



Ecosystem Profile

CHOCÓ-MANABÍ CONSERVATION CORRIDOR

Colombia and Ecuador

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INTRODUCTION

The Critical Ecosystem Partnership Fund (CEPF) is designed to safeguard the world's threatened biodiversity hotspots in developing countries. It is a joint initiative of Conservation International (CI), the Global Environment Facility (GEF), the Government of Japan, the MacArthur Foundation and the World Bank. CEPF provides financing to projects in biodiversity hotspots, the biologically richest and most endangered areas on Earth. A fundamental purpose of the Fund is to ensure that civil society is engaged in efforts to conserve biodiversity in the hotspots. An additional purpose is to ensure that those efforts complement existing strategies and frameworks established by local, regional and national governments.

CEPF will promote working alliances among community groups, nongovernmental organizations (NGOs), government, academic institutions, and the private sector, combining unique capacities and eliminating duplication of efforts for a more comprehensive approach to conservation. CEPF is unique among funding mechanisms in that it focuses on biological areas rather than political boundaries, and will examine conservation threats on a corridor-wide basis for maximum return on investment. It will also focus on transboundary cooperation when areas rich in biological value straddle national borders, or in areas where a regional approach will be more effective than a national approach. CEPF aims to provide civil society with an agile and flexible funding mechanism complementing funding currently available to government agencies.

In the Chocó-Darién-Western Ecuador Hotspot¹, CEPF will support strategic initiatives that complement existing and proposed investments in conservation and thereby take advantage of the relatively strong presence of conservation NGOs in the region and government institutions and donors committed to the conservation and sustainable development of the corridor. The conservation corridor concept will lend synergy to efforts of narrow and broad geographic focus in an area of the highest biological importance. CEPF funding will be used to launch a comprehensive array of activities for implementation by civil society and to support some major existing initiatives. The CEPF five-year, \$5 million investment will leverage or influence the direction of \$52 million in investments by donors. CEPF will leverage \$7 million for conservation in Colombia from the Cauca Valley Regional Autonomous Corporation and ECOFONDO, and help to integrate biodiversity concerns into a \$45 million portfolio of environmental projects in Ecuador, supported through the GEF's Maquipucuna Project, the Carbon Trust's Jatun Sacha – CI Project, the IDB's Coastal Resources Management Project, and the country's Northern Border Development Project (UDENOR). To maximize the CEPF conservation impact, priority conservation areas and activities in the Chocó-Manabí Conservation Corridor (a key region of the hotspot) will be targeted for grantmaking.

CEPF offers an opportunity to promote the conservation of some of the world's most important ecosystems — places of high biodiversity and great value. In the Chocó-Manabí Conservation Corridor, CEPF will promote the engagement and synergy of a wide range of public and private institutions to address conservation needs through coordinated regional efforts.

¹ December 2005 update: A hotspots reappraisal released in 2005 resulted in this hotspot being expanded to encompass new areas and to have a new name as the Tumbes-Chocó-Magdalena Hotspot. This profile and CEPF investments focus strictly on the hotspot as it was originally defined (then known as the Chocó-Darién-Western Ecuador Hotspot) and select geographic areas as presented in this document.

The Ecosystem Profile

The purpose of the ecosystem profile is to provide an overview of the causes of biodiversity loss in a particular region and to couple this assessment with an inventory of current conservation investments activities in order to identify the niche where CEPF investments can provide the greatest incremental value. The ecosystem profile is intended to recommend strategic funding directions that can be implemented by civil society to contribute to the conservation of biodiversity in the targeted region. Applicants propose specific projects consistent with these broad directions and criteria. The ecosystem profile does not define the specific activities that prospective implementers may propose in the region, but outlines the conservation strategy that will guide those activities. For this reason, it is not possible or appropriate for the ecosystem profile to be more specific about the site or scope of particular interventions or to identify appropriate benchmarks for those activities. Applicants will be required to prepare detailed proposals that specify performance indicators

The Corridor Approach to Conservation

The corridor approach to biodiversity conservation seeks to provide a practical and effective solution to the universal difficulty of maintaining extensive areas of pristine habitat. It is recognized that large habitat parcels are essential for maintaining biodiversity and large-scale ecological processes, and that every opportunity to protect large bodies of habitat in perpetuity should be taken. Nevertheless, few such opportunities exist. Existing protected areas are often too small and isolated to maintain viable ecosystems and evolutionary processes; indeed, in many hotspots, even the remaining unprotected habitat fragments are acutely threatened. In such circumstances, conservation efforts must focus on linking major sites across wide geographic areas in order to sustain these large-scale processes and ensure the maintenance of a high level of biodiversity. Such networks of protected areas and landscape management systems are conservation corridors.

The main function of the corridors is to connect biodiversity areas through a patchwork of sustainable land uses, increasing mobility and genetic exchange among individuals of fauna and flora even in the absence of large extensions of continuous natural habitat. Such corridors not only promote the immediate goals of regional-scale conservation based on individual protected areas, but also help maintain the ecosystem processes needed in order to sustain biodiversity into the future. In this context, small habitat fragments within corridors perform several related functions — connecting or reconnecting larger areas, maintaining heterogeneity in the habitat matrix, and providing refuge for species that require the unique environments present in these fragments.

Large-scale intervention through biodiversity corridors, ecoregional planning, and landscape conservation is therefore one of the highest conservation priorities at the regional level in many of the world's hotspots and wilderness areas. From an institutional perspective, CEPF's adoption of the corridor approach aims to stimulate new levels of civil society empowerment and participation in practical and political processes as a way to underpin and to multiply the effect of government and corporate responses to conservation. The corridor approach relies on strategic partnerships with key stakeholders to build a support framework and to coordinate activities in the field. The active involvement of local stakeholders and the development of their planning and implementation skills are essential to the sustainability of the biodiversity corridor.

BACKGROUND

In the summer of 2001, shortly after the World Wide Fund for Nature in Colombia held a workshop designed to build consensus on a conservation vision for the region, CI convened a strategic planning workshop in Cali that was attended by 80 representatives of the governments of Colombia and Ecuador, NGOs, and scientists to discuss the threats to biodiversity in the region and to articulate a common vision and strategy for the Chocó-Manabí Conservation Corridor through 2010. The corridor would represent a regional planning framework within which to address urgent conservation issues to maintain the environmental, economic and social integrity of the region. The resulting 10-year strategy would catalyze interagency alliances to mobilize human and financial resources for an integrated effort to connect natural areas — e.g., by consolidating and upgrading existing protected areas, rehabilitating degraded areas, and promoting sustainable agriculture and other sources of livelihood which sustain biodiversity, such as shade-grown coffee and agroforestry.

Workshop participants included, from Colombia, representatives of the Ministries of Environment and Agriculture, the Valle del Cauca Autonomous Corporation, ECOFONDO, and the Fundación Natura; and from Ecuador, representatives of the Ministry of Environment, National Parks Programs, the World Wide Fund for Nature (WWF), Jatun Sacha, Fundación Maquipucuna, and EcoCiencia.

The participants agreed on a 10-year strategy designed to improve conservation actions by maximizing investments and strengthening existing alliances between national, regional, and local stakeholders to protect biodiversity, while also improving the livelihood and quality of life of communities in the Chocó-Manabí Corridor. Participants also agreed on a process for future decision-making and consensus-building. An action plan was prepared to address conservation, social, and economic priorities in the region; elements of the plan are reflected in commitments and targets for the five-year implementation phase of the Chocó-Manabí Conservation Corridor as laid out in this ecosystem profile.

BIOLOGICAL IMPORTANCE OF THE CHOCÓ-DARIÉN-WESTERN ECUADOR HOTSPOT

The conservation priorities of Chocó-Darién-Western Ecuador Hotspot, and the Chocó-Manabí Corridor within it, must be viewed from the perspectives of the region's biological, cultural, and social characteristics — in other words, from the region's potential to foster sustainable development. Its residents include more than 250 communities of African descendants and indigenous and mestizo groups.

The Chocó-Darién-Western Ecuador Hotspot reaches from the southeastern portion of Panamá, along the western portions of Colombia and Ecuador, as far as northwestern Perú. Within it, the Chocó biogeographic region (“the Chocó”) is globally recognized as one of the world's most biologically and culturally diverse. The Chocó provides habitat to an extraordinary wealth of plant and animal species.

The variety of ecosystems within the Chocó-Darién-Western Ecuador Hotspot has given rise to high levels of diversity and endemism. Mountains trap humid air from the coast and contribute

to the survival of tropical humid and very humid premontane forests. The Chocó supports an estimated 9,000 vascular plant species, approximately 25% (2,250) of them endemic. Some scientists believe the Colombian Chocó to be the most floristically diverse site in the Neotropics. The Ecuadorian Chocó is estimated to support 25% of the nation's flora, or approximately 6,300 species of plants, 13% to 20% of which are endemic. The region is also home to more palm species than any other part of the world.

The montane forests of western Ecuador also support large numbers of species and high levels of endemism. Many of the endemics here have small ranges, rendering them especially vulnerable to extinction. For the endemic flora, forest fragmentation might actually have stimulated speciation and diversification. Many families, genera, and species seem to be naturally constrained to elevations below 2,300-2,500 meters, and many are extremely localized. The region exhibits a large number of vegetation types, such as thorny desert scrub in the dry and very dry parts of the coastal plains, to the coastal mountain ranges in which dry thorny scrub covers the lower zones, while a premontane vegetation takes over on the foothills and slopes. Humid and very humid vegetation covers the peaks. Such humid vegetation extends along the Colombia-Ecuador border. However, it is declining at elevations between 300-900 meters close to the Perú-Ecuador frontier. The Ecuadorian coastal zone in the northwest, however, constitutes an extension of the Colombian Chocó. It contains humid rainforests and correspondingly specialized flora.

Bird species, including migrants, number approximately 830, of which 85 (10.2%) are endemic. The southern portion of the hotspot is particularly important for birds, with more than 40 bird species and 140 subspecies endemic to the dry forest biome. BirdLife International recognizes four Endemic Bird Areas within the hotspot.

Mammal diversity and endemism are also high, with 235 species, 60 (25.5%) of which are endemic. The location of the hotspot at the transition zone between Central and South America results in the occurrence of some largely Central American mammal species not found elsewhere on the South American continent. The Ecuadorian Chocó alone is home to 142 mammal species, of which 15 (10.6%) are endemic to the region.

There are approximately 350 species of amphibians, including 210 endemics (60%), and 210 species of reptiles, 63 (30%) endemic. Several reptile and amphibian species are endangered or threatened. Within the Colombian portion of the Chocó-Darién-Western Ecuador Hotspot, endemic reptiles include four turtles in danger of extinction, and 11 species of amphibians are similarly threatened, nine of them vulnerable and one critically endangered.

Socio-Cultural Characteristics

The Chocó-Darién-Western Ecuador Hotspot is home to a diverse range of distinct ethnic groups, including African descendants and indigenous and mestizo communities. Overall, the African descendant communities in Colombia and Ecuador occupy the coastal and riparian lowlands, while indigenous peoples have retreated to the lower hill slopes, leaving the higher slopes to the mestizo colonists. Even so, in Colombia, indigenous groups (Wounaan, Embera, Awa, Chachis, and Eperara-Siapidara) live in the lowland plains, and Afro-American

communities live on the coast as well as in the sub-Andean hill complexes of Guarto, Santa Cecilia along the upper San Juan River.

Afro-Colombian and Afro-Ecuadorian Communities

Communities of African descendants in Colombia and Ecuador date back to the 16th century. They occupy diverse areas and ecoregions within the Chocó-Manabí Corridor, including the Pacific coast, low rainforest areas, terraces, hillsides, foothills, and sub-Andean slopes and páramos. Land use patterns of these communities include farming of crops (plantain, papaya, citrus, and sugarcane) on the banks of the rivers, and rice in the wetlands beyond. They also harvest timber, and hunt and fish in the rivers and along the coast. These practices are less ecologically invasive than the clearing of forest for pasture. Governments of both countries have adopted policies to improve the living conditions of their respective African descendant populations.

Colombia's new constitution (Law 21/91) and the new African Descendant Rights Law (Law 70/93) recognize the collective territorial land rights of Afro-Colombians to the public lands they occupy. These lands are administered through Community Councils (Consejos Comunitarios). The law provides instruments by which the Afro-Colombian communities can reclaim and control the resources and lands they have occupied for centuries. The Colombian Land Reform Institute (INCORA) began the process of titling Afro-Colombian community lands in 1996 with funding from the World Bank. Since then, 36 collective titles have been issued for approximately 1 million hectares, benefiting some 15,700 families and 14 municipalities.

In Ecuador, the Afro-Ecuadorian communities are concentrated in the Province of Esmeraldas, covering approximately 800,000 hectares, mostly along the region's rivers. Their history lies in the slave system, and often, economic and social discrimination still causes them to abandon their lands for the cities and towns, where many fall into a vicious cycle of poverty. Their poverty has been exacerbated as oil palm and forest extraction operations have resulted in their displacement. The national government is preparing legislation to recognize the collective land rights of the Afro-Ecuadorian communities, to provide them with autonomy to manage and control these territories and to determine their own development.

Indigenous Communities

In Colombia, indigenous rights to land, culture and languages have long been recognized in law (Law 160 and ILO 169). In Ecuador, legislation to acknowledge communal property rights has been recently drafted. Land use patterns of indigenous populations differ from those of the Afro-American communities — indigenous systems are less diverse, less dependent on fishing and coastal resources, and more reliant on hunting and gathering and on handicrafts for sale in regional towns and cities.

In Colombia, many groups of the Embera, the largest indigenous tribe along the Pacific, live within the corridor, which holds 72 declared *resguardos* (reserves for indigenous groups) allocating ancestral and formal titles to 736,892 hectares. Some Paez people have recently migrated into the region from the Andean department of Cauca.

In Ecuador, the Awá occupy approximately 3,500 square kilometers and, with the Chachis, are concentrated in the north along the Pacific coast in the municipalities of Carchi, San Lorenzo and Esmeraldas. The Awá are organized into 18 groups within an Awá Federation, and exert their communal property rights on the principle of communal ownership of “Ethnic Forest Reserves.” They currently occupy around 76,000 hectares in the counties of San Lorenzo, Esmeraldas and Tulcan, Carchi.

The Chachis and Cayapas live on the coast, while Afro-Ecuadorians occupy lands along the Santiago, Onzole and Canande rivers in Esmeraldas. In the 19th century, gold, rubber, and *tagua* and *pita* prospectors invaded their territories, as did banana plantations and loggers in the 20th century. Destruction of forests caused by the advancing agricultural frontier, colonists, and loggers has forced the Chachis from much of their ancestral land, which they have sold off to logging firms.

Mestizo Communities

Mestizo colonization is driven by poverty and lack of access to land. The rise of the *minifundio* (subsistence farming), in combination with population density in the highlands of both countries, has given rise to mestizo migration into relatively uninhabited forests and indigenous lands — causing, in turn, conflict between ethnic groups and mestizos over land and resources. Mestizos bring with them highland farming and cattle raising practices, many of which depend on clearing considerable tracts of forest. Roads built by municipalities and the national government have expanded access to once-pristine areas.

Unlike Afro communities and indigenous cultures, mestizo farming practices have historically had adverse environmental impact; and, for the same reason, it is more difficult to promote conservation principles in mestizo communities than among Afro-American and indigenous groups. Mestizos are also more dispersed, often without fixed land tenure, and lack government support for their needs and claims.

Currently, mestizos are more numerous in Ecuador than in Colombia. Clearing of forests by mestizos has caused serious loss of biodiversity and degradation of habitat and soils. In Colombia, colonization of the corridor is relatively recent and concentrated in the department of Alto San Juan, municipality of San José del Palmar, and the middle and upper watersheds of the Calima, Garrapatas, Sanquini, Naya, upper Micauy, Guiza, and Mira rivers.

Corredor de Conservación Chocó - Manabí

Versión Preliminar

"Hotspots" involucrados:
Chocó - Darién - Ecuador Occidental
Andes Tropicales

Septiembre 2001

Conservación Internacional

- Parques y Reservas del Orden Nacional
- Reservas Forestales
- Reservas y Territorios indígenas
- Territorios Culturales de Comunidades negras
- Colección Minera
- Explotación Forestal
- Línea del Corredor Chocó-Manabí
- Límites Departamentales e Provinciales
- Ríos y drenajes
- Fian
- Principales Ciudades de Ecuador
- Principales Ciudades de Colombia

Escala Gráfica
1: 1000.000

0 3000 6000 15000 Metros

Elaborado por:
Instituto de Estudios Ecuatorianos
Bogotá - Colombia
1999

Mapa del Corredor de Conservación Chocó-Manabí, elaborado por el Instituto de Estudios Ecuatorianos, con el apoyo de la Fundación de Estudios Ecuatorianos y el Programa de Estudios de la Universidad de los Andes. Este mapa fue elaborado en el marco del proyecto de cooperación técnica entre el Instituto de Estudios Ecuatorianos y el Programa de Estudios de la Universidad de los Andes, financiado por el Ministerio de Educación, Ciencia y Tecnología del Ecuador y el Ministerio de Educación, Ciencia y Tecnología de Colombia.



Prioritization of Corridors within the Hotspot

Based on stakeholder consultations, CEPF selected the Chocó-Manabi Conservation Corridor, spanning the southern end of the Chocó-Darién-Western Ecuador Hotspot, as the focal area for support. The Chocó region is globally recognized as one of the world's most important zones for the conservation of biological and cultural resources.

The Chocó-Manabí Corridor spans more than 60,000 square kilometres. Within Colombia, the corridor encompasses a full range of Chocó and Andean ecosystems as it stretches from peaks of Colombia's western Andean cordillera west to the Pacific Ocean. Crossing the border into Ecuador, the corridor traverses numerous life zones as it spans coastal and sierra ecosystems in the Cotacachi-Cayapas Ecological Reserve and Mache-Chindul Ecological Reserve. Cotacachi-Cayapas is located in the western foothills of the Ecuadorian Andes and covers about 204,000 hectares of coastal and sierra zones, ranging in elevation from 100 to 4,400 meters.

The Chocó-Manabi Conservation Corridor has an extremely high degree of endemism — by some estimates, one of the highest in the world, possessing several important attributes from a conservation perspective:

- biogeographically important as a transitional area between two hotspots (Tropical Andes and Chocó);
- the most floristically diverse region in the Neotropics;
- habitat for 6,300 species of plants, 20% endemic;
- located in the Choco Endemic Bird Area designated by BirdLife International, with highest number of restricted-range species (62) in South America; and
- important to the survival of tropical humid forest and very humid premontane forest, as mountains trap humid air from the coast.

Based on a preliminary analysis of opportunities in the hotspot and threats to its ecoregions, the Chocó-Manabí Conservation Corridor was designed to address areas of priority for conservation. It includes areas that are severely degraded, and emphasizes improved management of these areas and closer cooperation among its local Colombian and Ecuadorian partners. With these considerations in mind, the corridor incorporates Katios National Park, Utría and Tatamá National Parks, and Ecuador's Machalilla National Park. The July 2001 workshop in Cali identified the following priority areas for conservation action:

Colombia

- Ancón de Mataje (Dept. Nariño), an area of mangroves and adjacent coastal forests of northern Ancón de Mataje or southern Sardinias, at the mouth of the Mataje River and the Ecuador-Colombia border. This is the site of the least damaged mangrove forests on the Pacific coast, with trees reaching heights of 40 meters. The area is biologically significant as a large and representative sample of the mangrove associations with the world's most humid tropical forest. The area borders on the Cayapas-Mataje Ecological Reserve in Ecuador.
- Southern expansion zone of the Sanquianga National Park, including the buffer zone (Dept. Nariño). This area is of great interest for its swamp forests, which differ from mangroves, as well as for its transitional zones between hillside forests and terraces.

- Munchique National Park, Páramos of Tambito and Argelia, Serranía de Pinche, Napi and Guapi Mountains, and upper valleys of the Micay and Guapi Rivers (Cauca and Nariño).
- A pilot study area under the jurisdiction of the national Integrated Coastal Zone Management Policy, including the Gorgona Island National Park, its surrounding marine park zone, and the estuaries of the Guapi and Iscuande Rivers (Dept. Nariño).
- The Farallones de Cali National Park complex, Munchique, and Cuchilla Naya (Valle and Cauca), representing Pacific watershed western Andean cordillera forests.
- Serranía de los Paraguas, Cerro Torrá, and the connection with Tatamá National Park (Valle and Chocó).
- Utría Bay and Gulf of Tribuga complex and the mangroves between Bajo Baudó and Cueva Bay (Chocó).

Ecuador

Within the Corridor, Esmeraldas Province contains some of the oldest and yet most highly threatened humid forests and mangroves; only 18% of the lowland evergreen forests along the coast still intact. The Muisne River estuary has lost approximately 75% of its mangrove forests. Habitat in the Sanquianga, Cayapas, and Mataje River estuaries, currently sheltering around 15% of the country's remaining mangroves, is also heavily degraded. These areas remain under heavy pressure from shrimp farmers, and has led the Government of Ecuador to declare the Province of Esmeraldas as a "special attention region," as defined in the National Sustainable Development Strategy.

In order to extend and maintain the ecoregional unit encompassing the higher regions of the Cotacachi Cayapas and El Angel Ecological Reserves, the Provinces of Esmeraldas, Manabi, Carchi, and Imbabura have been identified as priority areas. Within these provinces, the following six areas are especially important for corridor conservation:

- Consolidation of three reserves (Mache Chindul Ecological Reserve in the Manabi-Esmeraldas region; Awa Indigenous Reserve in the Carchi-Imbabura-Esmeraldas region; and El Angel Ecological Reserve in Carchi Province) and extension of the Cotacachi-Cayapas and Cayapas-Mataje Ecological Reserves.
- The Mira River watershed and Golondrinas Protected Forest, with adjacent areas of paramo and montane forests of the western Andes slope. This region connects El Angel Reserve with Awa Reserve.
- Zones covering tropical and subtropical humid forest within the communities of Ventanas, Alto Tambo, Dureno, San Francisco, and el Dorado. This zone covers the Conservation Corridor of Awacachi, which connects Cotacachi-Cayapas and Awa Indigenous Reserves.
- Watersheds covering the Santiago, Cayapas, and Mataje rivers with wetlands and protected forests located within the basin. This tropical forest zone is located within an area of significant logging pressure, and connects the Cotacachi-Cayapas Reserve with the Mataje Mangrove Reserve.
- The coastal mountain range of Mache (which contains an important assemblage of subtropical and montane coastal forest) is under pressure from aggressive logging and colonization. These forces combine to make this area one of the most critical and vulnerable priorities in the entire corridor. The Mache Chindul Ecological Reserve, which lacks a management plan to confront these threats, is located in this area.

- The watersheds of the Chone and Portoviejo rivers form part of the transition zone between tropical humid forest of the Choco to the north, with tropical dry forest to the south that crosses into Machalilla National Park and extends to Peru. This region lacks national reserves and has few protected forests.

Levels of Protection for Biodiversity

Overall, the present levels of protection in the Chocó-Manabí Corridor are poor, particularly in coastal Ecuador. Here, the ecosystem is under the gravest threat, with only approximately 2% of the original forest cover remaining. In other regions, such as the northern Chocó, the ecosystem is still largely intact. Nevertheless, biodiversity in the Colombian side of the corridor requires significant protection. Much of the current protection is in the form of national parks, private protected areas and forests, and communally managed conservation areas. Approximately 24% of the corridor's original habitat is intact, much of it in the Colombian Chocó and parts of the Darién.

Colombia

The Colombian section of the corridor contains six national parks administered by the special administrative unit of the National Parks System (UAESPNN), covering 429,400 hectares; three protected national reserves covering 11,267 hectares; and 11 Natural Private Reserves covering 4,724 hectares (see Table 1). Furthermore, four areas are currently under analysis as potential Ramsar sites: Tumarado-Perancho, El Trueno, Delta de San Juan River and the Delta of Baudó river.

Table 1: Selected Protected Areas in the Colombian Portion of the Chocó-Manabí Conservation Corridor

PROTECTED AREA	HECTARES
National Parks	
Parque Nacional Utría	43,440
Parque Nacional Tatamá	25,950
Parque Nacional Gorgona	61,600
Parque Nacional Sanquianga	64,000
Parque Nacional Munchique	22,000
Parque Nacional Farallones de Cali	75,000
Parque Nacional Galeras	3,800
Protective Forest Reserves	
Area de Reserva Forestal Protectora La Planada	1,667
Area de Reserva Forestal Protectora Río Nembí	5,800
Area de Reserva Forestal Protectora Río Escalarete y San Cipriano	3,800
Natural Private Reserves	
Reserva Natural de la Sociedad Civil Río Nambí	1,000
Reserva N.S.C. Civil la Planada	3,200
Reserva N.S.C. El Canto del Viento	2
Reserva N.S.C. Casa de la Vida	9
Reserva N.S.C. El Refugio Torremolinos	18
Reserva N.S.C. El Ciprés	12
Reserva N.S.C. Himalaya	208
Reserva N.S.C. El Pilar de Ana María	257
Reserva N.S.C. Estación Septiembre	2
Reserva N.S.C. Kakirí	6
Reserva N.S.C, Juná	10

Ecuador

The Ecuadorian portion of the Chocó region is the most endangered. The humid tropical forests are the least protected life zones in the existing reserves, and they are the most fragmented and deforested areas in the region. The reserves in the province of Esmeraldas, for example, do not include the humid and very humid tropical forests below 300 meters. These forests are nevertheless noteworthy, harboring biodiversity and concentrations of threatened endemic species.

The last well-preserved fragments of coastal forests are in the northwestern buffer zone of the Awá Ethnic Reserve and in the upper watershed of the Onzole and Cayapas Rivers. Like the forests in northern Esmeraldas, those of the *cordillera* around Mache Chindul are the last reasonably extensive fragments of tropical humid pre-montane forests in western Ecuador. Collectively, these primary forests occupy no more than 189,000 hectares. The reserve itself has no management plan or corresponding conservation program.

The Ministry of Environment (MAE) of Ecuador has directed conservation activities to focus on this region. However, even current efforts fall well short of the resources required to effectively protect the coastal moist forests. Overall, the government manages approximately 1.7 million hectares of the Chocó region. Of this area, approximately 46% lies in protected forests, 28% in ecological reserves, and 22% in national forests. The rest is classified as national parks and as urban greenbelts around cities and other smaller communities (see Table 2). In addition, a number private and public protected forests exist.

Table 2: Selected Protected Areas in the Ecuadorian Portion of the Chocó-Manabí Conservation Corridor

PROTECTED AREA	HECTARES
National Parks	
Parque Nacional Machalilla	70,164
Ethnic and Forest Reserves	
Reserva Etnica y Forestal Awá	101,000
Ecological Reserves	
Reserva Ecológica Cotacachi-Cayapas	204,420
Reserva Ecológica Cayapas -Mataje	51,300
Reserva Ecológica Mache-Chindul	119,172
Reserva Ecológica El Angel	15,715
Protected Forests	Not Available
Wetlands	
La Tembladera	Not Available
El Relicario	Not Available
La Segua	Not Available
La Laguna	Not Available
Laguna de Cube	Not Available
Calguna de la Ciudad	Not Available
Yalaré	Not Available
Ciénaga de Same	Not Available
Laguna del Mono	Not Available

10-Year Vision For the Chocó-Manabí Corridor

Vision 2010 for the Chocó-Manabí Corridor, adopted at the Cali workshop, declares: “In ten years, the Choco ecoregion is managed as a biodiversity conservation corridor that functionally reconnects natural habitat, consolidates areas under protection, and maintains cultural integrity from Choco to Manabi by fostering and establishing sustainable development practices among stakeholders.” This goal will be achieved through a variety of projects that target the following objectives over the next 10 years:

- improve decision-making processes and coordination of stakeholders within the region to maximize on-the-ground conservation;
- improve local and regional sustainable management;
- develop effective zoning and land tenure frameworks within the region;
- ensure that agricultural production systems are compatible with biodiversity conservation;
- launch an effective communication campaign;
- establish a regional scientific assessment and monitoring system;
- consolidate cultural and territorial elements of the region; and
- ensure long-term financial stability for conservation in the corridor.

Over a five-year period, the CEPF investment strategy will facilitate the initial implementation of Vision 2010 by mobilizing the NGO community around the three strategic directions: (1) establish and strengthen local and regional mechanisms to foster corridor-level conservation; (2) bring selected protected areas and species under improved management; and (3) identify and promote sustainable development practices in communities near protected areas. These strategic directions will be pursued to achieve the longer-term purpose of attaining greater harmony between development and conservation through decentralized management of the hotspot’s biological resources.

SYNOPSIS OF THREATS

Biodiversity in the Chocó-Manabí Corridor is threatened by a variety of human activities. The degree of threat varies considerably within the corridor, with some areas among the most threatened on the continent (coastal Ecuador) and others (northern Chocó) still largely intact. The northern Chocó region, for example, lacks major roads, ports and other infrastructure that would allow easy penetration of the forest. However, large-scale development is planned, with train routes, roads, a large canal, and hydroelectric dams being considered by the government and private interests. Direct threats include deforestation, regional integration projects, fishing and shrimp farming, mining, illegal crops, population growth, and social conflict. These threats are discussed below in the context of associated development projects, as well as the opportunities they offer to improve conservation practices in the corridor.

Deforestation

Deforestation is a principal threat to biodiversity in the region. The root cause of poor forest and timber management is disorderly settlement and expansion of the agricultural frontier driven by poverty, land scarcity, and population growth. The Ecuadorian portion of the corridor is most acutely threatened, with only 2% of the original lowland forest remaining.

In coastal Ecuador, logging is taking place on approximately 50,000 hectares, including some land within national parks and other protected areas. Some 225,000 hectares have been deforested in the past ten years. Over the past 30 years, the northwestern forests of Esmeraldas Province have been the most significantly altered. A 1989 study by Fundación Natura and EcoCiencia cites rapid conversion, fragmentation, and consequent isolation of the forest as the primary threat to plant and animal species along the coast. The study revealed that, of the 6,300 species of vascular plants estimated in the region, some 20% are in danger of extinction. Fundación Natura's 1992 forest inventory and assessment in Esmeraldas identified five critically threatened forests: San Lorenzo, Borbón, Quininde I, Mache-Cube-Muisne and the Guayallabamba River basin. The study concludes that intense pressure on the forests originates from local Afro-Ecuadorian and indigenous communities, which are often driven by economic need and the demands of large and small logging companies operating in the area. It also points to the presence of corrupt officials as exacerbating the problem.

In Colombia, coastal forests have experienced heavy logging for over 40 years, contributing 60% of the wood consumed in the country, with the Guandal and Sajal forests especially affected by logging.

The following activities are factors that contribute to deforestation:

Settlement

Mestizo groups convert forested land near settlements for farming, livestock, and speculation. In the Baudó River region of Colombia, spontaneous colonization is a serious problem, as some 80% of the forests are converted to other uses — such as slash-and-burn agriculture — and high-value timber species are harvested. In many cases, settlers invaded national park areas before the parks had been declared or established, clearing forests, mining, and exploiting wildlife to the point of extinction, especially within the Tatamá, Farallones de Cali and Munchique national parks.

Inappropriate timber extraction practices

Unsustainable extraction is particularly serious along the western Andean slopes and terraces in mixed forests, the mangrove forests, and the Guandal and Naidi palm forests of the lowlands. In both countries, Afro-descendant and indigenous communities are poor. Many of their traditional low-impact extraction and production practices become more invasive in their efforts to make a meager living from these resources. In Colombia, antiquated sawmills waste up to 60% of the raw logs, limiting the potential impact of timber management there. The southwestern regions (Tumaco, Satinga, and lower San Juan Rivers and the lower Calima River) are the most affected.

Illegal timber extraction

Unlicensed logging has caused market failures in the region. Illegal logging is stimulated by short-term logging permits, often issued for periods of only one year, and by the practice of permitting the regional autonomous corporations to selectively extract high-value timber species. The timber sector is prone to exploitation by middlemen, who profit from the industry at the expense of the poor. While the poor carry out the logging, mainly as tree-cutters and haulers (some 70% live off or engage in logging in the Colombian Chocó), the benefits and returns to them are minimal.

Cattle ranching

Ranching can involve large-scale conversion of forests into pasture, causing extensive ecosystem degradation and loss of habitat. In Colombia, cattle ranching takes place mainly in the Andean and sub-Andean highlands and in the cloud forests, as in Alto Calima, southern Nariño, Tumaco-Ricaurte, and Cali-Buenaventura. The sub-Andean highlands of Nariño are the most affected. In Ecuador, cattle ranching contributes to large-scale forest conversion and destruction of wetlands in areas around Guayaquil.

Intensive agriculture

Forests, river flats, wetlands, and hillsides are being displaced by non-sustainable production of banana, plantain, cocoa, coffee and African palm, among other crops. This trend has been a major cause of habitat and species destruction — particularly in coastal Ecuador, where agricultural activities have doubled from the late 1960s to the mid-1980s. These activities have attracted outside capital (foreign and domestic) and displaced Afro-American and indigenous populations from their traditional lands, forcing them to occupy national parks and protected areas. This has occurred in the Awá Ethnic Reserve and in the Mache Chindul Ecological Reserve in Ecuador. The results include overexploitation of land, ecosystem fragmentation, and displacement of indigenous communities from their traditional lands. While African palm plantations represent the largest monoculture in Esmeraldas, it is ninth in ecological impact (behind substitution of pasture, which has altered more Chocoan landscape than any other activity). Coffee and cocoa plantations, among others, are also significant causes of conversion. So far, in Colombia, African palm is mainly grown in the municipality of Tumaco.

Regional Integration Projects

Regional integration projects have promoted modernization in the Chocó-Manabí Conservation Corridor, particularly in the Department of Chocó (Colombia), and in the Provinces of Esmeraldas and Manabí in coastal Ecuador. Modernization has largely involved large-scale development projects (roads, canals, dams, ports, and other infrastructure) to connect the Pacific coast of Colombia and Ecuador with the interior. These projects have stimulated ecosystem degradation and thus threatened biodiversity.

Colombia's Plan Pacifico has generated considerable attention within the environmental and indigenous rights communities. The Plan, conceived in 1974, is an ambitious development program that aims to grow the Choco's economy through the construction of infrastructure and exploitation of the region's natural wealth. Infrastructure projects include roads, hydroelectric and energy plants, and telecommunications networks. This infrastructure is designed to boost forestry, fishing, agriculture, and mining. Environmentalists and indigenous rights groups are concerned about the impacts of such a large project on traditional social and economic structures and on the environment, expressing concern that the large-scale development will severely damage the region's biological diversity. Within these regional integration projects, five aspects are of particular concern from a conservation perspective:

Road construction

In Colombia, the most significant road projects include the road to the San Juan River estuary, the coastal road connecting Colombia and Ecuador's coastal zone, and the road connecting Pasto-Tumaco, Las Animas-Nuqui, Popayan-López de Micay, Bahía Solano-El Valle, Pereira-

Tado-Quibdo, and Aguila, Valle-Siqui. In Ecuador, the native forests of Esmeraldas were cleared by the second half of the 20th century when the first access roads from Quito and Guayaquil were built in the region. The rate of road construction increased between 1960 and 1980, as did the destruction of native forests, especially along the coasts of the Provinces of Guayas and Manabí.

Canal construction

Canals affect Colombia and Ecuador as mangrove ecosystems have been altered and natural water flow redirected. Examples include the Hidrovía del Sur in Colombia, which has connected wetlands and natural channels between mangroves to shorten travel distances between Tumaco and Buenaventura. Around Guayaquil, large flood control works have resulted in the destruction of mangroves and other fragile habitat.

Hydroelectric dams

In Colombia, dam construction sites include the Alto San Juan River; Garrapatas-Sanquiní River; Calima III (from Cauca to Calima rivers); Arrieros del Micay; Mira and Telembí rivers; and Microcentral along the Micay River.

Port construction

Free trade policies have encouraged construction of ports in order to connect isolated regions with the rest of the world via the Pacific. These initiatives have attracted colonists who, in turn, have negative ecological and social impact on the region. For example, Tribugá Port has created problems in Utría National Park. The Free Trade Area in Buenaventura Port also has the potential to affect a large area.

Oil Pipeline construction

Major pipeline construction, ongoing and proposed, threatens several ecologically sensitive terrestrial and coastal areas. The imminent construction of the Trans-Ecuadorian pipeline will bisect the Chocó-Manabi Conservation Corridor. While the direct impact of the pipeline is likely to be minimal, the long-term impacts could be significant, particularly on ecotourism in such areas as Mindo. In fact, pollution along the pipeline is already occurring. In 2001, five pipeline ruptures released over 100,000 gallons of heavy crude oil, contaminating watersheds in the corridor.

Overfishing and Shrimp Farming

Overfishing and shrimp farming have been major factors behind the destruction of mangroves throughout Ecuador, causing very serious social and environmental impacts as shellfish, mollusks, and timber have become scarce and as local residents have been displaced off their traditional land. Water quality as a result of poor shrimp farming practices has plummeted. Many residents have been forced to resettle in other areas or move into towns and cities, contributing further to urban growth.

In Colombia, shrimp farming has caused serious changes in the trophic chain as mangroves have been removed and replaced with shrimp ponds. Such activities are concentrated in the departments of Nariño, in the wetlands of Agua Clara, and around Tumaco and Cape Manglares.

In Ecuador, the northern Guandal forests have been removed, and construction of dikes for shrimp ponds downstream has caused rivers to back up and alter their flows, with environmental impact yet to be fully assessed. From 1969 to 1995, approximately 54,000 hectares (27%) of mangroves disappeared in Ecuador, concentrating along the estuaries of the Chone, Muisne, Guayas, and Cojimies. Two of these estuaries are in Esmeraldas, between the Mataje, Santiago and Cayapas rivers, where settlers depend on the mangroves for fish and lumber. Along the coast in the corridor, shrimp ponds are concentrated in the Muisne estuary, where they cover approximately 490 hectares.

Mining

Mining was historically the mainstay of the regional economy. The presence of Afro-American communities is the result of importation of African labor mainly for mining. Destruction of riverbanks, siltation, and contamination of rivers and streams usually accompany mining.

In Colombia, mining for gold by means of dredges, drags, and backhoes in main channels and along banks has damaged rivers and displaced whole communities. This type of mining is especially concentrated along the San Juan, Tado, Ismina, Telembi, Barbacos, and Iscuande rivers, and along the banks of the Yurumangui, Cajambre, Raposo, and Mayorquin.

In Ecuador, the government has issued mining concessions in approximately 136,000 hectares for exploration and approximately 19,600 hectares for production. Gold concessions are concentrated in the Playa de Oro and along the Mira and Mataje rivers in Esmeraldas. Marble and other nonmetallic minerals are also extracted.

Illegal Crops

It is not known how extensively coca and opium poppy are grown in the Chocó-Manabí Corridor. When these crops are grown, forests are converted and habitat is lost. Moreover, policing these activities is dangerous and, with the near-withdrawal of most state services from certain regions (Darién and lower Atrato River in Colombia), enforcement is not even attempted. The cultivation of these crops displaces people out of the areas where they are grown, as in the departments of Nariño, the municipality of Olaya Herrera, and along the Chaguí River, and to lesser extent in the Andean forests.

Drug eradication and associated violence has displaced more than a million people in Colombia. The number of internally displaced persons (IDPs) may indeed grow as Plan Colombia, the \$7.5 billion coca eradication and alternative development program, is implemented. Some IDP absorption programs may be situated in municipalities in the Chocó. If not properly planned, new infrastructure and facilities may open up new habitat to colonization.

Population Growth

Population density and growth in the Chocó-Manabí Corridor is greater in Ecuador than in Colombia. The population of Ecuador increased from 4.4 million in 1960 to 11.5 million in 1995. Human settlements in and around Guayaquil have destroyed large tracts of wetlands. Both in Colombia and Ecuador, population growth has forced mestizos to settle protected areas, resulting in loss of biodiversity and habitat.

Social Conflict

Threats to biodiversity posed by social conflict are more pronounced in Colombia than in Ecuador, and involve armed groups seeking to assume political power and usurp land and other resources— including the lands supporting or buffering ethnic communities. These factions are concentrated in the areas of Tumaco, the frontier roads between Colombia and Ecuador, upper San Juan River, the territories of Eperara Siapidara, and along the rivers Saija and Satinga.

These conflicts seriously affect biodiversity protection. Most state regulatory efforts are impeded, including enforcement efforts by guards and wardens, some of whom have been killed, prompting the national parks system to halt park protection services. Civilian visitors are barred from many Colombian reserves, including Katios, Paramillo, Tatamá, Farallones de Cali, and Munchique. Civil unrest has greatly affected work in the region and is a significant problem that will be a key factor in determining the pace and progress of conservation activities.

SYNOPSIS OF CURRENT INVESTMENTS

International donors in Colombia and Ecuador have provided a large portion of the resources directed toward conservation of the Chocó. This support has stimulated a positive response from the national governments in the form of counterpart funding and complementary actions. Certainly, without the financial and technical support of international organizations, the Governments of Colombia and Ecuador would not be in a position to address the broad range of urgent social development problems and environmental threats in the Chocó-Manabí Corridor.

In Colombia, there are more than 50 conservation and resource management projects financed by donors, government, NGOs and civil society. Some of these projects have a regional scope and some are locally oriented, emphasizing participatory management of river basins, mangroves, parks, ecotourism, indigenous communities, coastal wetlands, and forests. In Ecuador, the environment has also attracted significant funding from many donors, particularly from the multilaterals and bilaterals, as well as from official, private, and NGO sources. These initiatives are focusing on coastal zone management, protected areas, sustainable development, institutional strengthening, carbon offsets, community development, and forest management.

Multilateral and bilateral donors have funded a diverse range of conservation projects in the Chocó biogeographic region. Tables 3 and 4 present a selection of major multilateral and bilateral projects in the Chocó region of Colombia and Ecuador.

Table 3: Multilateral and Bilateral Donors in the Chocó Biogeographic Region, Colombia

Type of Donor	Donor	Implementing Agency	Project	Investment
Multilateral	GEF/UNDP/COSUDE	UNDP	Biopacífico Project	\$9M
	IDB		Plan Pacífico	\$71.4M IDB \$50M
	UNESCO (Program on Man and the Biosphere, MAB)	Fundación INGUUDE	Permanent Plots for Biodiversity Monitoring	
	World Bank	MMA	New Pacific Corridor Project (Cauca-Nariño) – Phase I: Shuame-Minchique-Pinchi; Phase II: Farallones de Cali, Monchoque-Alto Naya-Guapi-Iscuandé	
	World Bank / Government of the Netherlands	MMA	Natural Resources Management Program: strengthening the Pacific Regional Corporations in their environmental management functions plus indigenous and Afro-Colombian organizations (e.g., ACIA, OREWA, others).; production of ecological zoning maps and GIS databases	\$65.3M
	GEF	Fundacion Natura	Proyecto Utria Regional	
Bilateral	Canada (CIDA) / ECOFONDO	Centro de Estudios Regionales del Pacífico	Support to the Process of Territorial and Environmental Control of Communities in Alto San Juan River	C\$11.3M CIDA total
		Organización Indígena Embera-Waunana (OREWA)	Recovery and Conservation of the Productive Agricultural Component: supports indigenous knowledge and capacity-building for environmental management by community leaders	\$16.5M ECOFONDO over 9 years
		Reservas Naturales de la Sociedad Civil Regional del Valle del Cauca	Construction of a Regional Conservation and Rehabilitation Model for Alternative Production in Protected Areas	
		Fundación Pilar Verde	Management of the River Dagua Basin	
		Consejo Comunitario Unión del Patía Viejo	Proposal to develop sustainable production systems among Afro-Colombian communities in Viejo Patía	
		Consejo Comunitario Río Patía Grande	Sustainable Rural Development in Bajo Patía, Pacific Coast, Dept. Nariño	
	Netherland (NAR)	Fundación INGUUDE	Production and Commercialization of Non-Wood Products in the Tropical Rain Forest	
	Netherlands / IUCN	Fundación INGUUDE	Conservation of Important Plant Species as Food Sources for Fauna in the Chocó-Darién	
	Netherlands	Ecofondo	Fundo Holanda – Ecofondo for the Choco	
	Netherlands	MMA/JAESPNN	Strengthening management of national parks in the Pacific (just approved and to start in January 2002)	
	DFID/WWF-UK	WWF Colombia, ASDES, Red de Reservas Privadas	Strengthening the role of civil society in the Andes and Choco; strengthening environmental education; conservation on private lands	
SIDA/WWF-Sweden and WWF-NL	WWF Colombia and partner organizations	Building local conservation processes toward an ecoregional vision in the Choco of Colombia and Ecuador		

Table 4: Multilateral and Bilateral Donors in the Chocó Biogeographic Region, Ecuador

Type of Donor	Donor	Implementing Agency	Project	Investment	
Multilateral	CAF/ Government of Ecuador/ UNDP		Plan Ambiental Ecuatoriano Biogeográfico del Chocó: Environmental and social assessment of road network; capacity-building on forestry and sustainable agriculture	\$42.7M	
	European Union	CISP	Fisheries Technical Cooperation: supports enterprises, regulates small-scale fisheries, and evaluates fish resources and capture; Manejo Costero Ecosustentable y Fortalecimiento de la Zona Especial Sur de Manabí	€1.2M	
	IDB		Coastal Resources Management Program: sustainable use of coastal resources (close to termination; new phase in preparation to consolidate initiatives underway along the Pacific coast)	\$16.5M IDB \$14.9M	
	UNDP / UNEP / World Bank	MAE CIDESA UNAGRO Corporación Amingay CISP, PMRC, Comité Zonal de Puerto López, GEF and Fundación Maquipucuna	Small Grants: sustainable natural resources management and conservation, sustainable shrimp larvae culture, diving and fishing, tourism, training, ecotourism, and microcredit	\$3.3M	
			Sustainable Development of Rainforest, Onzole River		
			Management of Nonrenewable Resources in Machalilla National Park and Influence Zone		
			Production of Chusquiales Project		
			Sustainable Management of the Special Coastal Zone in López Port		
	World Bank (GEF Projects)	MAE		Biodiversity Protection: restructuring/strengthening MAE & National Protected Areas System and biological corridors system	\$7.2M
		EcoCiencia		Wetlands conservation	\$750,000
		Min. Agriculture National Census Institute		Agricultural Census and Information System: improved database availability and use in the agricultural and livestock sector	
		CODENPE		Improving quality of life in indigenous and Afro-American populations	\$50M
Fundación Maquipucuna			Andean Chocó Corridor Project: biodiversity of the Chocó, ensuring the functional connectivity of ecosystems	\$3.4M	
	MAE		Biodiversity Conservation Project: Awá territory		
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Table 4 continued

Type of Donor	Donor	Implementing Agency	Project	Investment
Bilateral	Canada (Canada-Ecuador Development Fund)		<ul style="list-style-type: none"> ▪ Torquilla Hay among Chongón-Colonche Communities ▪ Ecodevelopment in the Mache Chindul Mountain Range ▪ Ecodevelopment of Chanchis, Camandé River ▪ Social Conditions, eight Afro-American Communities, Santiago River 	\$40M nationwide
	Germany (GTZ)		Numerous projects including: <ul style="list-style-type: none"> ▪ Forestry and Resource Management; ▪ Community Forestry Management, Esmeraldas Province 	\$4.6M
	Germany (KfW)	Fundación Natura	Reforestation and Conservation, Chongón Colonche	
	Netherlands	IUCN CIDESA EcoCiencia	<ul style="list-style-type: none"> ▪ Community Management and Sustainable Development of Mangrove Environments, Esmeraldas ▪ Sustainable Management, Cayapas-Mataje Mangroves ▪ National Strategic Policy on Biodiversity 	
	SIDA/WWF-Sweden & WWF-NL	WWF Colombia, Fundacion Altropico & Awa Federation	Building local conservation processes toward an ecoregional vision in the Chocó of Colombia and Ecuador	
	Switzerland	Fundación Natura	Various initiatives in Manabí including livestock management in the Santa Elena Peninsula	
	Spain (AECI)		Integrated Development of the Cayapas River Basin	
	United States (USAID)	CARE Alianza Jatun Sacha-CDC EcoCiencia MAE	SUBIR Project: integrated conservation and development, three protected areas and their buffer zones: institutional development, policy, and legislation; improved land use; marketing; and biodiversity monitoring. Potential model of integrated resource management, community participation, and decentralized local project administration with national and international partners.	\$15M over 10 years
	USAID	WWF Colombia, Fundacion Altropico & Awa Federation	The Ecuadorian Awa Territory: Protecting Biodiversity Habitats	

Table 5: GEF Projects in the Chocó Biogeographic Region, Ecuador

Donor	Implementing Agency	Project	Investment
GEF Projects in Execution			
GEF/World Bank	MAE	Biodiversity Protection: restructuring/strengthening MAE & National Protected Areas System and biological corridors for three areas (Machalilla, Cotacachi Cayapas, and Cuyabeno), and establishment of fiduciary fund to cover recurrent costs	\$8.8M
	EcoCiencia	Wetlands conservation, inventory and classification of Ecuador's wetlands	\$0.7M
	Escuela Politecnica del Litoral (ESPOL)	Promote the adoption of traditional knowledge to manage and conserve coastal biodiversity	\$0.7M
	Fundación Maquipucuna	Andean Chocó Corridor Project: protection of biodiversity in the Chocó to ensure functional ecosystem connections	\$1.0M
GEF/UNDP	TNC	Identification of priority management areas five ecoregions of global importance in Bolivia, Colombia, Ecuador, Panama, Paraguay, Peru	\$0.7M
GEF Projects in Preparation and/or Negotiation			
GEF/UNDP	Fundación Natura	Conservation and sustainable use of resources in the Mache Chindul Reserve	\$0.7M
GEF/UNDP	Network of Private Forests	Consolidate management of Ecuador's private forests	\$0.8M
GEF/UNDP	South Pacific Permanent Commission	Strengthening implementation of the Protocol for the Conservation and Management of South-eastern Pacific Marine and Coastal Protected Areas	\$0.8M
GEF/UNDP	Ecociencia	Biodiversity indicators for national-level decision-making	\$0.8M
GEF/UNDP	TVE London	Increase environmental awareness in the Latin American and the Caribbean region	\$1.0M
GEF/UNDP	MAE	Biodiversity protection in the Ecuadorian Chocó	\$1.0M
GEF/IUCN	IUCN	Ecosystem Approach Project in support of an ecosystem perspective under the CBD	\$0.9M
GEF/OAS	OAS	Building the Inter-American Biodiversity Information Network to establish a standardized set of indicators and networks for conservation decision-making	\$6.0M
GEF/BAHC	BAHC	Vulnerability assessment and integrated management of regional water resources	NA

Government Agencies

Colombia

The Government of Colombia funds some 48% of environmental investments in the country, often in partnership with national and international donors and NGOs, through a number of channels, including the National Resources and National Environmental Fund; Ministry of the Environment (MMA); Special Administrative Unit of the National Parks System (UAESPNN); Regional Autonomous Corporations of Cauca, Nariño, Risaralda, and Valle del Cauca; municipalities; Environmental Research Institute of the Pacific; and universities (Cauca, Chocó Technological, Nariño, Pereira Technological, and Valle).

At a national level, UAESPNN plays an important role in conservation as an agency of the MMA. Its mandate is to manage all areas protected under the national parks system (designated natural reserves, national parks, wildlife sanctuaries, flora sanctuaries, and unique natural areas). UAESPNN is responsible for coordinating environmental authorities and community organizations to develop strategies and programs that contribute to the sustainable management of resources in protected areas.

At a regional level, the regional autonomous corporations play a crucial role. They enforce laws and regulations and issue permits, concessions, authorizations, and environmental licenses. The Valle del Cauca Regional Autonomous Corporation and CI – Colombia signed a five-year agreement in March 2001 to implement a joint set of conservation actions. One promising innovative financing options supports coffee farmers who integrate conservation of protected areas and habitat along the slopes of the eastern cordillera in the departments of Chocó, Risaralda, Valle del Cauca, Cauca and Nariño from Tatamá National Park to the border with Ecuador.

At a local level, the mayors of municipalities represent the political and administrative authority to make environmental decisions affecting their jurisdictions. They promote and implement environmental and resource management policies. In addition, at local and regional levels, the Environmental Research Institute of the Pacific is an important actor in conservation in the Chocó. Linked to the MMA, the institute carries out scientific research and disseminates data on biological, social, and ecological conditions on the Pacific coast.

Table 6: Colombian Government Projects in the Chocó Biogeographic Region

AGENCY	PROJECT
CODECHOCÓ	Implementation of Participatory Management Plans for Basins Supplying Municipal Wastewater Systems in the Department of Chocó: cartographic location and quantification of areas, establishment of tree nurseries, technical assistance and training
CODECHOCÓ	Control and Monitoring of Environmental and Renewable Natural Resources in the Department of Chocó: creating an institutional management framework to administer environmental and natural resources in Chocó
Municipalities of Nuquí and Bahía	Support to the Development of Ecotourism in Northern Communities of the Pacific Coast
Municipality of Barbacoas	Development of a “Plan de Vida” or Life Plan for the Awá Community
UAESPNN	Utría National Park: investment in management research in and around the bay Gorgona National Park: investment in the area Sanquianga National Park: investment in the area Farallones de Calí National Park: investment in the area Munchique National Park: investment in the area Tatamá National Park: investment in the area Utría, Tatamá, Farallones de Calí, Munchique, Gorgona and Sanquianga National Parks Program Characterization and Management of Páramos in the Department of Cauca (Páramos of Argelia and Pinchí)
Valle del Cauca Autonomous Corporation (CVC)	Coastal Zone Formulation and Execution of Integrated Management Plan; agreement between CVC and CI – Colombia to design and implement a conservation corridor Chocó-Andino

Ecuador

The Government of Ecuador funds environmental investment in the country through various organizations and institutions, including the MAE, Coastal Zone Management Program,

Development Unit of the Northern Border Initiative (UDENOR), and municipalities and provincial councils.

At the national level, the MAE is responsible for implementing environmental policies. In the last year, the MAE has gone through a major decentralization process involving the establishment of regional offices, which are organized by provinces, to play a key role in implementing regional activities. The MAE also recently prepared the Environmental and Biodiversity Strategy and, with World Bank support, implemented the Biodiversity Protection Project with resources directed to protected areas in the Chocó-Manabí Corridor.

The Coastal Zone Management Program operates at the national level with IDB funding and is coordinated by the central government. Its mission is to conserve, restore, and protect coastal resources and promote sustainable resource use through participatory processes. The program operates in six “special management zones” working through local committees and seven conservation and enforcement units coordinated through the port authorities.

The five-year, \$266 million UDENOR project focuses social development, environmental protection, and sanitary infrastructure. The province of Esmeraldas will receive \$93 million, while the province of Carchi will receive \$40 million. Of the investments slated for the Chocó-Manabí Corridor, an estimated \$10 million will be committed to protecting habitat.

Five other programs are considered as priorities by the Government of Ecuador on the coast:

Guayaquil Gulf Bioregion: Under the PATRA project in the Gulf of Guayaquil, the government promoted local control over environmental management in four sites in the provinces of Guayas, Los Rios, and El Oro.

Center for Marine Biodiversity: Also funded under the PATRA project, the Center supports a database on the Gulf of Guayaquil’s marine biodiversity.

Institute of Urban and Regional Planning, Catholic University of Guayaquil: The institute supports the introduction of a local environmental management system in the province of Guayas and establishment of local environmental management units.

National Fisheries Institute: The Fisheries Institute conducts applied research and extension on all facets of shrimp aquaculture, including the education of fish farmers on the importance of sustainable shrimp farming and capture, assistance to government authorities on setting regulations and quotas for wild shrimp harvesting, and monitoring wild shrimp stocks.

Portoviejo Declaration on the Sustainable Development of Manabí: In response to concern about declining environmental quality and forest degradation, the 22 counties of Manabí signed the Portoviejo Declaration on the Sustainable Development of Manabí. Most counties are currently implementing small projects in solid waste management, assessment and mitigation of environmental impacts from industrial activities, information systems and environmental education, and forest management.

In addition, the Government of Ecuador has secured GEF funds to implement its Biodiversity Strategy. Currently, a \$17.1 million portfolio in GEF project is either in implementation or in negotiation. Of this amount, \$3.1 million will be invested in the Chocó-Manabí corridor. These GEF investments provide an excellent opportunity for CEPF to integrate such initiatives as dry forest conservation and Mache Chindul Forest Reserve project into the scope of this profile.

At regional and local levels, municipalities and provincial councils, which were created under the country's new decentralization policies, are assuming responsibility for environmental and natural resources management, including waste management, public education, regulation of environmental quality, and preparation of environmental agendas. This decentralization process has the potential to provide local NGOs with an unprecedented opportunity to become more meaningfully engaged in the local management of their environment and natural resources.

NGOs and Civil Society

National and international NGOs are implementing many environmental projects in the Chocó. Their role as future partners in conservation is essential. Members of civil society who own private reserves in the corridor or who belong to private NGOs are important stakeholders who have contributed to the success of environmental initiatives (e.g., the Network of Private Forest Reserves).

Colombia

More than 10 years of development and conservation effort is reflected in many small- and medium-scale projects supported by national and international NGOs. Some of the most active national NGOs and civil society organizations include ECOFONDO; FES; Fundación Inguede; Fundación Natura; Fundación Proselva; Fundación Yubarta; Asociación Nacional de Usuarios Campesinos; Federación de Organizaciones de Comunidades Negras; OREWA; Organización Regional Embera; Federación Nacional de Cafeteros. International NGOs include Conservation International, the Nature Conservancy, and the World Wide Fund for Nature.

Table 7 presents a selection of major projects carried out by NGOs.

Table 7: NGO Projects in the Chocó Biogeographic Region, Colombia

Type of Organization	NGO	Project
National NGO	ECOFONDO / Iniciativa de las Americas	Implementation of Management Guidelines for Threatened Flora and Fauna Species in Wounaan Indigenous Community
	FES	Protective Forestry Management Area La Planada
	Fundación Natura	Various projects in Utría National Park
International NGO	WWF CONSERVATION INTERNATIONAL	<p>Conservation and Sustainable Development in the Pacific Chocó Region Achieved by Strengthening Local Development Processes and Building Capacities to:</p> <ul style="list-style-type: none"> ▪ promote the establishment, conservation, and protection of indigenous and Afro-Descendant territories and public and private ecological reserves; ▪ promote sustainable management of forest resources and agricultural systems in specific project areas; and ▪ strengthen the capacities of organizations and institutions in the areas of administration, planning and management. <p>Since 1987, CI has conducted projects in three principal areas:</p> <ul style="list-style-type: none"> ▪ Investigation, conservation and sustainable use of species and ecosystems; ▪ Natural resources policies and law ▪ Environmental education <p>Agreement between CVC and CI Colombia to design and implement a Conservation Corridor Choco-Andino</p>

Ecuador

Some of the most active national NGOs and civil society organizations include Alianza Jatun Sacha-CDC; Centro de Investigaciones de la Biodiversidad Tropical; Coordinadora Ecuatoriana de Agroecología; Corporación de Bosques Privados del Ecuador; Corporación Río Manduriaco; EcoCiencia; Fundación Altropico; Awa Federation; Fundación Golondrinas; Fundación Maquipucuna; Fundación Natura; Fondo Ecuatoriano Populorum Progressio; and the Instituto de Ecología Aplicada de la Universidad San Francisco de Quito. International NGOs include the Comitato Internazionale per lo Sviluppo dei Popoli, Conservation International, the Nature Conservancy, World Conservation Union, BirdLife International, and the World Wide Fund for Nature.

Table 8 presents a selection of projects carried out by NGOs in Ecuador.

Table 8: NGO Projects in the Chocó Biogeographic Region, Ecuador

Type of NGO	NGO	Project
National	Alianza Jatun Sacha-CDC	Buffer zone, Cotacachi Cayapas Reserve, Mache Chindul & Muisne Estuary: managing private reserves, ecotourism, community development, research, agroforestry, and environmental education
	CIBT	Imbabura & Esmeraldas: agriculture, permaculture, forest management, research, training, and consulting on private reserve management
	CEA	Partners: CEFODI, FEPP, AMINGAY, ULVT, FUNDARE, PROPUEBLO: training and technical assistance in agroecology, agroforestry, and participatory natural resource management
	CECIA	Key player in Mindo and Birdlife International's Ecuadorian partner
	CEDA	Environmental law NGO that focusses on private land conservation and promotes the incorporation of the private sector in Choco conservation.
	Corporación Bosques Privados del Ecuador	Contributes to management of private forestry reserves, conservation processes, reforestation, and capacity building.
	Corporación Latinoamericana de Desarrollo (CLD)	Policy development with communities in the Choco
	Corporación Río Manduriaco	Provinces of Imbabura and Esmeraldas: developing a management strategy for the Río Manduriaco Reserve
	FEPP	Provinces of Esmeraldas and Manabí: legalizing communal lands, agriculture, forestry production, and natural resource management
	Fundación EcoCiencia	SUBIR Project: biological inventories, applied research for resource management, and monitoring the impact of logging on biodiversity
	Fundación Golondrinas	Golondrinas Reserve, Mira River Basin: Andean forest conservation
	Fundación Maquipucuna	Chocó Andino Conservation Corridor, connecting Guayllabamba River, Cotacachi Cayapas Reserve and northern Esmeraldas
	Fundación Natura	Mache Chindul & Chongón Colonche mountain ranges, Machalilla National Park: Reforestation, community resources, environmental monitoring, integrated conservation, ecotourism, capacity-building, and environmental education
	ECOLAP	Manabí environmental education, research, monitoring, and GIS
	Fundación Natura	Various projects in Utría National Park
International	CISP	Artesanal and coastal fishery, sustainable alternatives to fishing, coastal zone management, and support for the southern Manabí Special Management Zone, among others
	IUCN	Ecotourism related to bird watching in the wetlands of la Segua
	CONSERVATION INTERNATIONAL	The main activities of CI in the Chocó-Manabí Conservation Corridor have been: <ul style="list-style-type: none"> ▪ The Tagua Initiative, in collaboration with the local Ecuadorian NGO, CIDESA ▪ Support to the Comuna Río Santiago-Cayapas by carrying out a population census and a social and environmental needs assessment, including an extension of the Tagua initiative
	TNC	With USAID and its own funds, supports NGOs, among others, Alianza Jatun Sacha-CDC, Fundación Natura, in developing conservation actions for Machalilla National Park, under the Parks in Peril Project. Sub-projects completed: <ul style="list-style-type: none"> ▪ Biodiversity Monitoring in Machalilla National Park ▪ Monitoring the Catch of Marine Turtles in Machalilla National Park ▪ Monitoring of Marine Turtles in the Beaches of Machalilla National Park
	WWF	Supporting conservation and sustainable development in the Pacific Chocó region by strengthening local development processes and building capacities to: <ul style="list-style-type: none"> ▪ promote the establishment, conservation, and protection of indigenous and Afro-descendant territories and public and private ecological reserves; ▪ promote sustainable management of forest resources and agricultural systems in specific project areas; ▪ strengthen institutional capacities in the areas of administration, planning and management; and ▪ promote a favorable policy and legal framework for conservation

CEPF NICHE FOR INVESTMENT IN THE REGION

Over a five-year period, CEPF will facilitate the initial implementation phase of Vision 2010, supporting effective participation by NGOs and civil society organizations in the conservation of biodiversity within the Chocó-Darién-Western Ecuador Hotspot. The strategy will emphasize priority areas within the Chocó-Manabí Corridor, where many opportunities exist to develop local and regional mechanisms to foster corridor-level conservation efforts among stakeholders, improve management of protected areas, and promote sustainable development practices in communities located near protected areas.

In both countries, achievement of such conservation goals depends on a large number of stakeholders and institutional alliances that endorse a common vision for the corridor. Fortunately, several developments in recent years provide a promising setting for CEPF to achieve meaningful results.

Many institutions have expressed strong interest in addressing the Chocó's environmental problems, including such regional actors as the Cauca Valley Regional Autonomous Corporation and ECOFONDO in Colombia, and the Fundación Maquipucuna, EcoCiencia, Jatun Sacha, and regional MAE offices in Esmeraldas, Manabí, Carchi-Imbabura in Ecuador. In addition, the results and priorities determined through WWF's Ecoregional Planning Process held in Colombia followed by results of the CI led Cali planning workshop provide a strong foundation for work in participatory ecoregional planning, conservation, and sustainable development in this region. Furthermore, the IUCN, the Nature Conservancy, Conservation International, and other international NGOs are contributors, as is support from such international organizations as the World Bank, GEF, Inter-American Development Bank, USAID and European bilateral agencies.

CEPF will pay particular attention to several existing projects and will aim to influence their direction with a view toward leveraging new resources for conservation and forming partnerships with donors, governments, and the private sector to ensure that diverse programs work together in synergy. CEPF has already identified \$52 million available over the short to medium term that provide promising opportunities to integrate biodiversity conservation efforts in the Chocó-Manabí Corridor. In Colombia, CI has secured commitments from the Cauca Valley Regional Autonomous Corporation and ECOFONDO to channel an additional \$7 million to conservation activities. In Ecuador, CEPF priorities can be integrated into a \$45 million portfolio of projects in the corridor: the Maquipucuna Project (\$3.1 million) supported by the GEF; the Carbon Trust's Jatun Sacha – CI Project (\$2 million); the IDB's Coastal Resources Management Project (\$30 million); and the Northern Border Development Project (\$10 million).

The opportunity to work closely with the IDB is particularly noteworthy. The forthcoming Coastal Resources Management Project will emphasize the integration of biodiversity conservation into national coastal resource management. The project, scheduled for approval in mid-2002, will contain five components: national policy, best practices for coastal management, municipal-level zoning, investment projects for coastal communities, and special studies and monitoring. The investment component presents a particularly interesting opportunity for CEPF and its partners because several anticipated activities — including community management of mangroves, improved shrimp farming practices, and infrastructure development — could have considerable benefits for biodiversity if designed with conservation goals in mind.

In addition to these leveraging opportunities, several other developments bode well for promoting conservation in the Chocó-Manabí. For example, CI entered into a five-year agreement with the Ecuadorian Ministry of Environment in October 2001 to help implement the country's National Biodiversity Strategy, with a particular focus on strengthening its national parks system. To implement the agreement, CI will work with the Environment Ministry and its regional offices to strengthen the Mache Chindul Ecological Reserve, located in the Chocó-Manabí Corridor. The new partnership between CI and the MAE provides an auspicious step toward real conservation results in the corridor.

Efforts and experiences to date in the corridor have highlighted the need for self-directed, coordinated, and sustainable participation of local residents and organizations in scoping, planning, designing, implementing, managing, monitoring, and evaluating conservation programs. Lessons learned over the last ten years under USAID's SUBIR project in Ecuador point to the importance of ensuring that community-based organizations assume responsibility for implementing conservation and resource management projects for the sake of sustainability. Furthermore, gender considerations must be integrated into all aspects of conservation to achieve sustainability. Strengthening these institutions, alliances and processes represents a major investment opportunity and niche for inclusion in the CEPF investment strategy and program.

In Colombia, recently improved policies and regulatory frameworks, improved capacity of public institutions, and increased political strength of Afro-Colombian and indigenous communities provide a strong foundation for conserving biodiversity. Furthermore, local NGOs have strong technical capacity and a firm understanding of the negative impact of inappropriate resource use.

In Ecuador, the foundation for success in conservation is aided by recent improvement in environmental legislation and policy trends toward decentralization; increased acceptance of privately managed parks, community reserves and municipal protected areas; and a trend toward ecologically sound agriculture and alternatives to monoculture production systems. The recent Special Law for the Decentralization of the State and Public Participation transfers responsibility for management of natural resources from the central government to counties and municipalities, opening possibilities for participatory land use planning at the local level. This decentralization presents an unprecedented opportunity for the conservation community in Ecuador.

In 1996, Ecuador passed its first national environmental law and created the Ministry of Environment. The law presented new openings for local initiatives — especially those originating in the private sector. Promoting biodiversity-friendly enterprises, carbon sequestration and other climate change investments, and privately funded ecotrusts could provide opportunities for CEPF, in partnership with other partners and private businesses. Finally, the National Biodiversity Policy and Strategy and the sustainable development policy and strategy allow conversion of public commitments into biodiversity-friendly endeavors such as ecotourism, sustainable agriculture and fisheries programs, and marketing of genetic resources and agricultural biodiversity.

CEPF INVESTMENT STRATEGY AND PROGRAM FOCUS

Over a five-year period, the CEPF investment strategy will facilitate the initial implementation phase of Vision 2010, supporting effective participation by NGOs and civil society in the conservation of biodiversity within the Chocó-Manabí Corridor. Three principles, identified during the consultation process, will guide CEPF grantmaking:

- CEPF will seek opportunities to empower historically underserved Afro-Colombians, Afro-Ecuadorians, and indigenous communities (particularly the Awa, Chachis, and Chocoes) for conservation and sound natural resource management.
- CEPF will target strategically located areas that maximize conservation impact, whether by improving management in existing protected areas that lack adequate capacity, or by pursuing greater connectivity between parks through the adoption of sustainable agriculture and environmentally sound resource management practices.
- CEPF will pursue opportunities that leverage and influence other investments in the region in order to encourage a coordinated approach among partners and their programs.

The CEPF niche is directed toward influencing the direction of several major initiatives, leveraging new resources for conservation, and catalyzing the establishment of strategic alliances and partnerships within key stakeholder groups. CEPF will facilitate a coordinated approach that encourages distinct environmental programs and projects to work together in synergy to consolidate protected areas, ensure the survival of endangered and threatened species, and channel benefits from conservation to historically underserved communities. Local, national, and international NGOs are in a unique position to help CEPF achieve these goals.

Table 9: CEPF Funding Strategy for the Chocó-Manabi Conservation Corridor

CEPF Strategic Directions	CEPF Investment Priorities
<p>1. Establish/strengthen local and regional mechanisms to foster corridor-level conservation</p>	<p>1.1 Develop and operationalize existing and new frameworks and processes for information exchange, alliance building, and dialogue for coordination between stakeholders, governments, international donors and NGOs</p> <p>1.2 In a civil society led effort prepare a financing strategy for conservation in the corridor, to examine trust funds, endowments, conservation concessions and ecotrusts</p> <p>1.3 Support environmental monitoring and evaluation systems for development and conservation initiatives and for selected species</p> <p>1.4 Through civil society efforts, incorporate corridor conservation priorities and plans into the Ecuadorian National Biodiversity Strategy, and into Ecuadorian local and regional development and decentralization plans; integrate coastal ecosystems into corridor priorities</p> <p>1.5 Increase awareness of, and support for, biodiversity conservation in the corridor among key stakeholder groups*</p> <p>1.6 Through targeted civil society initiatives, improve and consolidate legal framework for national systems of protected areas*</p> <p>1.7 Launch and complete transfrontier territory planning processes, including agro-ecological zoning of critical areas, to promote land use that is compatible with corridor priorities*</p> <p>1.8 Ensure that civil society efforts lead to the incorporation of biodiversity concerns into decision-making processes associated with major initiatives, such as Plan Colombia, Plan Pacifico and Trans -Ecuadorian Pipeline*</p>
<p>2. Bring selected protected areas and species under improved management</p>	<p>2.1 Through civil society efforts prepare and implement management plans for selected protected areas, including Mache Chindul Reserve, Angel Ecological Reserve and Awa Forest Reserve</p> <p>2.2 Consolidate selected protected areas - through targeted civil society efforts - including Tatamas, Utria, San Quianga, Farallones de Cali, Munchiques, Galeras, Callapas Matage and Cotacachi Cayapas</p> <p>2.3 Improve protection and management of habitat for critical species</p> <p>2.4 Foster and support applied research on little known, threatened and endemic species and habitats*</p> <p>2.5 Strengthen the institutional capacity of municipalities, communities, NGOs and the private sector for protected areas management*</p>
<p>3. Identify and promote sustainable development practices in communities near selected protected areas</p>	<p>3.1 Identify, demonstrate, and disseminate best practices in key sub-sectors: improved forest management, carbon sequestration projects, reforestation; agroforestry, NTFP, coffee, and cacao; sustainable shrimp farming; and ecotourism*</p> <p>3.2 Identify, demonstrate and disseminate traditional uses of natural resources*</p>

* Investment priorities to be supported in conjunction with funding partners through funds leveraged by CEPF support

Establish/strengthen local and regional mechanisms to foster corridor-level conservation

Coordination between major stakeholder groups and proponents of conservation in the Chocó-Manabí is essential given the number and variety of ongoing environmental efforts in the region. CEPF will take a multi-pronged approach to create a variety of targeted mechanisms that support corridor-level conservation. Although several coordination frameworks already operate in the area, each framework functions at a different level of effectiveness and participation. Under this strategic direction, CEPF will support NGOs in order to strengthen existing coordination frameworks and establish a broader coordination mechanism and strategic alliances to guide relations between the major stakeholders. The aim will be to encourage these stakeholders to work together synergistically toward achieving conservation at the corridor level. This investment priority will be carried out by NGOs with the required expertise in the region, identified by the depth and breadth of their current operational involvement and their capacity to convene stakeholders and create working alliances. In the spirit of creating collaborative relationships, investment priorities marked with an asterisk in Table 9 will rely on working in close partnership with other donors and their funds to achieved desired results.

The creation of effective alliances and coordinating mechanisms will depend on meaningful stakeholder participation. National and local consultations on the corridor objectives represent a step in this process, including the WWF-led priority-setting process and the CI-led stakeholder consultation workshop. To address additional needs for corridor-level coordination, CEPF will provide resources to create a framework and process for information exchange and dialogue among stakeholders and between governments. Potential activities could include the establishment of an information clearinghouse to house a centralized database and a web site, and the production of outreach materials on corridor-level activities and data for public dissemination.

Since an effective conservation program must rely on public support and the creation of a constituency and advocacy group for biodiversity protection, CEPF will collaborate with funding partners to support projects that inform and educate the public and selected stakeholder groups about the importance of adopting a corridor-level approach for biodiversity conservation, and of an environmentally and socially sustainable path to development.

Recognizing that conservation by civil society can only be effective if the national, regional, municipal, and local policies that regulate natural resources are effective, understood, and enforced, CEPF will work with funding partners to support opportunities for greater participation in policy making that build on existing studies to promote more favorable political and legal frameworks for conservation.

In Ecuador, CEPF will support decentralization activities by working with municipal and regional partners to ensure that conservation of the region's rich biological heritage is integrated into future development and decentralization plans. Similarly, CEPF will work closely with the regional offices of the Ministry of the Environment to implement the National Biodiversity Strategy in the corridor. CEPF will also work at the policy level to identify opportunities where NGOs can integrate biodiversity protection concerns into decision making for Plan Colombia, Plan Pacifico, the Northern Border Development Project in Ecuador, and Trans-Ecuadorian

pipeline. CEPF will work with partners to advocate for measures that mitigate potentially negative impacts of these large programs. Due to the coastal ecosystem's rapid decline in the Chocó-Manabí, and particularly in Ecuador, CEPF will collaborate with funding partners to ensure that the needs of coastal habitat and communities are integrated into corridor priorities. Mangroves and critical nesting sites will be a focal point of this investment priority. To promote a pattern of land use compatible with corridor priorities and policies, CEPF will work with funding partners to initiate and support a transfrontier territory planning processes, to include agro-ecological zoning of critical areas such as mangrove forests.

To ensure long-term success in conserving the Chocó, CEPF will support the development of a comprehensive strategy and action plan to finance future conservation initiatives. The purpose of the strategy will be to identify a plan in which all levels of stakeholder groups, starting at the local level with individual communities all the way through to national and regional level entities, can pursue opportunities for long-term financing of their programs. Potential mechanisms to be examined include trust funds, endowments, and conservation concessions. As part of the action plan, CEPF may provide legal and technical assistance to NGOs interested in establishing long-term financial structures. Emerging private sector support for establishing Ecotrusts such as the proposed Trans-Ecuadorian Pipeline EcoTrust, funded by the oil industry, may provide long-term resources for conserving biodiversity in selected areas.

Equally important to the success of conservation efforts, CEPF will work with regional authorities and relevant institutions in developing and implementing an environmental monitoring and evaluation system for development and conservation initiatives. The system will be designed to institutionalize an adaptive approach to project management.

Bring selected protected areas under improved management

In both Colombia and Ecuador, several protected areas lack basic management plans that identify and zone areas for compatible resource use and that lay out to strategy for achieving long-term conservation goals. The challenge ahead is to put in place an effective system of management that protects biodiversity while also helping local communities to share in the benefits of conservation. Plan Pacifico is providing considerable financing to government entities to consolidate existing protected areas and create long-term management plans. However, resources still need to be channeled to civil society in order to consolidate existing protected areas. Under this strategic direction, CEPF will provide resources to prepare management and zoning plans for the Mache Chindul Reserve, Angel Ecological Reserve, and Awa Forest Reserve, and will fund activities to help consolidate the protected areas of Tatamá, Utria, San Quianga, Farallones de Cali, Munchique, Galeras, Callapas Matage and Cotacachi Cayapas.

The trend toward decentralized authority over resource management, particularly in Ecuador, creates exciting opportunities for CEPF and its partners. Empowering local stakeholders to take advantage of such opportunities in managing their protected areas will be an important investment priority under this strategic direction. CEPF and its funding partners will work with selected municipalities, communities, NGOs, and the private sector to increase their capacity to take advantage of the opportunities afforded by decentralization to create innovative structures and activities.

At a species level, CEPF will foster — and, when appropriate, support — applied research on a limited number of threatened or endangered species and habitats for which data is lacking for management decision-making. Research findings will be used to help protect and improve management of habitat sheltering these critical species.

Identify and promote sustainable development practices in communities near selected protected areas

A large area of the Chocó ecosystem, particularly in Ecuador, has been transformed by unsustainable production of banana, plantain, cocoa, coffee, shrimp, and African palm, among other products. Fortunately, the recent trend toward decentralization presents a significant opportunity for innovative community-based conservation initiatives. Under this strategic direction, CEPF will collaborate with funding partners to take advantage of this new climate in governance by promoting community-based development projects that safeguard biodiversity by encouraging connectivity between protected areas, while also increasing incomes for some of the most impoverished communities in the region. CEPF will endeavor to curb habitat loss and promote connectivity by investing in projects to increase forest cover through habitat restoration and foster environmentally compatible land use. CEPF also will seek to improve community livelihoods through initiatives that diversify agricultural areas through appropriate agroforestry systems (particularly coffee and cacao), sustainable shrimp farming, and locally based ecotourism that relies on intact ecosystems. Opportunities will also be pursued in carbon sequestration and other climate change projects. CEPF will support initiatives that demonstrate the long-term environmental and economic benefits of sustainable development (versus monoculture), and efforts to standardize best practice in ecotourism and resource management. Many indigenous, Afro-Colombian, Afro-Ecuadorian, and mestizo communities in and around the Chocó will be crucial partners under this strategic direction. In this regard, the program also will support the identification, demonstration, and dissemination of traditional uses of resources as a means of supporting local cultures and their heritage.

The project portfolio within this strategic funding direction will only be limited by CEPF outreach to these communities. Initial analysis, however, shows that projects promoting appropriate land and resource use, information dissemination, and buffer-zone management should all be CEPF priorities. To ensure that all prospective grantees in this strategic direction have an opportunity to apply for grants, CEPF will support an aggressive outreach campaign.

SUSTAINABILITY

CEPF investments will be funded over a period of five years. They represent the first step toward the goal of harmonizing biodiversity conservation and sustainable development in the Chocó-Manabí Corridor. It is therefore essential to look beyond the five-year funding horizon of CEPF and to ensure sustainability of support for the corridor — a task aided by substantial investment in the region.

Four major opportunities exist to leverage and influence development projects for conservation in the Chocó-Manabí Corridor, two in Colombia by the Valle de Cauca Regional Autonomous Corporation and ECOFONDO, and the other two in Ecuador through the IDB's Coastal Resource Management Project and the Northern Development Border Project. The Valle de

Cauca Regional Autonomous Corporation has committed up to \$5 million in support of the strategic directions identified in this profile. The specific amount contributed by the Valle de Cauca Regional Autonomous Corporation will be determined once the actual CEPF investment in the region has been allocated by the Donor Council. ECOFONDO has committed \$2 million to support implementation of CEPF's strategic directions. In addition, official representatives of the IDB have expressed strong interest in investing additional resources within the same strategic funding directions articulated in this profile. The IDB's investment in improving coastal management is \$30 million; the deployment of a significant percentage of this amount for conservation would be a major benefit for biodiversity. In addition, UDENOR's major investment of \$266 million over five years along the northern border presents an exciting opportunity to influence its environmental protection component. An estimated \$133 million will be invested in the Ecuadorian half of the corridor.

In Colombia and Ecuador, the national environmental policy and regulatory frameworks increasingly reflect concern for short- and long-term environmental impact of unregulated development and indiscriminate exploitation of natural resources. In both countries, environmental management and decision making is being decentralized to municipal and community levels, and is increasingly open to the full democratic participation of politically and socially organized local populations. There is growing concern among traditional inhabitants of the Chocó regarding the sustainability of the natural resources on which they depend, especially in light of the potential impacts from large programs promoted under Plan Pacifico and Plan Colombia. Their eagerness to participate in decision-making concerning the use and conservation of these resources is extremely encouraging.

CEPF programs will need to strengthen emerging national, regional, and local conservation efforts to improve their functional capacities. USAID's SUBIR project in Ecuador has already shown the critical role that locally-based organizations must play to ensure the sustainability of activities financed by the international community. Other lessons from SUBIR will be identified and where appropriate incorporated into CEPF's operations. Sustainability of CEPF investments will ultimately depend on the degree to which these national, regional and local efforts become autonomous, self-directed, and self-sufficient. The measure of success will be the degree of local ownership over the concepts, methods, and technologies of biodiversity conservation. CEPF can promote these outcomes by leveraging additional and long-term funding for the corridor initiative.

The investment strategy presented here assumes a quasi-competitive model, in that sub-projects will be screened based on predetermined criteria. One such criterion is the capacity of prospective grantees to leverage CEPF funds, both financially and with in-kind services. Another criterion requires applicants to show strategic plans for longer-term funding from sources other than CEPF. (This will not be possible in all cases, but it is a goal.) Also, given some of the threats affecting the corridor, including issues of public order and security, applicants will need to present plans to mitigate these risks.

In the spirit of sharing with the wider global conservation community, projects within the Chocó-Manabí Corridor which develop or refine best practices will be added to the CEPF Web site to be replicated in efforts to protect other critical ecosystems. The program will thus inform and

educate a wider community within and beyond the region.

CONCLUSION

The Chocó-Manabí Corridor encompasses some of the most biologically rich and diverse habitats in the world. Ranging from the Pacific coastal waters and mangrove forests to the peaks of the western *cordilleras* of the Andes, and from the wetlands of northwestern Colombia to the dry forests of southern Ecuador, the region is also home to a unique set of cultures. Each of these groups lives within, and makes different uses of, the habitats, natural resources, and geographic properties of its respective homeland. Each group has a different legal and corporate status under the national constitutions and laws. The Chocó-Manabí Corridor is a cross-section of this biological, cultural, ethnic and constitutional diversity. It is also in danger of irreparable environmental degradation as a result of extreme pressures exerted by internal and external economic, political, and demographic forces. Fortunately, many stakeholders have joined in partnerships to address these threats to biodiversity and to the livelihood and security of the corridor's traditional inhabitants.

In Colombia, while much of the northern sector of the corridor is still intact, the southern sector, close to the Ecuadorian border, has been significantly fragmented and altered. It contains several large protected areas. Recent legal recognition of local ownership of land and other natural resources (including fish, shrimp, mangroves, and community forests) in the region encourages creative and promising conservation practices and sustainable use among indigenous and Afro-Colombian communities, as well as in mestizo communities established more recently in and around the national parks. CEPF can catalyze preparation of land use management plans while also identifying and promoting sustainable production systems on these lands.

Ecuador also features a rich mix of civil society development and conservation organizations, many with considerable experience in the region and with time-tested environmental management concepts, methods, and technologies to share with their local counterparts. Here, too, given steady improvement in policy and legal frameworks, partnerships between government and civil society are now more easily established, more viable, and more durable. These partnerships enable larger programs and increased financing to be introduced and administered effectively, and allow for expansion and replication projects and best practices. CEPF resources can strengthen and enrich them.

Pressures are mounting, however, on the region's resources, as small farmers are driven out of the central highlands by violence and the narcotics trade in Colombia and are forced into the inhospitable rainforests of the Pacific coast. Other interests — such as logging of high-value timber species, gold and other mineral extraction, fishing and shrimp farming, and the exploitation of other forest and mangrove resources — stand to undermine the conservation goals of the Chocó-Manabí Corridor initiative. Large tracts of coastal rainforest are still being cleared for oil palm plantations and for extensive, inefficient cattle ranching. In addition, regional development plans supported under Plan Pacifico still rely on expanded port and road facilities, oil and gas pipelines, hydroelectric dams and transmission corridors, banana plantations, and other projects responding to global market pressures and opportunities. The success of the corridor initiative will depend largely on CEPF's identification of comparative programming and funding advantages, as well as the commitment and creativity needed to forge

and maintain partnerships between sectors, between agencies, and between countries. Finally, the challenge of establishing and maintaining commitment to the Chocó-Manabí Corridor between the two nations cannot be underestimated, as political interests and other regional security and economic concerns may at any time supersede those of conservation and sustainable resource management.

This initiative is timely, addressing many specific opportunities for ecoregional investment and action within three strategic directions: development of local and regional mechanisms to foster corridor-level conservation among stakeholders, improved management of protected areas, and adoption of sustainable development practices in communities located in close proximity to protected areas. The investment strategy outlined in this profile will draw together many local, regional, national, and international partners in a collaborative effort to promote conservation and sustainable development in the Chocó-Darién-Western Ecuador Hotspot.

LIST OF ACRONYMS

AECI	Spanish Agency for International Cooperation
AMED	Darién Special Management Area
CAF	Andean Development Corporation
CEA	Ecuadorian Coordinator of Agroecology
CEPF	Critical Ecosystem Partnership Fund
CI	Conservation International
CI – Andes	Conservation International Andean Regional Program
CIBT	Center for Studies of Tropical Biodiversity
CIDA	Canadian International Development Agency
CISP	International Committee for the Development of Peoples
CVC	Valle del Cauca Autonomous Corporation
ECOLAP	Applied Ecology Institute, University of San Francisco de Quito
FEPP	Fondo Ecuatoriano Populorum Progressio
GEF	Global Environment Facility
GTZ	German Technical Cooperation
IDB	Inter-American Development Bank
INCORA	Colombian Land Reform Institute
IUCN	World Conservation Union
KfW	Kreditanstalt für Wiederaufbau
MAE	Ministry of Environment (Ecuador)
MMA	Ministry of the Environment (Colombia)
NAR	National Advisory Council for Development and Cooperation (The Netherlands)
NGO	nongovernmental organization
OREWA	Indigenous Organization of the Embera Waunana Region
PMRC	Coastal Zone Management Program, Ecuador
TNC	the Nature Conservancy
UAESPNN	Special Administrative Unit of the National Parks System
UNDP	U.N. Development Program
UNEP	U.N. Environment Program
USAID	U.S. Agency for International Development
WWF	World Wide Fund for Nature