions by assessing the information and evidence regarding the effectiveness of promoting enterprise approaches to conserve biodiversity. Effectiveness is defined by the extent to which: 1) the enabling conditions are in place to support a sustainable enterprise; 2) the enterprise leads to income and other benefits being realized; 3) there are positive changes in attitudes and behavior; 4) there is a contribution to reducing threats; and 5) ultimately the biodiversity focal interests are conserved. Based on an understanding of the existing evidence base, staff from eight Missions were interviewed regarding their perceptions of the theory of change, the relevance to their biodiversity programming, potential learning opportunities, and their specific questions related to key assumptions in the theory of change.

Input from USAID Staff

MI conducted interviews with staff from eight Missions: Uganda, Mozambique, Malawi, Tanzania, Philippines, Indonesia, Cambodia, and El Salvador. MI also presented the draft Learning Agenda at the Global Environment Officers State of the Art Workshop in Washington, DC, in February 2016. USAID staff generally agree with the proposed definition of a conservation enterprise and theory of change, as shown in Figure 1 on page 6.

Those interviewed have current or recent past experience with activities that include an enterprise approach to conservation. They verified that the theory of change was generally implicit or explicit in their design of this approach, and they identified potential learning opportunities (e.g., assessing past activities to inform new activity designs and monitoring, evaluation, and learning approaches).

USAID staff provided many comments and questions related to the effectiveness of the conservation enterprise approaches they support with biodiversity funding. Their comments and questions related to testing all key assumptions along the theory of change.

Various staff reported the primary challenge with past conservation enterprise approaches was a lack of understanding of the business aspects of the enterprise. This understanding needed to be in place for the enterprise to be profitable and sustained beyond USAID’s or other external support. Questions related to key assumptions concerned the lack of evidence regarding the assumption that income from enterprises leads to a change in stakeholders’ attitudes and a reduction in threat-producing behaviors. A summary of the findings from these interviews and a list of more detailed points of analysis for the learning questions is available in Appendices B and C on pages 11 and 16.

What Experience Says

A recent systematic review of alternative livelihood projects (including conservation enterprises) was conducted by the International Institute for Environment and Development (IIED), with participation from the E3/FAB Office. This review found that there currently exists very little concrete evidence to address the primary research question: Are alternative livelihood projects effective at reducing local threats to specified elements of biodiversity and/or improving or maintaining the conservation status of those elements? The authors recommend all projects involving alternative livelihoods should have a theory of change; future work must focus on project design, monitoring, and sharing of lessons; and funders should actively encourage projects to report both positive and negative experiences.

---

1 Roe et al. 2015 Available at: http://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-015-0048-1
2 To define alternative livelihood projects, Roe et al. (2015) states that, “In general, however, they can be understood to be an approach to achieving biodiversity conservation by substituting a livelihood strategy that is causing harm to a biodiversity target—for example, through unsustainable use—for one that has a lesser, or negligible, impact on the same target.” This Learning Agenda defines a conservation enterprises approach as a subset of a alternative livelihood approach that has as its primary intent to generate income for stakeholders as the motivation for positive changes in attitudes and behaviors.
These findings are consistent with USAID’s conservation enterprises technical brief, which is a synthesis of lessons from assessments of past Agency-supported enterprise approaches to conservation. It was clear from this review that more systematically collected cross-site information on the effectiveness of conservation enterprise approaches could help inform the Agency’s collective knowledge and the design of USAID-supported projects.

From this initial review of readily available documentation, there is more evidence available regarding the enabling conditions and benefits (especially income) to stakeholders. However, there is less evidence available on changes in stakeholders’ attitudes and behaviors, reductions in threats, and biodiversity conservation. This gap may be a result of implementers lacking an explicit theory of change and, therefore, a monitoring and evaluation framework to assess the effectiveness of conservation enterprise approaches in achieving these outcomes along the entire length of the theory of change. Monitoring and evaluation frequently appears to stop at income generation, without gathering evidence for other key intermediate assumptions in the theory of change towards conservation. Therefore, an important aspect of this Learning Agenda will be to assess the extent to which there may be evidence regarding these intermediate assumptions in the theory of change.

---

Table 1 describes the key questions of the Learning Agenda and the proposed approach to engaging Learning Group members in addressing these questions. A list of more detailed points of analysis for the learning questions based on interviews with Mission staff is available in Appendix C on page 16.

Table 1. Learning questions, envisioned activities, and proposed products

<table>
<thead>
<tr>
<th>Learning Questions</th>
<th>Envisioned Learning Activities</th>
<th>Proposed Learning Products</th>
<th>Use/Value of Learning Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Are enabling conditions in place to support a sustainable enterprise?</td>
<td>Group members share their experience and learn about best practices in building the enabling conditions for enterprise participation. To support this activity, MI will conduct a review of publications and synthesis of best practices on enabling conditions for enterprises. MI will also facilitate presentations for and discussions within the Learning Group based on the findings.</td>
<td>Contributions to the online repository of lessons (posted on the wiki)</td>
<td>The Learning Products will help USAID: • Identify the enabling conditions for enterprises at the needed scale and sustainability to achieve desired biodiversity conservation results • Prioritize investments in supporting the various enabling conditions for the enterprise</td>
</tr>
<tr>
<td>2. Does the enterprise lead to benefits for stakeholders?</td>
<td>Groups share their experience and learn about the evidence base to support key assumptions in the theory of change for conservation enterprises. To support this activity, MI will conduct a retrospective assessment of the effectiveness of an enterprise approach to biodiversity conservation (especially focused on questions 2 and 3) that includes conducting interviews and site visits with selected enterprise programs. MI will also facilitate presentations for and discussions within the Learning Group based on the findings.</td>
<td>Contributions to the online repository of lessons (posted on the wiki)</td>
<td>The Learning Products will help USAID determine: • If supporting conservation enterprises may be the most strategic approach to biodiversity conservation • What contribution a conservation enterprise approach can potentially make to achieving the desired reductions in threats to (or restoration of) biodiversity • How a conservation enterprise approach fits within the broader context of their conservation activity</td>
</tr>
<tr>
<td>3. Do the benefits realized by stakeholders lead to positive changes in attitudes and behaviors?</td>
<td>To support this activity, MI will conduct a retrospective assessment of the effectiveness of an enterprise approach to biodiversity conservation (especially focused on questions 2 and 3) that includes conducting interviews and site visits with selected enterprise programs. MI will also facilitate presentations for and discussions within the Learning Group based on the findings.</td>
<td>A report summarizing the purpose, methods, and findings from the retrospective assessment (posted on website)</td>
<td></td>
</tr>
<tr>
<td>4. Do positive changes in stakeholders’ behaviors lead to a reduction in threats to biodiversity (or restoration)?</td>
<td>Based on the findings from the assessment, MI will develop a directory of resources for conservation enterprise design and implementation that encompasses situation analysis and definition of the theory of change.</td>
<td>A directory of resources for conservation enterprise design and implementation that encompasses situation analysis and definition of the theory of change Case study vignettes of 2-3 of the conservation enterprise approaches that can be used to illustrate key points Webinars and/or in-person presentations of the results to the Learning Group and others Discussions via Google group emails and webinars</td>
<td></td>
</tr>
<tr>
<td>5. Does a reduction in threats (or restoration) lead to conservation?</td>
<td>Based on the findings from the assessment, MI will develop a directory of resources for conservation enterprise design and implementation that encompasses situation analysis and definition of the theory of change.</td>
<td>A checklist of considerations for conducting an assessment of enabling conditions for use in project design or start-up</td>
<td></td>
</tr>
</tbody>
</table>
Learning is framed around the specific theory of change underlying a common strategic approach. A theory of change or development hypothesis articulates how a team believes a set of actions or a strategic approach will lead to the desired outcomes. It lays out the sequence of expected intermediate results and assumptions made in implementing a specific strategic approach, as well as important enabling conditions and limiting factors. The Learning Program uses results chains as a diagrammatic tool to illustrate theories of change to make explicit the expected sequence of results and the underlying assumptions.

Results chains are structured to represent a series of causal statements that link short-, medium-, and long-term results in an “if…then” fashion, leading ultimately to the expected impacts on the focal and related interests.

Figure 2. Results Chain – Arrows represent key assumptions that can be the basis for defining learning questions

Results chains can be useful for a variety of reasons: 1) to help teams discuss and refine assumptions, come to a common understanding of what they seek to achieve, and decide how they will portray it; 2) to provide a foundation for measuring effectiveness by developing outcome statements and indicators to measure progress; and 3) to provide a common framework for learning across mechanisms, projects, and operating units.

The arrows in the results chain represent assumptions regarding the effectiveness of the strategic approach that can be tested by measuring the extent to which, and under what conditions, one outcome leads to another. Learning questions can be addressed through monitoring, evaluation, and learning approaches.
In developing the Learning Agenda, MI conducted interviews with staff from eight Missions: Uganda, Mozambique, Malawi, Tanzania, Philippines, Indonesia, Cambodia, and El Salvador. Those interviewed expressed that they:

- Generally agree with the proposed definition of a conservation enterprise and the draft theory of change (Figure 1 on page 6)
- Have current or recent past activities that include an enterprise approach to conservation and verified that the draft theory of change was generally implicit or explicit in their design of this approach
- Can identify potential learning opportunities (e.g., assess past activities to inform new activity designs and monitoring, evaluation, and learning frameworks)
- Have many comments and questions related to the effectiveness of the conservation enterprise approaches they support with biodiversity funding
- Have comments and questions related to testing all key assumptions along the theory of change

Interviewees suggested additional factors that influence the results of supporting conservation enterprises, including the strategic approaches of building awareness and supporting laws and policies for sustainable use and the related result of improving human well-being. Short summaries of interviewee perspectives on these topics follow.

**Awareness building:** Various interviewees explained that supporting conservation enterprises is often part of a larger engagement with communities that also includes strategic approaches to raise awareness of the need for conservation. Interviewees explained how benefits (cash and non-cash) from enterprises may change stakeholders’ attitudes regarding their ability to change unsustainable behaviors. However, building awareness may also be needed to change the social norms. Social norms may have a strong influence on stakeholders’ attitudes towards their ability to change unsustainable behaviors. Even if the stakeholders believe the benefits from the enterprise will be sufficient to change unsustainable behaviors, the social pressure from their community (e.g., it has always been done this way), may also affect their attitudes towards their ability to change unsustainable behaviors. Interviews identified learning questions (see Table 2 in Appendix C on page 16) regarding the relative effectiveness of changing stakeholders’ attitudes through providing benefits from enterprises versus changing social norms through awareness building.

**Laws and policies for sustainable use:** Some interviewees explained that supporting the development and implementation of laws and policies for sustainable use of resources is also frequently part of a larger activity that includes supporting conservation enterprises. Although behavior change through enterprises may lead to a reduction in the threats to (or restoration of) biodiversity, many times the development and implementation of laws and policies that restrict overuse of resources are also needed. Some programs support conservation enterprises as a means to provide communities with an alternative source of income as a result of new or tighter restrictions on natural resource use. Interviewees had questions regarding the effectiveness of agreements with stakeholders to adhere to policies as a condition of engagement in conservation enterprises.

**Human well-being outcomes:** Some people interviewed explained that conservation enterprise approaches are aimed at improving human well-being in addition to biodiversity conservation. Given that these activities receive biodiversity funding, the primary outcome is improvement in the status of biodiversity focal interests. However, conservation enterprise approaches are also designed to have co-benefits to human well-being in two ways: first as an intermediate result of the cash and non-cash benefits realized by stakeholders through engagement in the enterprise, and secondly, as an ultimate result through the provision of ecosystems services.
resulting from the conservation of the biodiversity. Interviewees were interested in understanding how outcomes related to human well-being can be effectively measured.

Other USAID staff suggested exploration of negative outcomes such as increased risks, conflict, lack of sustainability, and/or undercutting local markets. These topics can be explored as possible additional learning topics.

**Example Conservation Enterprise Project Activities**

Those interviewed have supported and are currently supporting enterprises of different types, at different scales, and involving different actors, mainly to create the economic incentives for stakeholders to reduce threats to (or restore) biodiversity. Conservation enterprises (businesses for income) supported by Missions include: tourism/ecotourism, large value chains, and small value chains.

**The types of value chains supported by Mission projects include:**

- **Agriculture**
  - Crops (e.g., rice, cacao, fruits, vegetables, coffee, red chili, seedlings {certified/organic products})
  - Livestock (e.g., cattle, pigs, chickens)
- **Forestry**
  - Sustainably harvested timber products (e.g., mahogany, bamboo, fuel wood, furniture)
  - Non-timber products (e.g., resin, rattan)
- **Fisheries**
  - Sustainably harvested fish and shellfish
  - Aquaculture/mariculture (e.g., fish, jellyfish, pearls, processed fish waste)
- **Other natural products**
  - Beekeeping/honey, crafts, jewelry, butterflies, herbs, oils, paper, charcoal alternatives

Activities are in different stages of implementation. Some are soon-to-be or are currently being designed, some are being implemented, and others have recently ended. Those interviewed suggested assessments of projects that have recently ended could provide very useful lessons for adapting their strategic approaches for activities currently or soon-to-be under design.

**Comments and Questions from Interviews on the Learning Questions**

**Learning Question 1. Are enabling conditions in place to support a sustainable enterprise?**

Interviewees verified that the following conditions are important:

**Enterprise-related conditions:**

- Market demand for enterprise goods and services (e.g., local, national, international trends and competitiveness of markets are understood; sustainability of resource use to meet market demands is assured; and access to markets is understood).
- Profit potential of the enterprise (e.g., the types of enterprises that are more profitable are selected; transaction and opportunity costs are taken into account; and long-term profit potential beyond subsidies is understood).
- Business alliances and partnerships to support the enterprise (e.g., equitable partnership arrangements for expertise, experience, investments, and secure markets are formed).
- Access to credit or capital for the enterprise (e.g., women’s access is improved).
Other enabling conditions nested in broader approaches:

- Effective governance of the stakeholder group (e.g., leadership, ownership, and management structure of the enterprise).

- Skills, knowledge, and equipment for the stakeholder group (e.g., financial and management skills; needs for simple versus complex enterprises; needs based on gender and education of stakeholders).

- Diversified livelihoods for stakeholders (e.g., more livelihood options are available to increase their resiliency to stresses and shocks).

- Enterprise compliance with government regulations (e.g., compliance with – often complex – government health, safety, export, land tenure, land use, and benefit sharing regulations).

- Supportive policies and legal frameworks for enterprise development (e.g., policies that create barriers for enterprise development are changed; supportive policies and legal frameworks to control overuse of resources are put in place, such as, resource use rights are well defined, there is a transition from open-access to forms of limited user rights, there is compliance and enforcement of regulations).

Interviewee comments and questions regarding enabling conditions:

- Various activities are addressing supportive policies for enterprise development.

- Some interviewees were interested in understanding whether certain types of enterprises have greater potential to generate more household income.

- Several interviewees were interested in knowing how to select products that will be successful. One concern was that if the wrong product is selected, then disincentives for participation in the enterprise and community support for conservation may be created.

- In one interviewee’s experience with supporting enterprises, honey was successful, but it still only supported a few families. The products did not provide enough revenue for an entire community. There needs to be diversity in income sources to reduce risk.

- Various Mission activities are working on business alliances for enterprise development. Interviewees are interested in understanding if certain business partners can provide expertise, experience, investment, and a secure market for goods and services.

- One interviewee found many conservation non-governmental organizations (NGOs) did not have the necessary entrepreneurial skills (“business savvy”) for sustainable benefit generation.

- Commercial players who can partner with conservation organizations are needed. Conservation NGOs do not have that kind of comparative advantage.

- Who are the key players in the production and marketing of chili and honey in Uganda and what role can they play in the successful implementation of program activities? (Uganda biodiversity project “learning plan” question)

- Implementing Partners need to understand the entire value chain to understand profit potential. This seemed to be lacking in past efforts and the Mission wants to ensure it will be understood under current activities.
Learning Question 2. Does the enterprise lead to benefits for stakeholders?

- Several Missions have activities that measure the income generated from enterprises.
- Some interviewees said benefits may be non-cash as well as income, and understanding benefits at the household level could be important.
- One interviewee found enterprises with communities that were solidly traditional with traditional structures managed to prosper. New communities with displaced people were more difficult in terms of benefit sharing – no support for cooperation and benefit sharing. In those communities, places where the community is not cohesive, a straight market approach was easier. Sites where there are many different types of communities present the biggest challenges for benefit sharing.

Learning Question 3. Do the benefits realized by stakeholders lead to positive changes in attitudes and behaviors?

- One interviewee found fees from ecotourism concessions generally go to community benefits, which does not motivate behavior change at the household level. Income from beekeeping/honey was also used as additional income, and did not motivate behavior change. The interviewee was interested in exploring enterprises that have generated sufficient income to motivate behavior change.
- Does an increase in benefit from conservation for the communities living in and around the conservation areas translate into better attitudes and hence reduced threats to biodiversity? (From Uganda Biodiversity Program Project Management Plan (PMP))
- One interviewee wanted to understand if behavior change motivated by income from the enterprise is sufficient, or if an attitude change regarding the need for conservation more generally (e.g., change in social norms) is needed for sustainable threat reduction. For example, if they are paying stakeholders for providing turtle eggs for the hatchery; if stakeholders do not get paid in the future for providing turtle eggs for the hatchery, will they just return to selling eggs for consumption?

Learning Question 4. Do positive changes in stakeholders' behaviors lead to a reduction in threats to biodiversity (or restoration)?

- Are the selected enterprises reducing human wildlife conflicts in the areas where they are implemented? (From Uganda Biodiversity Program PMP)
- Several interviewees wanted to know if the behavior change from an enterprise is at the scale needed to reduce threats to the biodiversity focal interests overall.
- Evaluator found in some cases the livelihood activities are linked for Indonesia’s Forest Resource Sustainability program outcomes (reduce deforestation), but in other cases both the conceptual and practical linkages between the livelihood strategy and forest stewardship are weak. (From Indonesia Forest and Climate Support Project Evaluation)
- Some interviewees wanted to know if enterprise strategies help to exclude external users of the resource. They wanted to know how to ensure user rights over the resource such that they can help control external use.
• One interviewee wanted to know if enterprises are more lucrative or sustainable when communities gain the legal rights to use community resources for commercial purposes.

• One interviewee said their Implementing Partners reported communities will self-enforce to reduce threats through community agreements, but the Mission thinks this assumption should be tested.

Learning Questions 5. Does a reduction in threats (or restoration) lead to conservation?

• One interviewee wanted to know how conservation enterprise approaches are linking to the development objectives of Missions. How have they measured achievement towards development objectives? Have they been successful in achieving development through enterprise approaches? Have the outcomes been sustainable? Should we be making the connection between biodiversity conservation and ecosystem services for communities to incentivize them in continuing with sustainable practices?

• One interviewee wanted know how others have attributed biodiversity improvement to conservation enterprise activities.

• Enterprise development activities should be assessed for sustainability beyond the life of the project, and for conservation linkages and contribution to the overall goal of the project. (Recommendation from Mid-Term Performance Evaluation of the Supporting Forests and Biodiversity Project)
Table 2 summarizes the more specific points of analysis identified for each learning question.

Table 2. Additional points of analysis for learning questions

<table>
<thead>
<tr>
<th>Learning Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Learning Question 1. Are enabling conditions in place to support a sustainable enterprise?</strong></td>
</tr>
<tr>
<td>To what extent has meeting/not meeting the enabling conditions led to the sustainability of the enterprise?</td>
</tr>
<tr>
<td>Are the participants in the enterprise those stakeholders that have been involved in unsustainable resource use?</td>
</tr>
<tr>
<td><strong>Learning Question 2. Does the enterprise lead to benefits for stakeholders?</strong></td>
</tr>
<tr>
<td>To what extent has the enterprise led to stakeholders realizing/not realizing marginal increases in income and other benefits?</td>
</tr>
<tr>
<td><strong>Learning Question 3. Do the benefits realized by stakeholders lead to positive changes in attitudes and behaviors?</strong></td>
</tr>
<tr>
<td>What is the influence of the amount, frequency, and timing of income among different sets of stakeholders on motivating and enabling positive changes in attitudes and behaviors?</td>
</tr>
<tr>
<td>What is the influence of the distribution of income (e.g., individual or collective) on motivating and enabling positive changes in attitudes and behaviors?</td>
</tr>
<tr>
<td>What is the importance of income versus non-monetary benefits in influencing positive changes in attitudes and behaviors?</td>
</tr>
<tr>
<td>What types of non-monetary benefits are important for influencing positive changes in attitudes and behaviors?</td>
</tr>
<tr>
<td><strong>Learning Question 4. Do positive changes in stakeholders’ behaviors lead to a reduction in threats to biodiversity (or restoration)?</strong></td>
</tr>
<tr>
<td>Under what conditions are the scale and timeframe of an enterprise sufficient to have the needed effect on threat reduction?</td>
</tr>
<tr>
<td>Are enterprises enough to reduce threats, or are additional approaches such as community contracts and/or law enforcement also required?</td>
</tr>
<tr>
<td>How linked to the resource does the enterprise need to be for stakeholders to be motivated to exclude external users?</td>
</tr>
<tr>
<td><strong>Learning Questions 5. Does a reduction in threats (or restoration) lead to conservation?</strong></td>
</tr>
<tr>
<td>What are the indicators used for measuring biodiversity and livelihood outcomes?</td>
</tr>
<tr>
<td>What evidence exists that supporting conservation enterprises has led to changes in biodiversity conservation?</td>
</tr>
</tbody>
</table>