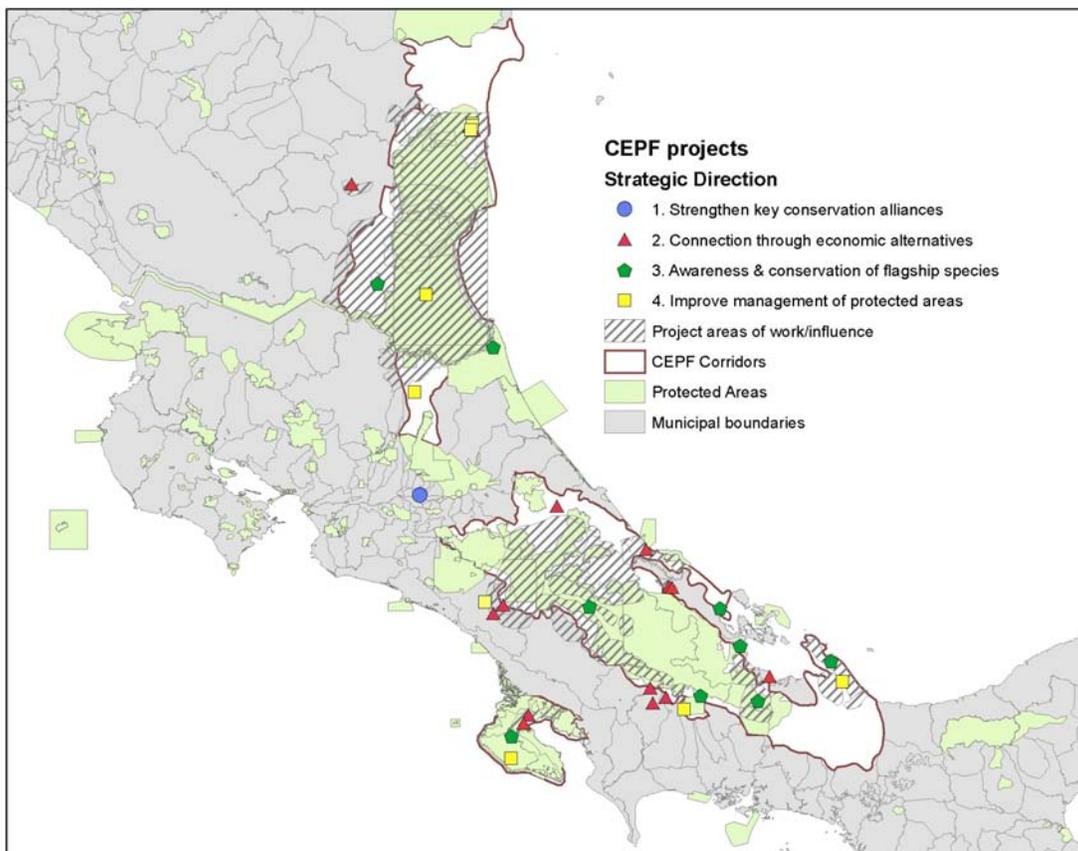


## CEPF and Poverty Reduction: A Review of the Southern Mesoamerica CEPF Portfolio

Although the target of the Critical Ecosystem Partnership Fund (CEPF) investments is biodiversity conservation, the benefits from intact habitats and healthy ecosystems extend well beyond biodiversity. CEPF is undertaking an effort to evaluate the relationship between the projects it supports and poverty reduction. The preliminary approach includes a socioeconomic study across the CEPF geographic funding area, and a project- and portfolio-specific assessment through questionnaires to project leaders. 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 complex picture of the priority areas. Project-specific information, collected through questionnaires, will provide specific data on key indicators and anecdotes that will complete the story of how CEPF-supported conservation projects contribute to poverty reduction. Ultimately, the project-level information will be presented in a standard format that could be globally aggregated and become a part of regular reporting to the CEPF donor partners. This approach is being piloted in four regions: Atlantic Forest, The Philippines, Southern Mesoamerica, and Succulent Karoo. This report presents the results from the first region: Southern Mesoamerica (Costa Rica, Nicaragua, and Panama).

CEPF's Southern Mesoamerica ecosystem profile focuses on three biodiversity conservation corridors, and four strategic directions (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 each country. For individual projects, we collected and analyzed data from CEPF grantees. This report summarizes results of analyzing these data.

Figure 1. Map of Southern Mesoamerica countries, CEPF corridors and project sites (note that some site locations shown correspond to more than one project, and region-wide projects are not mapped)



### Initiative-Wide (Global) Level

Southern Mesoamerica presents a unique setting in Latin America, containing one of the most developed nations in the region (Costa Rica) and one of the poorest (Nicaragua) (Table 1). Socioeconomic differences are evident in development indices and daily income, and in the dramatic disparity among the countries in life expectancy and child stunting (Table 2). Yet there are some common characteristics shared by these countries compared with the rest of the Latin America and Caribbean region: Southern Mesoamerica countries are less urban, they have a higher than average population growth rate, and a higher percentage of the population of each is young than the region as a whole (Table 2).

Table 1. National development and poverty levels for Southern Mesoamerica

	<i>Costa Rica</i>	<i>Nicaragua</i>	<i>Panama</i>
Human Development Index: value (rank <sup>a</sup> )	0.838 (#47)	0.690 (#112)	0.804 (#56)
Human Poverty Index: value (rank <sup>a</sup> )	4.0 (#3)	17.7 (#40)	7.7 (#9)
% population living on less than \$2 per day	9.5	79.9	17.6
% population living on less than \$1 per day	2	45.1	7.2

a: Rank among less developed countries globally

Source: United Nations Development Programme-Human Development Report online

Table 2. Socioeconomic characteristics of countries in the Southern Mesoamerica region : [www.undp.org/hdr](http://www.undp.org/hdr) 2003/.

<i>Characteristic</i>	<i>Costa Rica</i>	<i>Nicaragua</i>	<i>Panama</i>	<i>Central America</i>	<i>Latin America / Caribbean</i>
Current population	4,327,000	5,727,000	3,235,000	40,499,000	558,264,000
Avg. annual population growth	1.9%	2.4%	1.8%	2.1%	1.5%
Population aged 15 years or less	29.3%	42.6%	30.5%	37.6%	29.8%
Life expectancy at birth	78.1	69.5	74.7	71.5	70.9
Stunting younger than 5 years	6%	20%	14%	20%	17%
Indigenous	1%	5%	6%	26%	17.1%
Rural Population	41.0%	43.9%	43.8%	47.5%	22.4%

Sources: Instituto Nacional de Estadísticas y Censos Costa Rica on-line: [www.inec.gov.cr](http://www.inec.gov.cr); Instituto Nacional de Estadísticas y Censos Nicaragua online: [www.inec.gob.ni](http://www.inec.gob.ni); Departamento de Estadísticas y Censos Panama online: [www.controlaria.gob.pa/dec](http://www.controlaria.gob.pa/dec); Earthtrends World Resources Institute online: <http://earthtrends.wri.org>; Centro Latinoamericano y Caribeño de Demografía/Comisión Económica para América Latina y el Caribe online: [www.eclac.cl/ceclade/](http://www.eclac.cl/ceclade/); Estado de la Nación online: [www.estadonacion.or.cr](http://www.estadonacion.or.cr) (2005).

### Corridor Level

To evaluate the socioeconomic context within Southern Mesoamerica, the study examined several variables widely recognized as indicators of poverty, focusing on both population and housing characteristics. One can show this in map form. For instance, CEPF projects tend to occur in places with high levels of illiteracy (Figure 2) and relatively low access to electricity (Figure 3). Within specific CEPF corridors, such as the Osa-Talamanca-Bocas del Toro conservation corridor, socioeconomic data indicate a low standard of living (Table 3). Conclusions from our analyses are supported by studies of poverty conducted by the countries themselves. For example, national poverty assessments prepared by Costa Rica, Nicaragua, and Panama also indicate that CEPF projects in Southern Mesoamerica occur in rural areas with high poverty rates (Figure 4).

Figure 2. Map of illiteracy and CEPF corridors/projects

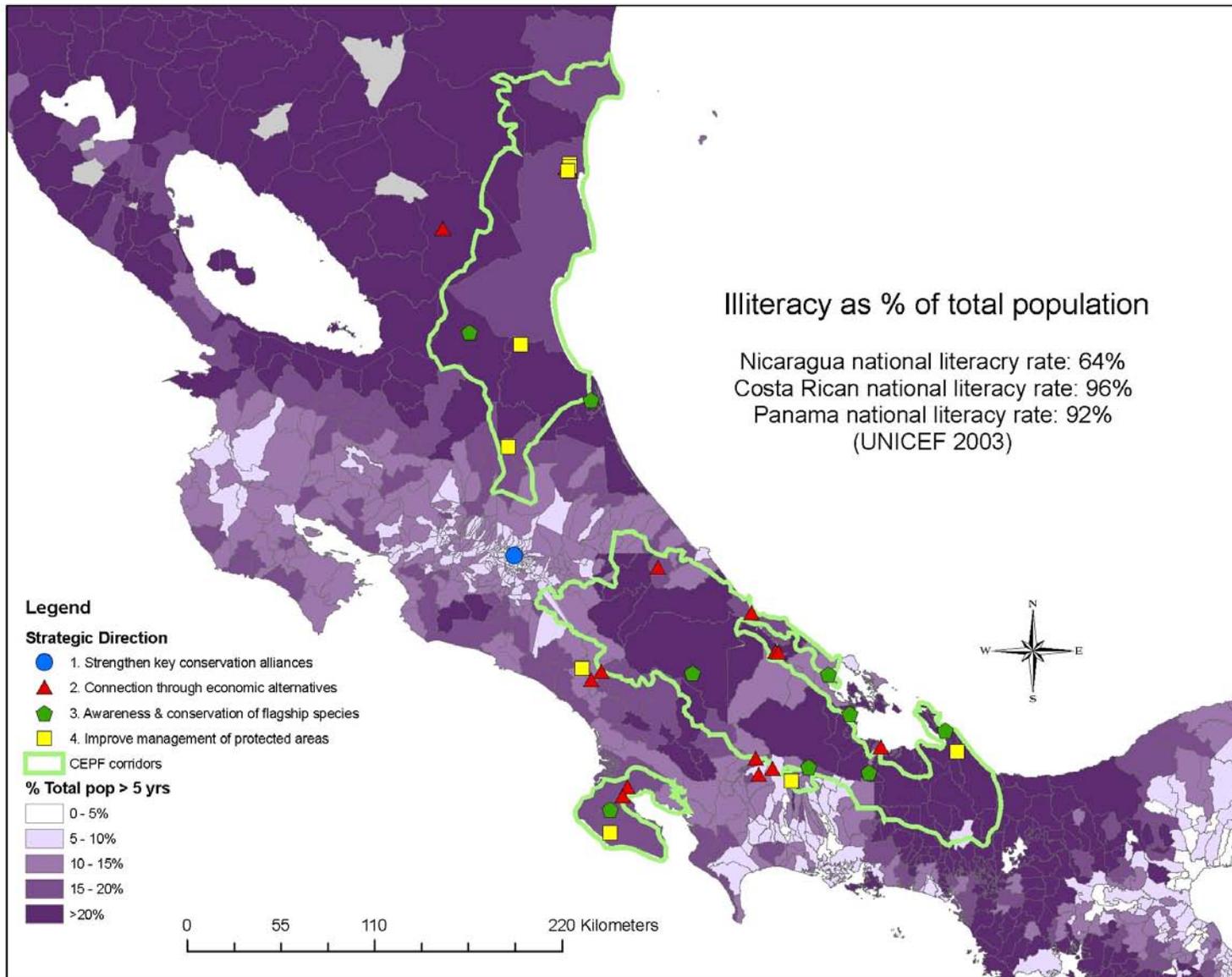


Figure 3. Map of access to electricity and CEPF corridors/projects

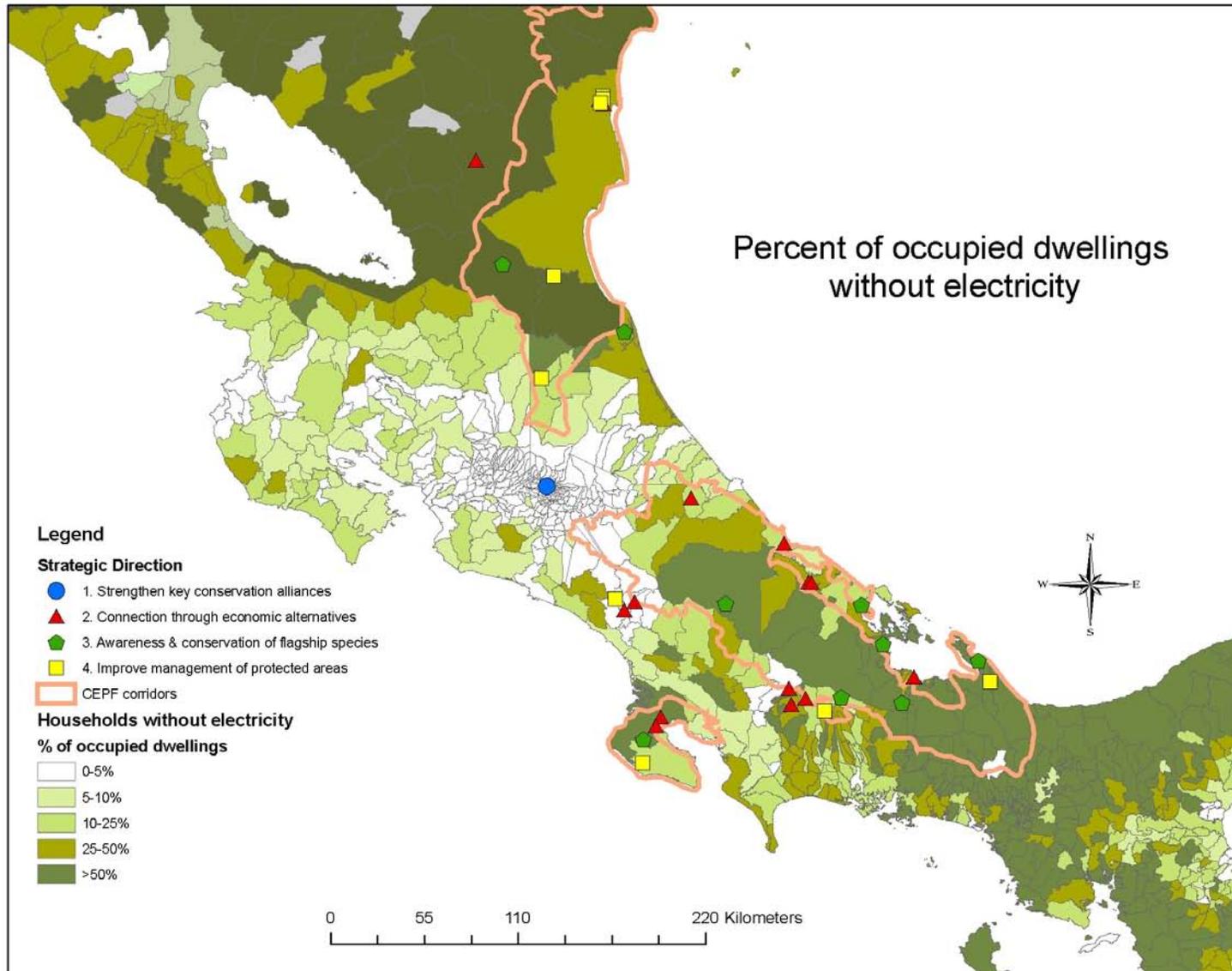


Table 3. Selected poverty indicators for the Osa-Talamanca-Bocas del Toro conservation corridor, compared to national averages

Indicator	National average (% of households)		Corridor average (% of households)		% CEPF jurisdictions worse off than national average
	Costa Rica	Panama	Costa Rica	Panama	
Cook with charcoal/wood	23	48	37	55	68%
Female-headed household	19	18	16	18	29%
Lack of electricity	6	47	16	62	63%
Lack access to potable water	11	24	27	38	68%
Lack interior plumbing	2	19	3	35	53%

Note: Red font indicates where the corridor average—measured for all jurisdictions partially or completely within the corridor is worse than the national average

### Individual Project Level

To examine how CEPF projects contribute to poverty reduction, we surveyed CEPF grantees to gather data for the Southern Mesoamerica project portfolio. To date, surveys have had an excellent response rate: 83% of the 41 region-specific projects in the portfolio have responded, and we anticipate a few more responses in coming weeks. A key finding is that CEPF grantees report both direct and indirect contributions to poverty reduction. Direct contributions include job creation and training (Table 4). Indirect contributions to poverty reduction include the creation or strengthening of local organizations. Several indirect contributions are difficult to summarize statistically, such as the household, agriculture, health, and education surveys conducted by the ADEPHCA project in Nicaragua, and the training in traditional medicine provided by ASOMETRAN project in Panama. Other indirect effects, such as indirect job creation, were beyond the scope of this assessment.

Table 4. Summary from CEPF questionnaire responses, Southern Mesoamerica Region

Indicator	Strategic Direction				Total
	Builds Alliances/Networks	Economic Alternatives	Flagship Species	Management of Protected Areas	
Number Projects Reporting <sup>1</sup>	3(6)	13(15)	7(8)	11(12)	33(41)
CEPF Funding <sup>2</sup>	1,365,611	1,098,781	102,457	870,572	3,437,421
Communities Worked With	N/A	62	20	30	112
Population in Communities Worked With	N/A	24,000	174,000	61,500	259,500
Estimated Population Reached <sup>3</sup>	N/A	8,000	95,000	49,000	152,000
Jobs Created	N/A	155	68	146	369
Persons Trained	97 <sup>4</sup>	3,227	746	10,299 <sup>5</sup>	14,369
Organizations Created or Strengthened	124	35	15	21	195

1: Based on responses received for 34 out of 41 projects

2: US dollars

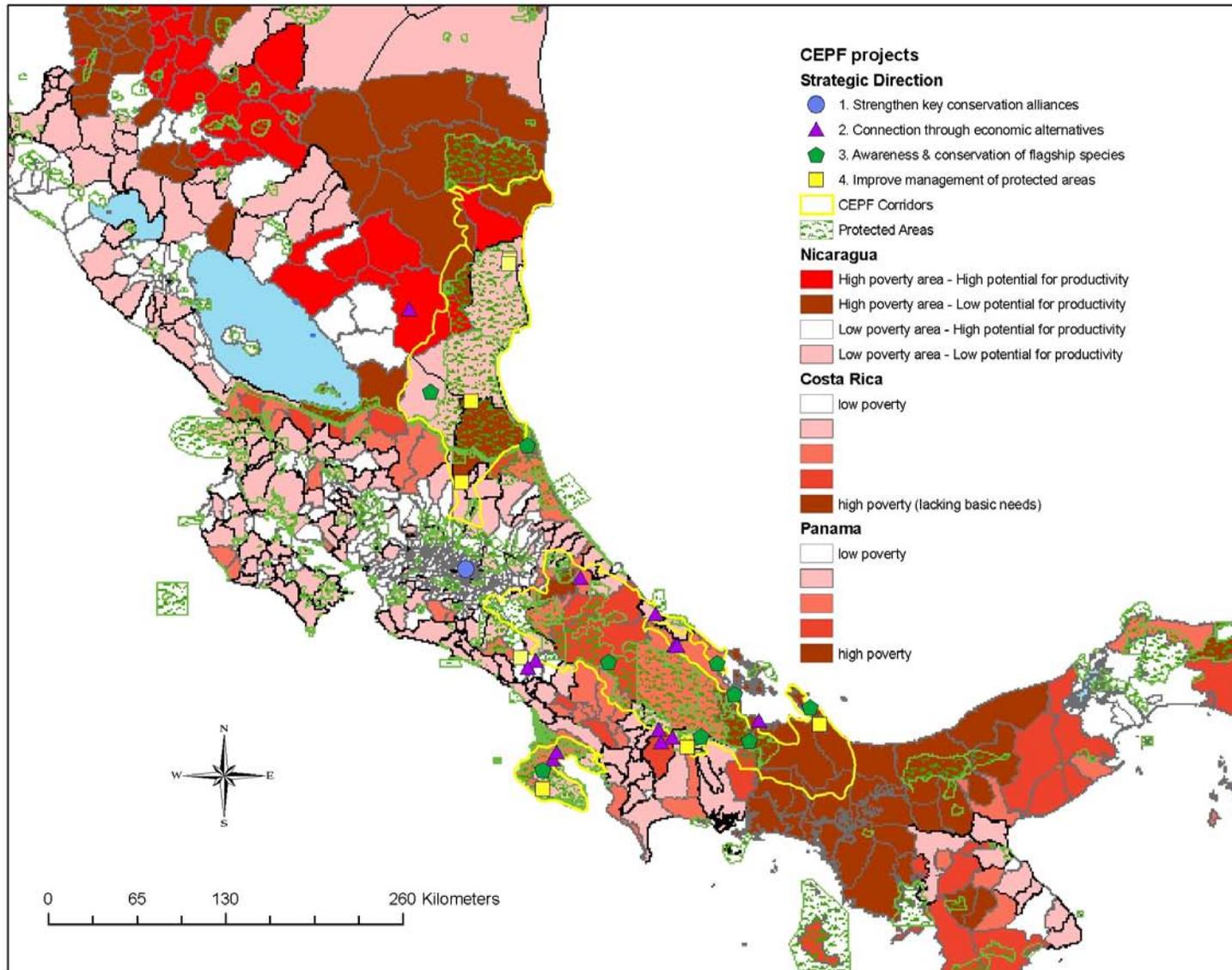
3: Based on percent of each community reached by project activities, as reported in questionnaire responses

4: Does not include persons receiving training through workshops offered

5: Includes results of one large information distribution campaign, estimated to have reached 10,000 people

We used the three-heading framework on the links between biodiversity conservation and poverty reduction, presented to the 7<sup>th</sup> 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.

Figure 4. Composite map of national level poverty analysis for Southern Mesoamerica



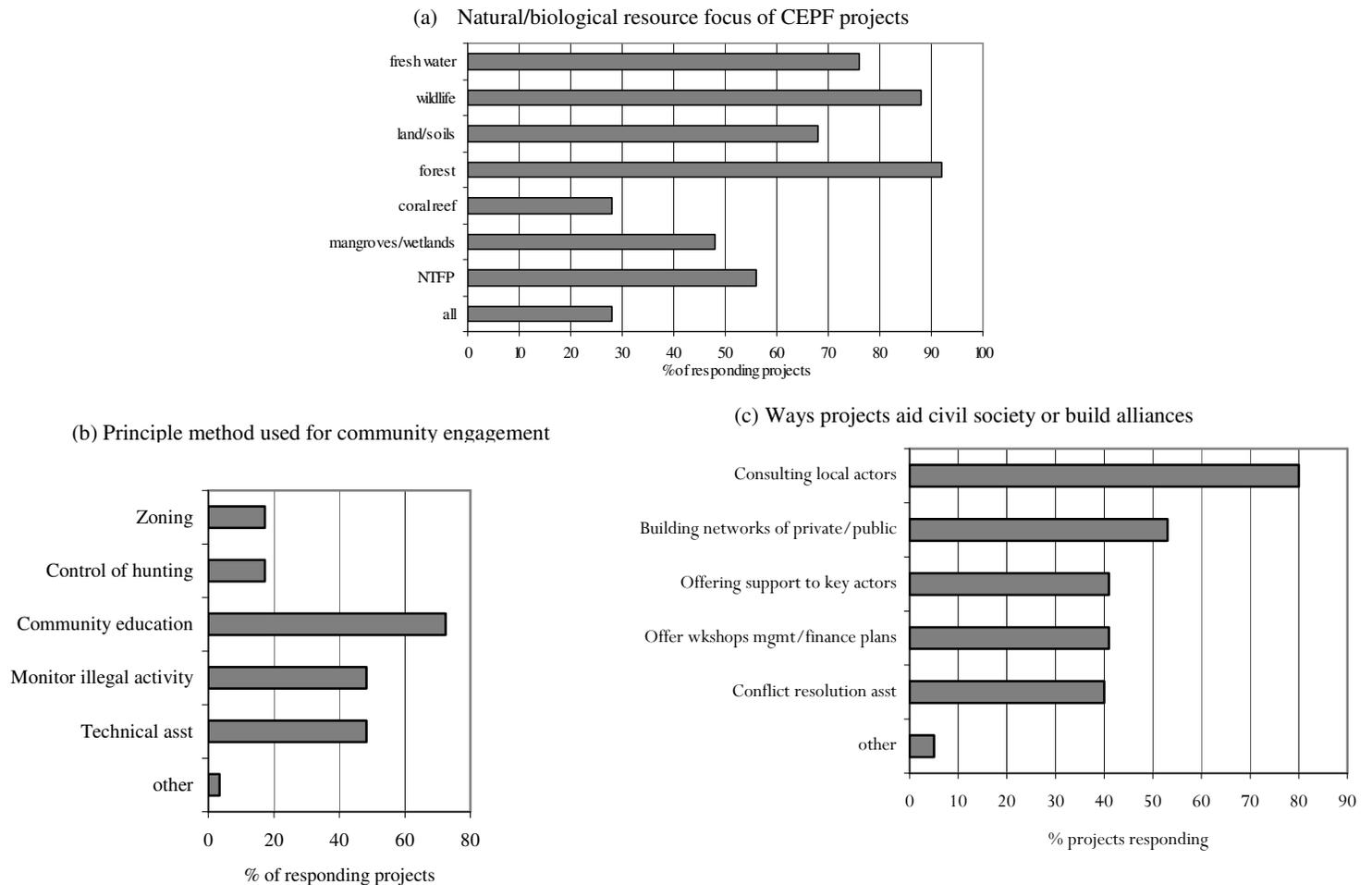
**Building Income or Assets for the Poor**

To obtain information from CEPF projects on building income or assets for the poor, the questionnaire focused on the following issues:

- management of biological and natural resource assets
- conditions for secure management: civil society
- improved human resource assets
- conditions for secure management: household or community

Project support to improve resource management mainly focused on forest, wildlife, freshwater, and land/soil conservation (Figure 5a). CEPF projects also supported the management of 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 both wise, and unwise management, as well as technical assistance and monitoring of illegal activities (Figure 5b). Management of natural and biological resources is extremely important for poor rural communities who depend on the products of healthy ecosystems for much of their for their food, fuel, clothing, medicine, and shelter.

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



Some CEPF projects strengthen civil society to achieve conservation (Figure 5c), as successful resource management often depends on having functioning local groups and networks or alliances. Most frequently, projects work with local actors individually or promote multi-actor networks that assemble different stakeholders, supporting them in taking actions that improve resource management. CEPF projects have provided training in management and finance planning, and direct support to help these groups become successful and independent. Actions to strengthen the capacity of local conservation groups have been shown to have a ripple effect: local groups with the capacity for sound resource, project, and financial management can apply these skills to actions supporting poverty reduction.

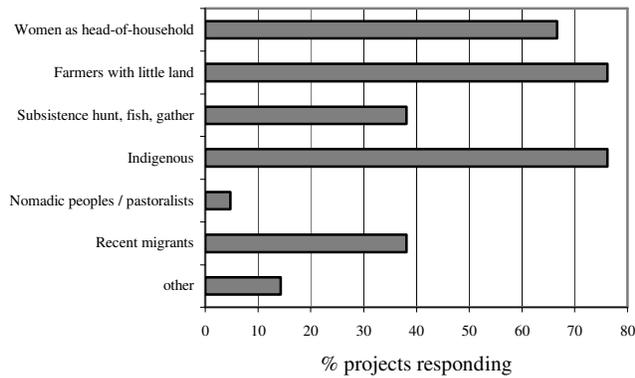
Human assets include a wide variety of actions, such as those that contribute to people's education or livelihood options, or that help promote opportunities for the rural poor. Job creation is the most tangible conventional indicator of poverty reduction from CEPF efforts, followed by training. CEPF projects provided nearly 370 jobs and trained more than 14,369 people in 112 communities. Direct employment is common in projects involving ecotourism and ecological monitoring. Training, in turn, enhances the potential to reduce poverty through improved knowledge, skills, or opportunities. Examples of training include introducing new ways of producing goods or services (e.g., farming, making local crafts), increasing awareness of traditional knowledge, and improving nutritional status by introducing new foods or preparation methods. Training of selected individuals in communities can also produce ripple effects, with people not yet trained copying others when they see improvements that enhance the quality of life.

Finally, CEPF projects contributed to secure management at both the household and community levels by creating and strengthening nearly two hundred local organizations or alliances. Of the four CEPF strategic directions, the one most actively creating or strengthening local organizations was the Economic Alternatives strategic direction, reporting work with 35 organizations, followed by the Protected Area Management and Flagship Species strategic directions. Data on the Builds Networks/Alliances strategic direction remain incomplete, helping to account for the low numbers under that category. All of these efforts at creating or strengthening local organizations and networks help empower local communities by increasing the information and role of rural communities in decisions and actions that affect them—from markets, government, projects, the legal system, or other sources. Effective local institutions have been shown to use their abilities to contribute to poverty reduction.

#### Facilitating Empowerment of the Poor

The questionnaire collected data on the categories of poor families living in the CEPF project areas. Grantees responded that they engaged several types of rural poor, with indigenous families and farmers with little land (and hence scarce resources) the most frequently engaged (Figure 6; note that family groups could count in more than one category). The emphasis on these two groups remained consistent with questionnaire responses estimating the number of families directly affected by their project's work. CEPF-funded activities that facilitated empowerment also include training local residents and creating or strengthening organizations, as discussed in the preceding section.

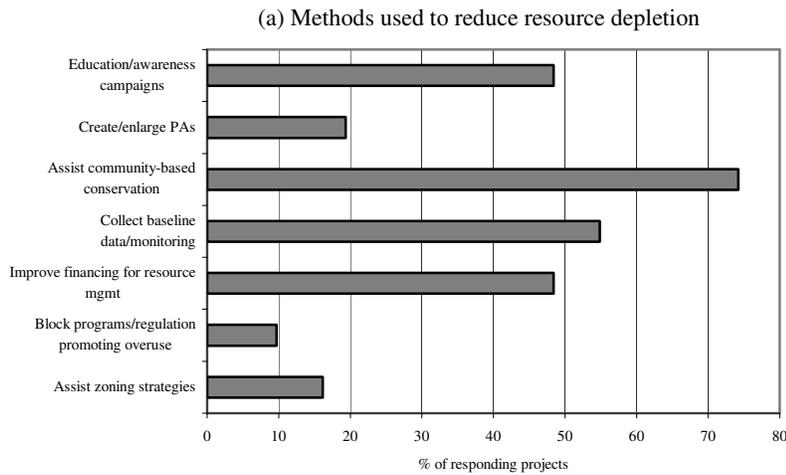
Figure 6. Categories of poor families engaged by CEPF-funded projects



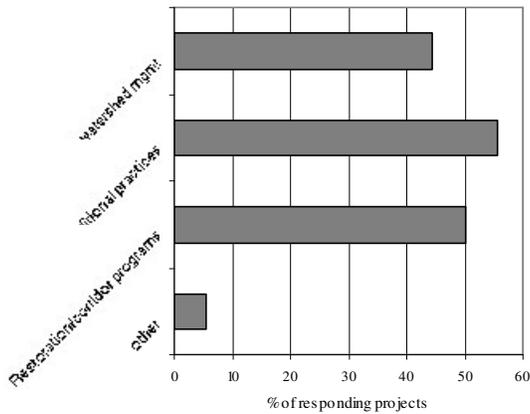
Reducing Vulnerability and/or Enhancing Poor People’s Security

The questionnaire obtained information on reducing resource depletion, resource degradation, and affects of shocks and disasters. All respondents reported that their projects addressed resource depletion. The primarily means of achieving this goal was through community-based conservation, though many also addressed resource depletion through data collection or monitoring, improved financing or resource management, or educational and awareness campaigns (Figure 7a).

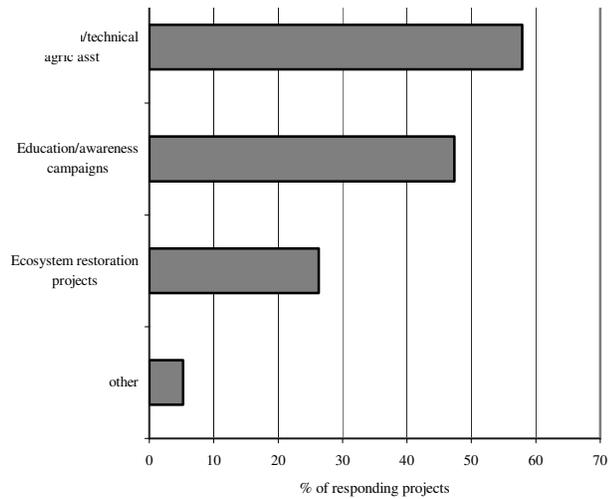
Figure 7. CEPF projects and reducing vulnerability



(b) Methods used to reduce resource degradation



(c) Methods used to reduce vulnerability to shocks and natural disasters



Given the high number of indigenous families engaged by CEPF projects in Southern Mesoamerica, it is not surprising that the most common method of reducing resource degradation was through promoting traditional practices (Figure 7b). Projects also sought to reduce resource degradation by restoration or corridor-scale activities programs. Once again, actions that improve local resource management are vital to the poor, as such resources often are 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. The main means they reported of reducing such vulnerability was through technical assistance in reforestation and agriculture, thereby providing (or conserving) habitat that helps to reduce the impacts of large storms and other severe events (Figure 7c). Nearly half of the projects reporting also indicated that they used educational and awareness campaigns to reduce vulnerability to shocks and disasters. Such measures are important in areas where the need to meet basic human needs can lead people towards activities that makes them more susceptible to severe events—such as broad deforestation of hill slopes—and where other types of protection from shocks and disasters, and assistance following such events, are unavailable.

### Conclusion

Available socioeconomic data indicate that CEPF-supported projects in Southern Mesoamerica tend to occur in areas of rural poverty in Costa Rica, Nicaragua, and Panama. CEPF projects directly and indirectly contribute to poverty reduction and help to improve human conditions in these regions, in addition to their focus on biodiversity conservation. These projects engage and ultimately benefit poor sectors of the societies in each country, including indigenous peoples, farmers with small amounts of land, and female-headed households. Direct impacts include creating jobs and providing training to local peoples. Indirect impacts include creating local organizations, strengthening civil societies, and other activities that maintain and restore the ecosystems on which many poor people in Southern Mesoamerica 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.

- September 2005