CEPF and Poverty Reduction: A Review of the Philippines CEPF Portfolio

The benefits from intact habitats and healthy ecosystems extend well beyond biodiversity. The Critical Ecosystem Partnership Fund (CEPF) is undertaking an effort to analyze the relationship between the projects it supports and poverty reduction. This analysis includes a socioeconomic study across the CEPF geographic funding area, and a project- and portfolio-specific assessment performed through administering questionnaires to grantees. The socioeconomic information will provide CEPF with more detailed information about the areas where it invests and can be layered with existing biodiversity data to present a more comprehensive picture of the priority areas. Project-specific information, collected through questionnaires, provides specific data on key indicators. In addition this report incorporates narrative examples of how CEPF-supported conservation projects contribute to poverty reduction as suggested by the Government of Japan. As of the last quarterly report, the project-level information has been globally aggregated and become a part of regular reporting to the CEPF donor partners. Analyzing how CEPF projects contribute to poverty reduction is being piloted in four regions: Atlantic Forest, Philippines, Southern Mesoamerica, and Succulent Karoo. The following report presents the results from the Philippines, emphasizing the three priority corridors within that country.

CEPF’s Philippines ecosystem profile focuses on three biodiversity conservation corridors: Eastern Mindanao, Palawan, and Sierra Madre (Figure 1). Data from various complementary sources were used for this analysis. For the entire region and the separate corridors, we compiled and examined available socioeconomic data from the Philippines. For individual projects, we collected and analyzed data from CEPF grantees in the Philippines. This report summarizes the data analysis at a corridor scale and for individual projects.

Figure 1. Map of the Philippines, CEPF corridors, and project areas (note that several projects work within an entire corridor and are therefore not mapped individually).
**Initiative-Wide (Global) Level**

The Philippines comprises more than 7,100 islands covering nearly 300,000 square kilometers, with a total population of 76.5 million people in 2000. Population is dense—on the order of 252 people per square kilometer for the country as a whole—and growing at a sustained rate of 2.4% annually (1995-2000). At a national level, considerable poverty exists in the Philippines. As of 2003, the human development index for the Philippines was 0.758 (84th of 177 countries) and the poverty index was 16.3 (35th of 103 developing countries) (United Nations Development Programme-Human Development Report, online at http://cfapp.undp.org/hdr/statistics/data). That same year, an estimated 11.1% of the Philippines’ population was living on $1 per day or less and 44.1% was surviving on $2 per day or less (Asian Development Bank Report on Poverty in the Philippines, 2005, online at http://www.adb.org/Documents/Books/Poverty-in-the-Philippines/default.asp). Development policies that have favored urban and upland forested areas have contributed to more rapid population growth in these areas. Despite the increase in urban population, 41% of Filipinos continues to live in rural areas and the incidence of rural poverty remains remarkably higher than that of urban poverty—with 47% of rural families documented as living below the nationally defined poverty line in 2000, compared with 19.9% of urban families. This high incidence of poverty among rural households has remained virtually unaltered since 1988, while the situation has improved for urban families. The rural poor in the Philippines are characterized as being self-employed, primarily concentrated in the agricultural sector, and without any title to land.

Apart from greater frequency of rural poverty, considerable socioeconomic diversity occurs in the Philippines, and one can find examples of this diversity in the CEPF corridors. Presented at the level of provinces, a greater percentage of families in the Eastern Mindanao Corridor lives under the poverty line than in either the Palawan or Sierra Madre corridors (Figure 2). But depending on the indicators selected, poverty levels vary both within corridors and nationally. One tendency that recurs is that poverty levels in the CEPF corridors tend to be high, though not necessarily greater than elsewhere in the Philippines.

Figure 2. Percentage of families living below the poverty line, by province, with respect to CEPF corridors: 2000 (data source: www.census.gov.ph)
Corridor Level
To explore the socioeconomic context in the CEPF corridors within the Philippines Hotspot, this study examined variables widely recognized as indicators of poverty, focusing on both population and housing characteristics. One can show this in map form, presented for small geographic units called barangays. In contrast with the geographic pattern of poverty shown in Figure 2, the spatial arrangement of access to electricity (Figure 3), houses in dilapidated condition (Figure 4), and population with elementary education or less (Figure 5) do not necessarily show the Eastern Mindanao Corridor as worse off. Moreover, for any given poverty indicator, conditions within a CEPF corridor are not necessarily worse than elsewhere in the country. Nevertheless, conditions in the three corridors tend to indicate considerable poverty, in a country where poverty is widespread.

Figure 3. Access to electricity, by barangay: 2000 (data source: DATOS, National Statistics Office, Philippines)
Figure 4. Housing units in dilapidated condition or condemned, by barangay: 2000 (data source: PUMS, National Statistics Office, Philippines)

Figure 5. Percent population with elementary education or less, by barangay: 2000 (data source: PUMS, National Statistics Office, Philippines)
Table 1 summarizes data for selected socioeconomic indicators for the three CEPF corridors in the Philippines, along with figures for the Philippines as a whole to use as reference points. Statistics in this table are consistent with patterns in the above maps, indicating that conditions are worse in different corridors for different indicators. This table shows the degree of poverty affecting both the nation as a whole and the CEPF corridors, in terms of basic infrastructure, education, and housing condition. Even when conditions are not worse in a particular corridor than the national level, they tend to indicate high levels of poverty where CEPF works.

Table 1. Selected poverty indicators for barangays in the three CEPF conservation corridors, compared to national averages, 2000 (values in red indicate when conditions are worse in CEPF corridors than the national level)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Philippines</th>
<th>Eastern Mindanao Corridor</th>
<th>Palawan Corridor</th>
<th>Sierra Madre Corridor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population</td>
<td>76,413,657</td>
<td>2,690,610</td>
<td>615,374</td>
<td>1,079,739</td>
</tr>
<tr>
<td>Total number of barangays</td>
<td>41,940</td>
<td>1,442</td>
<td>309</td>
<td>671</td>
</tr>
<tr>
<td>Barangays without electricity (%)</td>
<td>23.4</td>
<td>15.7</td>
<td>49.8</td>
<td>34.4</td>
</tr>
<tr>
<td>Barangays without basic road network (%)</td>
<td>49.6</td>
<td>49.1</td>
<td>31.1</td>
<td>46.0</td>
</tr>
<tr>
<td>Population with elementary education or less (%)</td>
<td>52.1</td>
<td>48.5</td>
<td>58.0</td>
<td>60.4</td>
</tr>
<tr>
<td>Houses in dilapidated condition or condemned (%)</td>
<td>19.1</td>
<td>16.6</td>
<td>19.0</td>
<td>22.1</td>
</tr>
<tr>
<td>Houses with makeshift walls or no walls (%)</td>
<td>0.8</td>
<td>1.7</td>
<td>0.7</td>
<td>1.7</td>
</tr>
</tbody>
</table>

Data sources: DATOS, PUMS, National Statistics Office, Philippines

Individual Project Level

To examine how CEPF projects contribute to poverty reduction, we surveyed CEPF grantees to gather data for the Philippines project portfolio. To date, surveys have had a strong response rate, with 63% of the 32 region-specific projects in the portfolio completing questionnaires (Table 2). In addition to presenting results statistically, we also provide brief narratives describing examples of CEPF-funded projects and the multiple ways they contribute to poverty reduction (including a slightly more detailed narrative presented in Appendix 1).

A key finding of this study is that CEPF grantees report both direct and indirect contributions to poverty reduction. Direct contributions include job creation and training. Indirect contributions to poverty reduction include the creation or strengthening of local organizations. Several indirect contributions are difficult to summarize statistically. Other indirect effects, such as indirect job creation or economic multiplier effects, were beyond the scope of this study.
Table 2. Summary from CEPF questionnaire responses, the Philippines

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Multiply &amp; scale up investments corridor-wide</th>
<th>Build civil society awareness of conservation</th>
<th>Build capacity for better protection of PAs</th>
<th>Emergency critically endangered species program</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number Projects Reporting</td>
<td>6</td>
<td>1</td>
<td>10</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>CEPF Funding a</td>
<td>1,622,143</td>
<td>20,000</td>
<td>1,182,184</td>
<td>1,063,765</td>
<td>3,888,092</td>
</tr>
<tr>
<td>Workshops Offered</td>
<td>33</td>
<td>N/A</td>
<td>18</td>
<td>6</td>
<td>57</td>
</tr>
<tr>
<td>Jobs Created</td>
<td>11</td>
<td>N/A</td>
<td>126</td>
<td>30</td>
<td>167</td>
</tr>
<tr>
<td>Persons Trained</td>
<td>13</td>
<td>N/A</td>
<td>750 b</td>
<td>375 b</td>
<td>1138 b</td>
</tr>
<tr>
<td>Organizations Created or Strengthened</td>
<td>5</td>
<td>N/A</td>
<td>23</td>
<td>18</td>
<td>46</td>
</tr>
<tr>
<td>Network or Alliance Organizations</td>
<td>33</td>
<td>N/A</td>
<td>63</td>
<td>16</td>
<td>112</td>
</tr>
</tbody>
</table>

a: US dollars
b: These numbers include general estimates reported by grantees based on several workshops offered, reaching many organizations and communities.

We used the three-heading framework on the links between biodiversity conservation and poverty reduction, presented to the 7th Meeting of the Donor Council in November 2004, as the basis for information gathering from individual projects. Selected results of analyzing the questionnaire data appear below under those same headings: Building Income or Assets for the Poor, Facilitating Empowerment of the Poor, and Reducing Vulnerability and/or Enhancing Poor People’s Security.

**Building Income or Assets for the Poor**
To obtain information from CEPF projects on building income or assets for the poor, the questionnaire focused on the following issues:
- biological and natural resource assets;
- human resource assets;
- conditions for secure management: household or community;
- conditions for secure management: civil society.

In the Philippines portfolio, project support to improve resource management mainly focused on freshwater, wildlife, and forest conservation (Figure 5a). CEPF projects also supported the management and conservation of soils, non-timber forest products (NTFPs), mangroves and wetlands, coral reefs, and combinations of resources. Projects used a variety of methods to engage communities in resource management, with an emphasis on community education about the consequences of wise and unwise management, zoning, and technical assistance (Figure 5b). Management of natural and biological resources is extremely important for poor rural communities that depend on the products of healthy ecosystems for much of their food, fuel, clothing, medicine, and shelter.

The focus of most grantees in this portfolio is on corridor scale conservation, and actions that occur beyond household scales. Such corridor-scale actions include capacity building, education and training for civil society organizations on corridor-level biodiversity conservation priorities, and emergency response to help safeguard critically endangered species and their habitat.
Grantees work with local community organizations or promote multi-actor networks that assemble different stakeholders, supporting activities that improve resource management (Figure 5c). CEPF projects have provided training in management and finance planning, along with direct support to help these groups become successful and independent. This is particularly relevant when considering the representation of civil society organizations and small stakeholder groups in this portfolio: local groups generating capacity for sound resource, project, and financial management and awareness of the conservation priorities of their corridor and regional landscape can apply these skills to actions supporting poverty reduction.

Figure 5. CEPF projects and the management of natural and biological resource assets

(a) Natural/biological resource focus of CEPF projects

(b) Principle method used for community engagement

(c) Ways projects aid civil society or build alliances

Finally, CEPF projects contributed to secure management at both the household and community levels by creating or strengthening approximately 46 local organizations and building alliances between these organizations and more than 112 other institutions. All of these efforts to create or strengthen local organizations and networks help empower local rural communities by increasing the information flowing to them and their capacity to respond to markets, government, projects, the legal system, or other sources of change. Effective local institutions have been shown to use such capabilities to help reduce poverty in the communities where they work.
One example of strengthening civil society occurs in the Sierra Madre Corridor, where a project led by First Philippine Conservation, Inc., helps link community organizations with the private sector. Actions include linking community enterprises to markets and integrating corporate volunteers who can help with management issues and assist NGO development. Thanks to these activities, community organizations have been able to develop coastal resource management plans, implement these plans, promote the development of appropriate policies, and integrate conservation with local planning. Another project that strengthens civil society is the Community Enforcement Initiative to Stop Poaching and Illegal Forest Destruction in the Palawan Corridor. Led by the Environmental Legal Assistance Center, this project has provided paralegal training to help communities stop outsiders from exploiting local resources. This project also supports the development of alternative livelihoods (e.g., green charcoal, vegetable farms) to lessen stress on remaining forests.

Facilitating Empowerment of the Poor
CEPF investments in biodiversity conservation often help empower the poor. Many CEPF investments directly support civil society efforts to help communities and local people participate in and benefit from conservation efforts. The questionnaire collected data on the categories of poor people engaged by CEPF projects. Unfortunately, only slightly more than half of projects responding (60%) were able to quantify the types of local family groups engaged. Those who were able to respond worked primarily with indigenous families, subsistence hunter-gatherers, and near-landless or landless farmers (Figure 6).

Reducing Vulnerability and/or Enhancing Poor People’s Security
The questionnaire obtained information on reducing resource depletion, resource degradation, and effects of shocks and disasters. Three-quarters (75%) of respondents reported that their projects addressed resource depletion. The primary means of achieving this goal was through education and awareness campaigns, as well as through community-based conservation, improved financing for resource management, and providing assistance in zoning (Figure 7a).

Given the large amount of deforestation that has occurred in the Philippines and the prime value placed on freshwater, it is not surprising that the most common method of reducing resource degradation was through assisting with watershed management (Figure 7b). These activities not only support better resource management in upland areas, but they are also extremely important
for the poor, who cannot afford alternative sources of potable water, and other people who live downstream. Projects also sought to reduce resource degradation by promoting traditional land use practices, including practicing less intensive agriculture. Once again, actions that improve local resource management are vital to the poor, as maintaining the quality of these resources is essential to the survival of rural people with limited means.

Several CEPF grantees reported that their projects helped to reduce community vulnerability to shocks and natural disasters. Projects reduced vulnerability through technical assistance in reforestation and agriculture, thereby creating (or conserving) habitat that reduces the impacts of large storms and other severe events (Figure 7c). An equal number of projects reported using ecosystem restoration projects and education or awareness campaigns to reduce vulnerability to shocks and disasters. Such measures are important in areas where the challenge of meeting basic human needs can lead people towards activities that increase their vulnerability to severe events—such as broad deforestation that increases susceptibility to impacts from storms—and where other types of protection from shocks and disasters, and assistance following such events, are unavailable.

One project that supports resource management involves the indigenous Manobo people of the Eastern Mindanao Corridor. With funding from CEPF, the Manobo are improving management of resources on their ancestral lands, in the process improving protection of biodiversity that includes the Philippine eagle and improving river resources for downstream users. Another example of a resource management project involves a project in the Palawan Corridor that has hired nine ex-poachers to serve as wildlife wardens. Much of the poaching and illegal wildlife trade involves young males from the Pala’wan ethnic minority, putting them in conflict with traditional values as well as the law. In addition to reducing illegal hunting this project has created a community group that focuses on conserving threatened wildlife in the Rizal barangay—together providing both social and environmental benefits to the Pala’wan.

Figure 7. CEPF projects and reducing vulnerability

(a) Methods used to reduce resource depletion
Conclusion
Available socioeconomic data indicate that CEPF-supported projects in the Philippines often occur in areas with a high level of rural poverty. Within these areas of poverty, CEPF grantees tend to focus largely on poorer households that are indigenous, depend directly on wild resources as subsistence hunter-gatherers, have little or no land, or are headed by women. CEPF projects directly and indirectly contribute to poverty reduction and improve human conditions in these regions while achieving their primary objective of biodiversity conservation. Direct impacts include creating jobs and providing training to local peoples. Indirect impacts include creating local organizations, strengthening civil society, and other activities that maintain and restore the ecosystems on which many poor people in the Philippines rely. Ultimately, the analysis presented in this report, and data and analyses for other regions, will enable CEPF to report against standard indicators on its contribution to poverty reduction.

- February 2006
Appendix 1: Case Study of Crocs and Poverty—The Links Between The Community-Based Research, Observance and Conservation (CROC) Project and Poverty Reduction in the Sierra Madre Biodiversity Corridor, Philippines

Can a project working to save Critically Endangered crocodiles contribute to poverty reduction and human welfare? The answer is an unqualified “yes.” Many of the threats to crocodiles in the Sierra Madre Corridor also pose threats to people who live in the same area. Unsustainable fishing practices in upland rivers by outsiders using dynamite, electricity, and chemicals contaminate the water and reduce fish populations for crocodiles and for local fishermen, including indigenous groups such as the Agta and Kalinga. Conversion of upland areas through logging and slash-and-burn farming leads to erosion and sedimentation in rivers and flashfloods in lowland areas. Agrochemicals used in upland areas pollute the rivers that are home to the crocodiles and that supply water that local people use for drinking, bathing, and washing clothes. With a small grant from CEPF, the Mabuwaya Foundation began the CROC project to promote crocodile conservation. Working in 20 barangays in the Sierra Madre Corridor, this project affects more than 13,500 people, including nearly 2,500 indigenous Agta and Kalinga families. At household or village scales, the CROC project has directly supported local farmers (representing approximately 3,000 families) affected by crocodiles. For example, the project provided water pumps to minimize crocodile-human interaction, and small loans to families to start a small store that supplements incomes and thereby reduces reliance on activities bringing them into contact with crocodiles. To help ensure lasting management, the project assisted local farmers in two communities in securing their land claim for 25 years. In addition to advancing biodiversity conservation, the CROC project has strengthened civil society and empowered local citizens to take steps to improve their lives.