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CONSERVATION INTERNATIONAL

USAID “Biodiversity Corridor Planning and Implementation Program” (Corridor) Cooperative Agreement

October 1, 2000 FY01 Implementation Plan and Narrative Response to USAID Comments*

* Implementation Plan last revised 10/18/00; Narrative Response last revised 2-14-01



CONSERVATION
INTERNATIONAL

Biodiversity Corridor Planning and Implementation Program (Corridor)

Cooperative Agreement No. LAG-A-00-99-00046-00

February 14, 2001

Ms. Cynthia Gill
Biodiversity Specialist
Global Bureau, Environment Center
USAID
Ronald Reagan Bldg 3.08-151
1300 Pennsylvania Ave., NW
Washington, DC 20523-3800

Re: *Revised* Response to USAID's Comments regarding FY01 Annual
Implementation Plan

Dear Cynthia,

Please find attached two copies of Conservation International's revised response to USAID's FY01 Annual Implementation Plan Comments dated December 1, 2000 for the *Biodiversity Corridor Planning and Implementation Program (Corridor) Cooperative Agreement*. You will note that the revised response provided here now includes an updated Philippines section which addresses issues brought up in the December 1st written comments from USAID and those brought up in the December 15th Implementation Plan review meeting. CI's response is in reference to the FY01 period for activities, by Corridor country site, to be implemented in year two under our cooperative agreement with USAID/Global Bureau, Cooperative Agreement No. LAG-A-00-99-00046-00.

I look forward to answering any of your questions or providing more detailed information as requested. I can be reached at (202) 912-1407, or via email at t.drake@conservation.org.

Best regards,

Theresa M. Vermeulen Drake
Manager, USAID Program Management



Conservation International's Response to 12/1/00 USAID Comments on the FY01 Implementation Plan

- I. Brazil
- II. Guyana
- III. Philippines

I. NARRATIVE SUPPLEMENT TO THE CERRADO-PANTANAL YEAR 2 IMPLEMENTATION PLAN

Introduction

At two million squared kilometers, the Brazilian Cerrado is a type of tropical Savanna, located at the Central Brazilian shield. The most common physiognomy ranges from grasslands to tortuous tree forested areas. The human impact has turned the original biota into a largely fragmented landscape composed of islands in a heavily agricultural environment. The extensive transformation of the Cerrado has produced great losses of biodiversity, where species are highly endemic and their distribution is still poorly known.

Despite the fact that levels of endemism in the Pantanal are not as pronounced as in the neighboring Cerrado, the 140,000-km² flooding plains of the Brazilian Pantanal presents high densities of biodiversity extremely influenced by the water regime. The flooding regime determines the availability of dry or flooded areas influencing the seasonal distribution of different species. The Pantanal is influenced by the characteristics of three primary vegetation types: Amazon in the North, the Cerrado scrub forest of Central Brazil and the dry & wet Paraguayan Chaco. As a patchy environment, the different sub-regions of the pantanal are composed by a mixture of several landscapes including: native grasslands, scrub forest, gallery forest, marsh vegetation and dominant species in different proportions.

The threats to the Pantanal and the adjacent Cerrado biomes are intertwined and multifaceted. The Cerrado in particular has faced development pressures since the 1970s, when new agricultural advances transformed this once agriculturally marginal region into an ideal place for soybean and other agricultural commodities production, turning soybean into one of Brazil's main exports. There is a growing concern that cash crops may be associated with negative consequences such as habitat loss, erosion, and siltation.

Surprisingly, up to this point very few conservation efforts have been targeted at this biome. The plight of the Cerrado has received little attention from other organizations and institutions in Brazil. Until recently the World Bank and the Brazilian government viewed this as the country's primary agricultural frontier. Therefore, it is not surprising that this hotspot is less well represented in Brazil's protected area network than the Amazon and the Atlantic Forest, even though it is probably disappearing more rapidly than the Amazon. Only about 1.4% of the Cerrado is protected by parks and reserves. This percentage is even lower for the Pantanal, particularly along the central floodplains. Finally, these areas are among the least homogeneously surveyed biomes in Brazil and, as recently as last year, still lacked a clearly defined region-wide biodiversity conservation strategy.

Although 5 new protected areas were created during this year by Mato Grosso do Sul State Government, plus one National Park by the Federal Government, Conservation International's job in this area is not done. CI and other NGOs are facing great challenge with the encroachment of Mato Grosso's Government in favor of the Waterway pushing the populations against the NGOs as well as licensing the construction of the new port at Morrinhos. The recent declaration of the Pantanal as a Biosphere Reserve and the Pantanal National Park as a World heritage site threatened the local farmers that are very suspicious about all this happening at once. (inside info: a new 2-3 hundred thousand hectares state park will come soon)

Conservation International – Pantanal

CI has been active in the Pantanal since 1993, supporting several activities aimed at protecting the Pantanal ecosystem through the creation of Private reserves, biodiversity assessments and raising public awareness of important issues like the creation of the Paraguay-Paraná waterway.

In the last year, CI-Pantanal was instrumental in the creation of the State Park of the Rio Negro by the state government, an area with one of the highest populations of giant river otters and jaguars in the country. The creation of the state park and the private reserves established with CI's assistance account for over 100,000 ha of protected area in the most pristine portion of the Pantanal, which will be instrumental as one of the main core areas in the Cerrado-Pantanal Corridor.

One of the main difficulties encountered by CI-Pantanal in the implementation of conservation activities is the fact that 99% of the Pantanal wetland belongs to private landowners, who through the years have become more impoverished and have adopted more intensified techniques for cattle production in detriment of the local environment. The clearing of natural vegetation for pastureland and introduction of exotic plant species for cattle grazing are some of the greatest threats we face.

Another major difficulty is related with beef prices in the Brazilian market which have dropped to less than half of what they used to be 20 year ago. In addition, the splitting of large properties along generations has reduced the competitiveness of Pantanal's cattle production in comparison to the Cerrado's lower production costs. Cattle production in the Pantanal is going through a gigantic crisis caused by two important managerial components: one is the ability to adapt to the macroeconomic changes faced in Brazil, and the second is the low technical level of the majority of the producers.

CI is very well positioned in relation to the problems mentioned above. First because of our local insertion and established partnerships- no other NGO with CI's technical status has offered to contribute to the MS, GO and more recently to MT State Governments with clearly demonstrated results, like the creation of one of Pantanal's first State Park. The Alliance with the Emas Foundation has enlarged our capacity to face to the Emas National Park area approach, without inflating our personnel, and also allowed us to have a direct connection with Agriculturalists, which will be decisive on the success of the corridor.

The Emas Foundation - Cerrado

In the Cerrado, CI's first action was launched through USAID Corridor Project in 1999. In alliance with the Emas Foundation, a local NGO based in Mineiros, in the boarder between the States of Goiás, Mato Grosso and Mato Grosso do Sul, which has long experience in natural resources conservation, specially mainly water conservation in the Cerrado region. The Emas Foundation, created in 1983, is the first environmentalist NGO to be established in the Cerrado. Since its creation the Foundation has been strongly active in supporting conservation measures for the Emas national park, which was considered by the 1998 Pantanal and Cerrado Priority Areas Workshop as the most significant Cerrado's "*core nuclea*" area. Emas National Park & Taquari Headwaters State Park – 162.000 ha and also was recently declared Biosphere Reserve by UNESCO considering his biodiversity importance link between Cerrado and Pantanal biomes.

The Cerrado is also one of the most important areas in crop production, using intensive mechanized production systems --mainly soya & maize -- with a fast growing agribusiness. It has a fragile soil and it is also the headwaters area for three of the major Brazilian watersheds – Paraguay, Paraná and the Amazon/Araguaia river. The Emas Foundation works towards the conservation and restoration of forest cover in the Cerrado landscape as a solution for soil, water and biodiversity conservation.

What is the Corridor Information System?

The Corridor Information System (CIS) is simply a system to ensure that all the key actors in the corridor decision-making process have immediate and equal access to the wealth of information gathered during the project. For the first two years or so of the corridor programs, this process begins with the baseline data being established for the individual corridors, thus establishing a foundation for our understanding of the corridors.

During the course of the corridor projects, timely updates to the system will allow corridor participants to assess critical information as it comes in, allowing them to rapidly adjust their management response (hence, the link with the adaptive management aspect of the CLS). Because we want to design and maintain corridors based on sound biological and social science, it is therefore critical that the free flow of information is transparently available to all the actors involved in the process. This information is inherently spatial, but can also include spatially referenced databases, key reports, i.e., any information that would be useful in our conceptual understanding, design and management of corridors.

The CIS will naturally differ from corridor to corridor, following recommended local standards and needs. CABS will work with the CI Brazil/Guyana/Philippines in data, hardware, software and training issues. Because of CABS' initiatives in Knowledge Management and Arc Internet Map Server, the Corridor Information System can eventually be integrated into these systems establishing a comprehensive global information system accessible to key stakeholders over the Internet.

In the table below, we have described how the activities proposed for the implementation of the Cerrado-Pantanal corridor will address the main threats in the area.

BASIC THREATS ASSESSMENT: Cerrado and Pantanal

Threats	Root Causes	Environmental Effects	CI and Emas activities
<p>-Paraguay/Paraná Waterway (the Hidrovia) : to increase the efficiency of transportation for several products such as soybean and iron and manganese ores from the Pantanal to the La Plata Basin.</p>	<ul style="list-style-type: none"> - Demand for commodities - Cheaper transportation. 	<ul style="list-style-type: none"> - Dredging and canalization of parts of the river will adversely affect fish breeding and growth, which consequently affect reptile and bird life cycles and would collapse the commercial and recreational fishing industry. - The possibility of salinization, contamination of drinking waters, and increased risk of oil spills due to increased river traffic also exists. - Building access roads and ports 	<ul style="list-style-type: none"> - CI-Pantanal has released a video to raise stakeholder's awareness for the threats of the waterway to the Pantanal, with support of W.Alton Jonh Foundation. - CI-CPAP Embrapa did a evaluation report on the EIA that supported IDB decision in not fund the proposed project. - CI and other NGOs promoted 3 stakeholder seminars to evaluate the project.

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<p>Agriculture</p>	<ul style="list-style-type: none"> - Governmental incentives in the early 70's to expand agricultural activities in the Cerrado high plains surrounding the Pantanal - Demand for cheap food products. 	<ul style="list-style-type: none"> - Deforestation of riparian vegetation around headwaters in the Cerrado lead to erosive processes causing the siltation of the water courses in the Pantanal downstream. - Water, soil and fauna contamination by pesticides; - Acceleration of river movements through siltation, increasing flooding areas 	<ol style="list-style-type: none"> 1. Reforestation of riparian vegetation would reduce silting of watercourses thus controlling excessive flood of farmlands. CI-Pantanal intends to tackle reforestation issues in FY03. 2. CI-Pantanal in FY02 will develop Educational campaigns to raise local people's awareness for this sedimentation problem and how to prevent it (2.7.2); 3. To implement the recuperation of damaged areas and creating a seed bank as an activity resulted by Educational activities (CI-Pantanal FY03 Activity). 4. The Cumeeira project, a partnership of Conservation International with the Emas Foundation and others, aims to control erosive processes, and the reforestation of gallery forests in the Cerrado specially on the Araguaia and Taquari river (Emas ongoing project).
<p>Extensive cattle raising in sand soil</p>	<ul style="list-style-type: none"> - Demand for cheap animal products. 	<ul style="list-style-type: none"> - Introduction of exotic grasses. - Fire use in the dry season. - Continuous conversion of Cerrado into pasture. - Serious erosion process caused by deforestation. 	<ul style="list-style-type: none"> - CI-Pantanal is creating incentives for sustainable cattle (ecobeef) production by certifying producers using appropriate sustainable techniques (1.6.1). - The Emas Foundation will help the establishment of land use zones according to agriculture and conservation potential.
<ul style="list-style-type: none"> - Domestic waste discharged into rivers without any treatment, specially in places with high numbers of tourists; 	<ul style="list-style-type: none"> -Lack of sludge treatment stations in towns where tourism is prevalent and in farms, therefore discharging raw sludge in watercourses. 	<ul style="list-style-type: none"> - Waterborne diseases like Cholera, Hepatitis A, <i>Eschericia coli</i>, etc. - Fish Kills 	<ul style="list-style-type: none"> - The Pantanal Program developed by the State Secretary for the Environment and partners are committed to creating/improving sewage treatment plants in many of the towns in the Upper Paraguay Basin, CI is a consultant to the

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			<p>program for the JBIC.</p> <ul style="list-style-type: none"> - CI-Pantanal will create a water quality monitoring station at the Rio Negro farm to aid the quality control of some of the most pristine rivers in the Pantanal. (3.3.1).
<ul style="list-style-type: none"> - Unregulated Fishing 	<ul style="list-style-type: none"> - Unsustainable sport fishing - Lack of economic alternative for small riverside communities - Lack of enforcement of fish legislation in the Pantanal areas 	<ul style="list-style-type: none"> - Overexploitation of high valued species of fish (jaú, pacu, pintado, piraputanga, etc.) - Uncontrolled marketing of live baits, like crabs and small fishes to sport fisherman. 	<ul style="list-style-type: none"> - CI-Pantanal will aid the Rio Negro Landowner Association's monitoring of illegal fishing and wildlife trade by installing two control posts on the entrances of the region (2.2.3). - CI-Pantanal AquaRAP expedition to the Upper Paraguai Basin at MT will help identify the biodiversity of fishes and highlight threatened species and areas(1.1.5).
Uncontrolled use of fire	<ul style="list-style-type: none"> - Need to renew pastureland and agricultural land in a cheap manner. 	<ul style="list-style-type: none"> -Loss of soil fertility. -Danger of uncontrolled fire destroying extensive areas of native vegetation. -Loss of biodiversity -Loss of habitat 	<ul style="list-style-type: none"> - CI-Pantanal started working with the local fire brigade to implement fire brakes and fire management activities in order to reduce uncontrolled fires in private reserves, this activity is ongoing for the next 4 years (2.7.3).
Lack of sufficient protected areas system in Cerrado and Pantanal	<ul style="list-style-type: none"> - Extensive Biome with very high diversity and heterogeneity under pressure to be converted to productive land. - Lack of knowledge of biodiversity importance 	<ul style="list-style-type: none"> - Loss of genetic diversity endangering the viability of populations. 	<p>CI-Pantanal, the Emas Foundation and partners will:</p> <ol style="list-style-type: none"> 1. offer new incentives for private reserves (2.5.2/2.1.1) 2. Reinforce environmental legislation for areas of permanent protection and legal reserves. 3. Provide technical assistance on the design and implementation of the State System of Protected Areas (1.4.1).

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<p>Gold and diamond mining</p>	<ul style="list-style-type: none"> - Poverty - Inadequate techniques - Lack of job opportunities 	<ul style="list-style-type: none"> - Mercury contamination - Erosion/siltation 	<ul style="list-style-type: none"> - Promote the 2nd expedition of AquaRAP to Mato Grosso in order to have a better understanding of water related biodiversity and threats(1.1.5) - Support new socioeconomic alternative activities, such as beekeeping, tourism, and organic production (1.4.2,1.6.1,1.6.2).
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Brazil Corridor Response to USAID Global Questions regarding FY01 Implementation Plan

1. Activity 1.4.2 - What is a charette? Is this a construction activity?

If so, we need a cost breakdown, a further description of the proposed construction, and additional information regarding potential environmental impacts of the activity.

- A charette is an intensive workshop organized to solve some specific design or planning problem in a short period of time. The charette organizers will put together a team of design professionals, conservation experts and tour product developers to synthesize the knowledge of this diverse group and to quickly plan useful products. The result is a series of conceptual designs for tourism development that are truly "world class" and at the same time firmly rooted in the unique resources and conditions of the Pantanal.
- In the specific case of the Pantanal, the specialists invited will tackle ways to implement tourism in the biodiversity corridor areas as a way to improve sustainability in the ongoing conservation efforts. By adopting the Rio Negro sub-region, as a case study, we will promote a more hands-on collaboration among the participants, in order to generate an operational approach to developing ecotourism products that are both feasible technically and socio-economically and effective as a conservation tool. The charette will identify the positive and negative existing aspects of existing products; clarifying bottlenecks to tourism development and considering strategies to maximize participation of local people enhancing the impact on long-term conservation of the natural and cultural resources.
- Some of the products that will be developed during the charette are:
 1. Development of touristy routes in the Rio Negro region, incorporating several ranches around the state park.
 2. Sustainable tourism plan and product development, in order to protect key landscape features, such as nesting sites, dens, and other breeding grounds.
 3. Develop guidelines for infrastructure design, considering the use of local resources, the history and tradition of the Pantanal and specially the landscape interpretation. For instance: observation towers, blinds, decks, etc.

1.5.2 - What is the purpose and target of the proposed environmental Education activity?

Activity 1.5.2 is the hiring of an Environmental Education Coordinator who will be in charge of activities 2.7.1 and 2.7.2. The Environmental Education project will launch the Campaign entitled "Preservation of the Pantanal Watersheds". The focus of the Campaign will be the Escolas Pantaneiras (local Pantanal Schools), located in the Rio Negro Region and will be developed in partnership with the Municipal Secretary of Education of Aquidauana and the Land Producers Associations. This activity intends to enhance the *pantaneiros* understanding of the importance of taking care of their environment and place greater value on their tradition. This will be achieved by preparing, producing and releasing instructive materials and games related to the Pantanal and by proposing a discussion about special subjects such as erosion, siltation, uncontrolled fires, which directly affect the region and its population. As well as giving support to the Council of the Escolas Pantaneiras, keeping them operational.

1.6.1 - What is the link between the proposed activity (certified cattle) and biodiversity conservation? Will grazing pressure be decreased through this activity?

Although overgrazing can be a deleterious factor to forested areas in the Pantanal, due to its selective effect on trees seedlings, few are the cases of overexploited pastureland in the floodplain. Actually, the abandonment of ranches and absence of grazing by domestic and wild animals could be more deleterious as a cause of uncontrolled fires. Extensive cattle production has been the principal economic activity in the Pantanal for the past 200 years. This activity has always taken advantage of the native vegetation species of the Pantanal. However, in the past 30 years the increasing high costs of the cattle ranching in the flooding plain compared to the highly intensive

and sometimes mechanized techniques adopted in the Cerrado high plains are forcing local farmers to adopt such techniques to be able to compete in the economic market. Some of the environmental impacts observed from this intensive form of cattle production are:

1. Introduction of exotic plant species, which are highly invasive, African grasses.
2. Deforestation of extensive areas for pastureland and inversion of native grasslands.

By facilitating the certification the cattle products of the farmers that agree to follow the International Federation for Organic Agriculture Movements (IFOAM) guidelines, we will be attributing an additional economic value to the cattle raised in an environmentally sustainable manner. Beef produced in a certified manner will guarantee¹ that:

1. Only native plant species will be used, maintaining the genetic diversity of the system and its surroundings, including the protection of plant and wildlife habitats.
2. The long-term fertility of the soil will be maintained, as the use of fire is not permitted.
3. All forms of pollution that may result from agricultural practices will be minimized as products like synthetic fertilizers and pesticides cannot be used, nor should any other input give rise to unacceptable pollution of surface, ground or well water, air or soil.
4. Any materials and substances needed have to be of a recycling nature.
5. No Genetic modified organism are accepted for organic production.

Encouraging ranchers to offer an end product with a seal that guarantees the organic nature of the product, as well as an important commitment to preserving the environment will decrease grazing pressure in forested areas, as well as allow farmers to make a living from traditional cattle ranching practices. CI proposes to help farmers in all the stages necessary to obtain the certification of the farm and with the marketing and selling of the products to national and international markets as we have done for other products such as Coffee and Cocoa.

2.2.3 - As above, we request for any construction a cost breakdown, a further description of the proposed construction, and additional information regarding potential environmental impacts of the activity.

This activity is also not a construction activity. The control posts will be installed in existing small houses on the two farms mentioned in the activity – Retirinho and Esperança Farms. The existing houses may need some repair to the roof and paint.

The main aim of this activity is to provide support to land owners and the environmental police by:

1. Controlling the entrance of sick cattle to the area, which may cause the spread of diseases to wild animals.
2. Regulate the off road group movement trough the region
3. Control the carjacking movement to Bolivia.
4. Control illegal hunting and fishing
5. Control the entrance to restricted areas like private reserves and parks.

The idea, therefore, is to minimize environmental impact by helping the environmental Police to guard this immense area.

2.4.2 - The \$10,200 budgeted for this activity seemed low, will this be adequate?

This activity is to be developed in partnership with the State Secretary for the Environment and the State Land Department. As well as CI's financial and technical support, the activity will be developed with matching funds from IBD provided via the State Secretary for the Environment. This fund will be enough to assist with the Development and Implementation of the Management Plan for the State Park of the Rio Negro.

¹ Basic Standards for Organic Agriculture and food Processing, IFOAM-1995.

II. NARRATIVE SUPPLEMENT TO THE GUYANA YEAR 2 IMPLEMENTATION PLAN

1 PARTICIPATION Activity 1.4.2

In terms of the general comments, activity 1.4.2 is one of the most critical activities in the Guyana corridor project, as it is designed to identify and engage the actors/stakeholders in Region Nine (this will be supported by activity 2.1.1). In the case of the indigenous peoples of Region Nine, CI has already engaged communities and community leaders to move beyond basic 'consultations' to more meaningful collaboration and the development of partnerships. Engaging the communities and creating partnerships is essential if we are to ensure the participation of the indigenous people in all aspects of the development and ultimately the management of a protected area in the Kanuku Mountains. It is also understood that CI has a responsibility to inform the communities, their leaders, regional government and other stakeholders about protected areas, what they are and their potential impact so that the stakeholders themselves are empowered and become informed decision-makers. This would effectively pave the way for a collaborative decision-making process for the protected area.

During recent discussions with the indigenous leaders of Region Nine, they themselves pointed out that women were not fully represented in the discussions and have agreed to work with CI to develop a means to nurture the participation of women in a way that is acceptable to the culture and communities.

2 CAPACITY BUILDING: Activity 1.1.6

2.1 Building GIS Capacity in Guyana

Building capacity in Guyana, both within CI-Guyana and others institutions is becoming more essential as the database on Guyana increases. Maps and information databases are important tools for conservation planning and must be accessible to all those involved in developing the conservation corridor. Plans are presently being made to train CI Guyana personnel in GIS techniques and establish the corridor information system within the CI-Guyana office. This information system will then be provided and accessible to key government and non-government agencies and stakeholders. Trained personnel will be able to access this data and generate GIS products "in-house" for use in a number of conservation and corridor planning activities. This activity will utilize resources available under activity 1.6.1.

Nevertheless, this does not detract from the value of collaborating closely with the Guyana Integrated Natural Resources Information System (GINRIS) to benefit from their GIS support and to have access to relevant data already available within GINRIS (under activity 1.1.9). Some of the information available in GINRIS is both sensitive and of strategic importance. CI is therefore in the process of developing an MOU with the GNRIS to ensure access to data and data sharing between institutions.

2.2 Corridor Digital Overflights

Most recently CI completed digital overflights of the corridor region in Guyana. Participants included CI GIS experts from Washington, CI-Guyana Corridor Coordinator and CI Guyana Region 9 Field Coordinator, as well as Guyanese ecologist Ivan Welch. Data gathered will provide information needed for vegetation mapping of the corridor area as well as information on many of the areas under cloud cover in existing satellite imagery. All information gathered during the overflights will be analyzed and incorporated into a draft vegetation map for the Guyana Corridor. Ground truthing will take place during both the timber inventory in the conservation concession area and the resource use mapping exercises with the communities living around the Kanuku Mountains.

3 ANNUAL CORRIDOR PLANNING MEETING: ACTIVITY 1.1.11

Activity 1.1.11 refers to our annual planning meeting, which is intended to review the experience with project implementation over the past year and to plan activities for the next fiscal year. Perhaps the use of several keywords in the Implementation Plan, such as 'workshop', in the status column, and 'review meeting', has caused a little confusion. In future language such as "review and planning meeting" should provide greater clarity when consistently used.

4 ACTIVITY 2.1.1

Although CI Guyana is clear on the necessary steps to be undertaken to establish a protected area in the Kanuku Mountains, we cannot move forward without the active involvement, commitment and support of the indigenous peoples living in the area. With this in mind, we have put the formal proposal to the GOG for the development of a Kanuku Mountain Protected Area on hold until after the indigenous communities in the region have been effectively engaged and their participation is secured. Over the next several months, CI will work with these communities to empower them to understand the issues and make informed decisions. This will enable them to have a voice in the process and ultimately the decision to establish a protected area would be a collaborative one between the indigenous communities and other stakeholders in the region and the Government of Guyana.

The discussions with indigenous communities to date have been quite favorable and we are confident that in the near future, CI will have established a number of formal and informal partnerships with the communities and their representative bodies to advance the process of establishing a protected area in the Kanuku Mountains.

Further, we are confident that the Government of Guyana's commitment to the creation of a protected area in the Kanuku Mountains. Over the past year, the GOG through the President's office and the EPA developed the Protected Areas Secretariate – the mandate of which is to establish the National Protected Areas System. They have asked that CI participate on the Secretariate and that we take the lead in developing a protected area in the Kanuku Mountains

5 ACTIVITY 3.5.3

The teachers of the various stakeholder communities stand out as members of a potentially powerful strategic group, since they are well placed to further the interests of CI in promoting environmental awareness and environmental education in Region Nine. Using a 'train the trainers' approach, teachers would be collectively sensitized and empowered to appreciate matters relating to the environment. The materials provided in these workshops would ultimately be filtered into the classroom to enhance the environmental awareness of students. In addition, by virtue of their standing within the communities, it is also anticipated that teachers will contribute to the dissemination of messages to enhance environmental awareness in their wider communities.

At the end of the activities, it is expected the teachers, students, and hopefully some members of the wider community will have an enhanced awareness of general environmental issues and the potential benefits of a protected area in the Kanuku Mountains. A monitoring plan will be developed to assess the effectiveness of this activity by comparing the 'before' and 'after' scenarios.

III. NARRATIVE SUPPLEMENT TO THE PHILIPPINES YEAR 2 IMPLEMENTATION PLAN

1. Overview of the SMBC Project

The Sierra Madre Biodiversity Corridor (SMBC) is located in the eastern portion of the Island of Luzon and encompasses the largest tract of lowland rainforest remaining in the Philippines. Based on the Department of Environment and Natural Resources (DENR) statistics, the corridor covers approximately 1 million hectares of forest, including roughly half of the remaining 800,000 hectares of old growth forest in the Philippines. The area is rugged and still thickly forested, and includes substantial portions of hinterland still uncharted and unexplored scientifically. The range stretches from north to south and is bordered on the west by an extensive area of development and intensive agricultural production. To the east lies several hundred kilometers of coastline. In addition to its biological importance, the area is still home to large indigenous populations, such as the Agtas in Cagayan, Isabela and Aurora provinces and the Bugkalots in Quirino and Nueva Vizcaya.

Currently, the SMBC extends through five provinces (Cagayan, Isabela, Quirino, Aurora and Quezon); however, CI Philippines (CIP) is considering eventually expanding the corridor into four additional provinces (Nueva Vizcaya, Nueva Ecija, Bulacan and Rizal). The proposed expansion of the SMBC evolved out of stakeholder consultations/orientations on the project. The initial suggestions were made by the Local Government Units covering the Sierra Madre range and the Regional Development Councils (RDC), which coordinate all development initiatives in the region. The strategic importance of the expansion areas was reinforced by the results of a spatial analysis, which indicated that the incorporation of these areas is critical to successful conservation within the SMBC. The expansion should not affect the existing budget or implementation plan because the proposed areas are contiguous to the original area, and planned activities and objectives are readily adaptable to include these areas. The proposed expansion is already included in an implementation plan prepared for SMBC beyond the period covered by the USAID Corridor agreement.

CIP is implementing and promoting the Sierra Madre as a biodiversity conservation corridor, which entails the development of a more coordinated and improved management system for the region. The corridor approach seeks to connect existing protected areas, forest reserves, watershed reservations and other management units [i.e. Community Based Forest Management Agreements (CBFMA) and Certificates of Ancestral Domain Claims (CADC)] under an integrated planning and management system stretching across the SMBC. At present, there are 22 existing Protected Areas that will serve as the core nuclei for a corridor linking the Northern Sierra Madre Natural Park with the Maria Aurora Memorial Park. Since existing protected areas, watershed reservations, forest reserves and management units are established in fragments along the corridor, large areas have been left open to access and occupation. These areas do not currently have a management system to ensure that they are developed appropriately.

To date, there are still three logging companies currently allowed to operate in the corridor area until the expiration of their permits. According to the DENR, the latest will expire in 2007. Two special economic zones are also being established, one in the northernmost portion (Cagayan province) and the other one in the southernmost portion (Quezon province) of the corridor. The government also proposes to establish two major road systems traversing the Sierra Madre range. The intention is to connect the coastal municipalities with the major growth centers located on the valley side of the Sierra Madre range and around Manila. As a result of the enactment of a mining law, there are already several applications for mining permits within the corridor area. It is expected that mining investment will continue to have a big impact on the area due to the presence of gold, chromite, and other valuable minerals. If not handled appropriately, these development and extractive investments pose a grave threat to the biodiversity of the corridor area, particularly when considered comprehensively. In addition, the growing population in the region can be expected to result in increased agricultural conversion of forest areas.

The project is utilizing the Rapid Assessment of Corridor Economics (RACE) methodology and spatial analysis techniques (e.g. GIS) to analyze the current state of the corridor area and to refine the threats analysis. By compiling existing maps and information from the different government agencies (such as the DENR, the National Economic and Development Authority [NEDA] and provincial governments) and using aerial photography in critically threatened areas, it will be possible to formulate appropriate strategies and management interventions compatible with the existing land use systems in the area. Current activities entail the development of the SMBC framework needed to prioritize and target threats and to build the necessary constituency for the project. In Year Two of the project, it is expected that more direct interventions will be implemented based on current analysis and planning. These interventions include the investigation of appropriate livelihood and development alternatives, the launching of awareness campaigns and policy advocacy directly addressing identified threats, the strengthening of existing protected areas, and the promotion of additional protected areas or other management units within open access areas.

2. Project status/updates and Challenges/issues

In Year One, project activities focused on developing and expanding coordination, networking, and other outreach activities, as well as promoting and refining the corridor concept with major stakeholders across the region. CIP successfully staffed up the project and expanded its on-site presence and capacity.

CIP made presentations to and engaged in discussions with NGOs and important government stakeholder agencies, including the DENR, NEDA, and Local Government Units (LGUs) at both the provincial and municipal level. As a result of this outreach and information campaign, a variety of stakeholders have expressed their interest and support for the project. Endorsements of support were received from the Protected Area Management Board (PAMB) of the Northern Sierra Madre Natural Park, DENR officials of the Regions covered (Region 2, 3 and 4) and many of the LGUs of the provinces encompassing the SMBC. The PAMB endorsed the project with a resolution, the DENR expressed their support through a letter of commitment to Conservation International, the NEDA-RDC with their endorsement, and the provincial LGUs by creating Provincial Sustainable Development Councils. Likewise, NGOs have given support to the SMBC, and the Foundation for Philippine Environment (FPE) has adopted the SMBC framework for all of their projects within the Sierra Madre Corridor. Currently, CI is working on an MOA with FPE to complement ground activities in Cagayan province.

Important progress has been made in the gathering of baseline data and information toward the development of a corridor information system that will support the framework and implementation plan. The baseline data includes biological, socio-economic, land cover, land-use plans, and regional, provincial and municipal development plans. The data gathered to date are being compiled using the CIP GIS unit. The majority of biological data, particularly on plants, were generated from the Northern Sierra Madre Natural Park, reflecting the limited biological data available for the region. In Year Two, CIP will use analyses of the data and information to further define, and where necessary revise, the design of strategies and management interventions that most effectively address biodiversity threats in the area.

The immediate threat of biodiversity loss/destruction is aggravated by the proposed establishment of roads, special economic zones, and the continuation of logging and mining operations in the area. A new road, which has been partially constructed in Cagayan province, will cut across old growth forest. The Regional Council for Sustainable Development of Region 2 and Multi Sectoral Forest Protection Group (RCSD-MSFPG) stopped the operation pending the issuance of an Environmental Compliance Certificate for the project. It should be emphasized, however, that these on-going development/investment initiatives are covered within existing laws and within the framework of existing investment plans of the government. In this context, CIP promotes careful participatory planning to develop the best plan to address these threats to biodiversity without compromising the legality of existing investments. Planning with the participation of all stakeholders, including the agencies regulating the implementation of these projects, LGUs,

concerned NGOs and local communities, will promote the acceptance of appropriate interventions and build confidence and transparency in the formulation of development alternatives.

3. The Threats to the SMBC and the Initial Activities/ Interventions to Address the Threats

The primary direct threats in the SMBC area are the development of roads across the Sierra Madre range, logging, mining, land conversion for agriculture, the development of special economic zones and the construction of dams for energy generation. Infrastructure development plans include hydroelectric installations, agro-industrial growth centers and regional trade and industrial centers. Despite the protected status of the park, there are still proposals to de-list some portions for additional concessions and related infrastructure development. The Cagayan Valley Strategic Development Plan for Region 2 outlines several development projects, including the three trans-Sierra Madre roads and one coastal road within Northern Sierra Madre Natural Park territory. The Local Government Units at the provincial and municipal levels have generally welcomed this development plan as a means of generating employment and increased market access. Transportation of goods in and out of the Northern Sierra Madre Natural Park remains a challenge, and the local people seek improved access to the rest of the country. The RACE process will elucidate the issues and incentives related to development and infrastructure projects, and will facilitate the further investigation of alternatives and/or best practices. The land use and land cover assessments will determine biodiversity priority areas, including critically important ecosystems, areas of vulnerability and other key focal geographic sites.

Though logging in the primary forests has been banned, Timber License Agreements continue to exist. Moreover, the lack of legal protection of traditional forest tenure allows outsiders unchecked access to forest resources. In Northern Sierra Madre Natural Park, most of the timber poaching is carried out by people from Quezon, but inhabitants are involved as well. CIP will address the logging threat by conducting an intensive education campaign on the importance of biodiversity within the park and by supporting the Community Forest Guards (Bantay Kalikasan Brigade) and strengthening the Northern Sierra Madre Natural Park-Protected Area Management Board (NSMNP-PAMB). Additionally, CI's continuation of in-kind support to the Protected Area Superintendent of Northern Sierra Madre Natural Park will directly strengthen the effectiveness of the park's management. CI will also facilitate the process of building broad-based consensus for the creation and support of specific protected areas across the corridor.

The enactment of the Mining Act (Republic Act No.7942) in 1995 put a vast portion of the Sierra Madre under several mining applications, which continues to pose a grave danger to the biological diversity in the area. Currently, some of the mining applications within Cagayan province have obtained permits; however, the operations are stalled due to the absence of approved Environmental Compliance Certificates. Other obstacles include overlaps in area coverage with Community-Based Forest Management Areas (CBFMA) and Certificate of Ancestral Domain Claims (CADC) issued to communities prior to the mining permits. The SMBC project will facilitate the implementation of appropriate actions to counter the mining operations based on the compilation and analysis of all relevant data/information available for the area, including the results of the RACE. Data gathering and analysis will also be performed to provide stakeholders and decision-makers with the information needed to make wise decisions on resource use and planning. CIP will continue building alliances and partnerships to engage and generate support from provincial governments, Local Government Units and local communities affected by these extractive activities. The continuation of consultations on the SMBC will increase awareness among all stakeholders of the long-term costs of mining on community development and biodiversity conservation.

Given the numerous and varied threats to the SMBC area, the project strategy will be refined based on the identification and analysis of the scale and intensity of the different threats. To date, CIP has collected a wide range of data on regional planning as well as information on stakeholder actors across the corridor region. CIP will perform an initial assessment of land use and tenurial instruments within the SMBC. The assessment will consist of developing a GIS database on existing land uses in the SMBC, including infrastructure development plans, in order to determine

overlapping land uses and potential areas of strategic focus. The assessment results from this activity will be used to facilitate the RACE process.

CI's Resource Economics Program and CI Philippines' Resource Economist will design and initiate the RACE for the SMBC. The RACE will analyze and prioritize the major threats to biodiversity across the SMBC, with the results used to refine and target project interventions to the underlying causes of the threats. Each prioritized threat will be analyzed by CI staff resource economists together with local expert consultants to produce a report identifying the geographical distribution of the threat, the economic drivers, related political and management causes, and the economic incentives for different stakeholders. Reports will be prepared on the following major regional threats: (i) road development; (ii) industrial estate development; (iii) logging; (iv) mining and (v) dam development. Based on the information and analysis that will be conducted through the RACE process, CIP will be able to develop a cost-benefit-analysis (CBA) and provide appropriate policies and interventions to address some of the key threats within the corridor. Subsequent activities will focus on localized areas defined as critical through the GIS and RACE assessments. Different stakeholders, including local communities, will participate in the RACE process in order to generate acceptable and credible results.

Overall, there is lack of appreciation and understanding among local governments and communities of the importance of biodiversity and its relevance to their long-term sustainable development interests. There is also weak coordination between government agencies, as well as overlapping and unclear mandates. CIP will continue to facilitate consultations and biodiversity orientations with various stakeholders to strengthen the coordination and integration of activities within the proposed corridor.

Sierra Madre Biodiversity Corridor Threats Assessment

ROOT CAUSE(S)	PROXIMATE THREATS	Environmental Effect	CI-Philippines Activities	Activity's Effect on the Threats
<p>Local demand to reduce economic isolation (East-West)</p> <p>National trans-SM super-highway (North-South)</p> <p>Coastal Road w/in NSMNP</p> <p>National Poverty Alleviation Program and national-level economic development and infrastructure planning initiatives</p>	<p>Road Development (East-West) (North-South) Timber extraction/ Logging; Migration; Easier Access for Mining; Tourism Increase (Unregulated); Increased Social Conflict; Displacement of Indigenous Communities</p>	<p>Primary: Habitat loss/ Alteration; Biodiversity loss; Increased Sedimentation</p> <p>Secondary: Pollution/Garbage build-up;</p>	<p>CI Philippines will:</p> <ol style="list-style-type: none"> 1. Purchase/collect and compile on SMBC (1.1.1), i.e. development plans, timber and concession data, land use data and existing vegetation data as basis to for the formulation of appropriate management interventions and formulating advocacy strategy. 2. Process cloud free satellite images (1.1.2) and conduct over flights and ground truthing (1.1.3) to determine the location of the proposed roads and the extent of the threats posed in constructing the roads, including the identification of critical important and/or vulnerable areas. The data generated in these activities will be used to develop the appropriate interventions. 	

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ROOT CAUSE(S)	PROXIMATE THREATS	Environmental Effect	CI-Philippines Activities	Activity's Effect on the Threats
<p>National Economic Goals/Priorities: GDP Growth, Employment, Increased trade/foreign and domestic investment Development of Alternatives to small-holder agriculture Increase local level incomes Promote economic/industrial migration centers outside</p>	<p>Development of Industrial Estates Road Construction; Population pressure; Increased Demand for Resources; Displacement of Indigenous People;</p>	<p>Primary: Increased Demand for Resources; Habitat loss/alteration; Pollution/Industrial Waste</p> <p>Secondary: Water and soil erosion; Destruction of Marine ecosystems</p>	<p>CI-Philippines will:</p> <ol style="list-style-type: none"> 1. Design and initiate Rapid Assessment of Corridor Economics (RACE) along the propose corridor (1.1.6). The RACE will focus on major threats to biodiversity across the corridor. Each of the threats will be mapped out and identify the economic drivers, political and management related causes and the economic incentives held by the different stakeholders. 2. Establish biological Resource Center (1.1.9) in order to show/share information on the biodiversity of the Sierra Madre and its importance to development. 3 Continue to engage in dialogue and awareness campaign to the different stakeholders through consultations and orientations (1.4.2 and 1.7.3) to generate support and create awareness on the importance of biodiversity. 	<p>The RACE process will provide information and analysis to support the development of policies and alternatives to extractive industries. Cost Benefit Analysis will be done on each of these threats and develop options to be provided to the decision-makers. Currently, data are being gathered to establish the extent of threat of each development plans.</p> <p>Baseline biological data will be incorporated in the analysis to show us the impact of such project on biodiversity. This will also provide the basis for the development of alternatives to the projects, which will cause less impact on biodiversity.</p> <p>The results of the analysis will be conveyed to decision-makers and discussed with them, including alternatives. CIP will foster awareness and provide pertinent information for decision-makers.</p>

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ROOT CAUSE(S)	PROXIMATE THREATS	Environmental Effect	CI-Philippines Activities	Activity's Effect on the Threats
<p>Pressure to utilize resource base to prevent outsiders from benefiting from use (within NSMNP)</p> <p>Logging outside of concession areas due to low risk of sanctions (economic opportunism)</p> <p>Domestic and international demand for tropical hardwood</p>	<p>Logging (large-scale legal and small-scale illegal)</p> <p>Increased access to new areas for hunting and agriculture;</p> <p>Destructive or inappropriate alternative livelihood activities (coffee growers)</p>	<p>Primary: Habitat Alteration & Fragmentation; Habitat and forest loss Soil erosion – siltation of rivers Sedimentation of coastal reefs/mangroves;</p> <p>Secondary: Increase in vector-borne disease incidence;</p>	<p>CI Philippines will:</p> <ol style="list-style-type: none"> 1. Compile existing data (1.1.1) logging, land use development plan, etc. and conduct RACE (1.1.6) to serve as basis for policy advocacy activities, identification and formulation of appropriate interventions that would address the underlying causes of the logging threat. 2. Establish biological Resource Center (1.1.9) in order to show/share information on the biodiversity of the Sierra Madre and its importance to development. 3. Continue to engage in dialogue and awareness campaign to the different stakeholders through consultations and orientations (1.4.2 and 1.7.3) to generate support and create awareness on the importance of biodiversity. 4. develop media events and products (1.7.3) such as press releases, environmental book launching and exhibits to raise national awareness of biodiversity conservation 	<p>The data generated from the RACE process and the biological information will be used to convey the effects of this threat. This will help raise awareness of the local community in NSMNP and provide the NSMNP - Protected Area Management Board (PAMB) pertinent information for decision-making.</p> <p>The continuous consultation and dialogue with the stakeholders will help generate information on the actual status and update CIP with what is happening on the ground. This will help CIP improve our strategy and developed activities that will help address these threats that are acceptable and easily conveyed to the stakeholders.</p> <p>National awareness is also important in the awareness campaign to educate the decision makers at the national level</p> <p>Data generated from the RACE process will be conveyed to the decision-makers at the national level. This will provide the decision-makers the sense of what is really happening on the ground.</p>

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ROOT CAUSE(S)	PROXIMATE THREATS	Environmental Effect	CI-Philippines Activities	Activity's Effect on the Threats
<p>Foreign Investment (international markets)</p> <p>Domestic and international demand for gold, nickel and chromite, copper</p> <p>Lack of awareness of potential impact on human and environmental health</p>	<p>Mining large-scale exploration, development and extraction</p> <p>small -scale exploration, development and extraction, including the use of mercury and other toxic chemicals</p>	<p>Primary: Water/Soil Contamination; Habitat Destruction; River Sedimentation/Soil Erosion; Human Health Impacts -- poisoning, malaria pools, food source contamination</p>	<p>CI Philippines will:</p> <ol style="list-style-type: none"> 1. Compile existing data (1.1.1) logging, land use development plan, etc. and conduct RACE (1.1.6) to serve as basis for policy advocacy activities, identification and formulation of appropriate interventions that would address the underlying causes of the logging threat. 2. Establish biological Resource Center (1.1.9) in order to show/share information on the biodiversity of the Sierra Madre and its importance to development. 3. Continue to engage in dialogue and awareness campaign to the different stakeholders through consultations and orientations (1.4.2 and 1.7.3) to generate support and create awareness on the importance of biodiversity. 4. develop media events and products (1.7.3) such as press releases, environmental book launching and exhibits to raise national awareness of biodiversity conservation 	<p>Please refer to remarks 1 and 2</p>

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ROOT CAUSE(S)	PROXIMATE THREATS	Environmental Effect	CI-Philippines Activities	Activity's Effect on the Threats
<p>Energy demand for Luzon</p> <p>Casecnan Dam</p>	<p>Dam Development</p> <p>Electricity Generation;</p> <p>Roads and associated infrastructure development;</p> <p>Expansion of tourism/recreation use;</p> <p>Community displacement;</p>	<p>Primary: Flooding/inundation; Disruption of aquatic habitat and ecology and habitat loss; Disruption of water systems</p> <p>Secondary:</p>	<p>CI Philippines will:</p> <ol style="list-style-type: none"> 1. Compile existing data (1.1.1) logging, land use development plan, etc. and conduct RACE (1.1.6) to serve as basis for policy advocacy activities, identification and formulation of appropriate interventions that would address the underlying causes of the logging threat. 2. Establish biological Resource Center (1.1.9) in order to show/share information on the biodiversity of the Sierra Madre and its importance to development. 3. Continue to engage in dialogue and awareness campaign to the different stakeholders through consultations and orientations (1.4.2 and 1.7.3) to generate support and create awareness on the importance of biodiversity. 4. develop media events and products (1.7.3) such as press releases, environmental book launching and exhibits to raise national awareness of biodiversity conservation 	<p>See Above</p>

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ROOT CAUSE(S)	PROXIMATE THREATS	Environmental Effect	CI-Philippines Activities	Activity's Effect on the Threats
<p>Low awareness of biodiversity importance Limited financial resources/ primacy of other development priorities</p>	<p>Lack of effective national and local capacity to manage, equip and police protected areas; Human encroachment into existing protected areas; Failure to establish new protected areas</p>	<p>Unimpeded biodiversity destruction/loss of habitat;</p>	<p>CI Philippines will:</p> <ol style="list-style-type: none"> 1. Continue to engage in dialogue and awareness campaign to the different stakeholders through consultations and orientations (1.4.2 and 1.7.3) to generate support and create awareness on the importance of biodiversity. 2. Establish biological Resource Center (1.1.9) in order to share the biodiversity of the Sierra Madre with other scientist and the general public. 3. provide support to the operations and capacity building trainings of the Protected Area and management Board and the DENR-Park Superintendent in protecting the Northern Sierra Madre Natural Park and will help the establishment of the community forest guards that will assist the DENR in the protection work (2.2.1 and 2.2.3) 4. explore debt for Nature swap opportunities and assess as possible financing mechanism for the Sierra Madre biodiversity Corridor (1.6.1) 	<p>See Above</p>

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ROOT CAUSE(S)	PROXIMATE THREATS	Environmental Effect	CI-Philippines Activities	Activity's Effect on the Threats
Source of income from revolutionary taxes	Increased rebel activities	Logging/habitat alteration	<p>CI Philippines will:</p> <ol style="list-style-type: none"> 1. Continue to engage in dialogue and awareness campaign to the different stakeholders through consultations and orientations (1.4.2 and 1.7.3) to generate support and create awareness on the importance of biodiversity. 2. Establish biological Resource Center (1.1.9) in order to share the biodiversity of the Sierra Madre with other scientist and the general public. 3. provide support to the operations and capacity building trainings of the Protected Area and management Board and the DENR-Park Superintendent in protecting the Northern Sierra Madre Natural Park and will help the establishment of the community forest guards that will assist the DENR in the protection work (2.2.1 and 2.2.3) 4. explore debt for Nature swap opportunities and assess as possible financing mechanism for the Sierra Madre biodiversity Corridor(1.6.1) 	See Above

4. Financial Sustainability Activities for Year 2 of the SMBC Program

CI-Philippines has taken programmatic measures to ensure long-term financial sustainability of the SMBC. CI-Philippines and CI's Conservation Policy and Finance Manager will explore debt-for-nature swap opportunities under the Tropical Forest Conservation Act and will assess as possible financing mechanism for the Sierra Madre Biodiversity Corridor. In addition, CI will continue to build financial sustainability of the corridor by building the technical and financial capacity of SMBC partners and stakeholders. Technical and financial support to established People's Organizations in Cagayan and Isabela provinces will include training on financial management, conflict resolution and networking. Technical support will include assistance in accessing funding for operations.

In addition to programmatic interventions, CI will also bring significant co-financing sources to Year 2 implementation. CI has been able to match over 20% of USAID's support for SMBC. CI continues to seek additional funding for this ambitious program, and has already been successful in engaging private sector support in the Philippines. In addition to continuing support from the First Philippine Conservation, Inc., the Foundation for Philippine Environment has agreed in principle to coordinate its funding and activities in the region with CI. The SMBC program has also received support from Ricoh Corporation, Japan for conservation outreach and education activities, and is exploring further support. CI's Tropical Wilderness Protection Fund, contributing match funding for the RACE component, can be expected to leverage additional funding for the SMBC in the future.

5. Stakeholder Participation Activities for Year 2 of the SMBC Program

In Year 2, CIP will take important steps to concretize stakeholder support of the SMBC planning and implementation framework. Many regional organizations and agencies have become aware and interested in the Corridor approach. CI-Philippines will conduct biannual meetings with identified SMBC partners: Foundation for Philippine Environment (FPE), Plan International (PI), National Integrated Protected Area Inc. (NIPA), Department of Environment and Natural Resources (DENR), the National Economic Development Authority (NEDA), and Local Government Units (LGUs-provincial and municipal) to coordinate corridor activities and inform partners of new developments.

Right now, the Foundation for Philippine Environment and CI Philippines are forging a Memorandum of Agreement to jointly work for the implementation of biodiversity conservation projects in the Cagayan province. The Regional Offices (Regions 2, 3 & 4) of the Department of Environment and Natural Resources have expressed support to the project through letters of commitment issued by the concerned Regional Directors and are now working with the SMBC team on the on-going consultation and awareness campaign. The provincial government units agreed to create provincial sustainable development councils in support to the program. In addition to the awareness campaign, these stakeholders will also be included in the RACE process.

In addition to providing activity updates and additional information, CI-Philippines will continue to hold consultations on the corridor framework with stakeholders at various levels. Key stakeholders to be addressed are DENR's regional and provincial offices, the Community Environment and Natural Resources Office (CENRO) in Regions 2 and 4, Local Government Units, provincial and municipal governments, NGOs and People's Organizations with community-based forest management agreements within the corridor area.

6. Information, Education and Communication Activities for Year 2 of the SMBC Program

CIP will conduct strategically targeted education and communication activities in Year 2. Major activities include the design of an awareness campaign for conservation within the Northern Sierra Madre Natural Park and the promotion of the corridor concept to policy makers in key government agencies. As information and analyses become available from the GIS and RACE assessments, they will be incorporated into communication materials and/or disseminated through workshops and reports. The different stakeholders of the park will jointly implement the awareness campaign

activities. The Department of Environment and Natural Resources, which is mandated by the government to implement biodiversity conservation programs, will spearhead the continuation of the awareness campaign to include current activities and consultations. Local Coordinating Units created in every province will coordinate the awareness campaign activities.

CIP will conduct presentations at stakeholder meetings, workshops and consultations. CI-Philippines will develop informational and educational materials, including a corridor brochure, to be used by Site Coordinators and Community Organizers in outreach efforts to SMBC stakeholders and potential partners. Activities will include seminar/lectures concerning ecology, biodiversity conservation, environmental protection and wildlife management to targeted audiences (local communities and students) during the training sessions conducted in Divilacan and Maconacon. CI-Philippines will also set up an interpretive ecological display in the office of the Protected Areas Superintendent (PASu) of NSMNP as an educational resource.

To galvanize public support, develop a national constituency and exert pressure on decision-makers, CI also seeks to develop a national awareness-building campaign on the Sierra Madre. Anticipated activities include the development of Public Service Announcements (excellent footage is available, seeking match funding for production costs) and other media outreach. CI has already had a series of discussions with TV and advertising companies interested in helping to promote the "Save the Sierra Madre" message.



CONSERVATION INTERNATIONAL

Biodiversity Corridor Planning and Implementation Program (Corridor)

Cooperative Agreement No. LAG-A-00-99-00046-00

October 18, 2000

Ms. Cynthia Gill
Biodiversity Specialist
Global Bureau, Environment Center
USAID
Ronald Reagan Bldg 3.08-151
1300 Pennsylvania Ave., NW
Washington, DC 20523-3800

Re: *Revised* - FY01 Annual Implementation Plan

Dear Cynthia,

Please find attached two copies of the *Revised* October 2000 FY01 Annual Implementation Plan for Conservation International's *Biodiversity Corridor Planning and Implementation Program (Corridor)*. This Plan covers the FY01 period for activities, by Corridor country site, to be implemented in Year Two under our cooperative agreement with USAID/Global Bureau, Cooperative Agreement No. LAG-A-00-99-00046-00. The revisions pertain to the Philippines Corridor only. Please also find enclosed a FY01 narrative supplement per Corridor country site to provide you with additional information and in response to your FY01 Guidelines for Implementation Plan Review.

I look forward to answering any of your questions or providing more detailed information as requested. I can be reached at (202)331-3407, or via email at t.drake@conservation.org.

Best regards,

Theresa M. Vermeulen Drake
Manager, USAID Global Cooperative Agreements

NARRATIVE SUPPLEMENT TO THE CERRADO-PANTANAL YEAR 2 IMPLEMENTATION PLAN 10/11/00

I. Introduction

At two million squared kilometers, the Brazilian Cerrado is a type of tropical Savanna, located at the Brazilian shield. The most common physiognomy ranges from grasslands to forested areas. The human impact has turned the original biota into a largely fragmented landscape composed of islands in a heavily agricultural environment. The extensive transformation of the Cerrado has produced great losses of biodiversity, where species are highly endemic and their distribution is still poorly known.

On the other hand, levels of endemism in the Pantanal are not as pronounced as in the neighboring Cerrado. The biodiversity encountered in the 140,000-km² flooding plains of the Pantanal is mainly due to the water regime, which determines the availability of dry or flooded areas influencing the seasonal distribution of different species. The Pantanal region contains characteristics of three primary vegetation types: Amazon rainforest, the Cerrado scrub forest of Central Brazil and the *Chaco* vegetation of Bolivia. Principal vegetations include: native grasslands, scrub forest, gallery forest and marsh vegetation.

The threats to the Pantanal and the adjacent Cerrado biomes are intertwined and multifaceted. The Cerrado in particular has faced development pressures since the 1970s, when new agricultural advances transformed this once agriculturally marginal region into an ideal place for soybean production, one of Brazil's principal exports. There is a growing concern that cash crops may be associated with negative consequences such as habitat loss, erosion, and siltation.

Surprisingly, up to this point very few conservation efforts have been targeted at this biome. The plight of the Cerrado has received little attention from other organizations and institutions in Brazil. Until recently the World Bank and the Brazilian government viewed this as the country's primary agricultural frontier. Therefore, it is not surprising that this hotspot is less well represented in Brazil's protected area network than the Amazon and the Atlantic Forest, even though it is probably disappearing more rapidly than the Amazon. Parks and reserves protect only about 1.4% of the Cerrado. This percentage is even lower for the Pantanal, particularly along the central floodplains. Finally, these areas are among the least homogeneously surveyed biomes in Brazil and, as recently as last year, still lacked a clearly defined region-wide biodiversity conservation strategy.

BASIC THREATS ASSESSMENT: Cerrado and Pantanal

THREATS	ROOT CAUSES	EFFECTS	OPPORTUNITIES
- Increase in the sedimentation process of the rivers (mainly in the Taquari and São Lourenço rivers)	- Increasing human activity in highlands (Cerrado) as the expanding agricultural activity (mainly soybean) led to opening of new roads and the deforestation of gallery forests.	- Farmers are losing their farmland due to the erosion process in the highlands. - Increasingly flooded areas in the plain are reducing land once used for cattle raising. - The siltation and agrochemical contamination of springs and watercourses.	- CI-Pantanal in FY02 will develop Educational campaigns to raise local people's awareness for this sedimentation problem and how to prevent it; - To implement the recuperation of damaged areas and creating a seed bank as an activity resulted by Educational activities (CI-Pantanal FY03 Activity). - The Cumeeira project, a partnership of Conservation International with the Emas Foundation and others, aims to control erosive processes, and the reforestation of gallery forests (Emas ongoing project)
- Dredging, dyking, and levying plans along several stretches of the lower Pantanal.	- Increasingly flooded areas in the plain are reducing land once used for cattle raising	- Social and economic complications such as flooding in urban areas; - Fertility lost by the dry lands protected by the dams. As a consequence farms protected from flooding find it necessary to use agrochemicals.	- Reforestation of riparian vegetation would reduce silting of watercourses thus controlling excessive flood of farmlands. CI-Pantanal intends to tackle reforestation issues in FY03.
- Domestic waste discharged into rivers without any treatment, specially in places with high numbers of tourists;	-Lack of sludge treatment stations in towns where tourism is prevalent and in farms, therefore discharging raw sludge in watercourses.	- Waterborne diseases like Cholera, Hepatitis A, <i>Eschericia coli</i> , etc. - Fish Kills	- The Pantanal Program developed by the State Secretary for the Environment, with support from the IDB, and partners are committed to creating/ improving sewage treatment plants in many of the towns in the Upper Paraguay Basin. CI-Pantanal will create a water quality monitoring station at the Rio Negro farm to aid the quality control of some of the most pristine rivers in the Pantanal.
- Gold and diamond mining (especially in the portion of Pantanal situated in Mato Grosso State)	-Poverty - Inadequate techniques - Lack of job opportunities	- Mercury contamination - Erosion/siltation	- Enforcement of current legislation regarding the use of mercury in gold mining. - Alternative socioeconomic activities

<ul style="list-style-type: none"> - Unregulated Fishing 	<ul style="list-style-type: none"> - Unsustainable sport fishing - Lack of economic alternative for small riverside communities - Lack of enforcement of fish legislation in the Pantanal areas 	<ul style="list-style-type: none"> - Overexploitation of high valued species of fish (pintado, pacu, Piraputanga, etc.) - Uncontrolled marketing of live baits, like crabs and small fishes to tourists. 	<ul style="list-style-type: none"> - CI-Pantanal Environmental education campaign will work with the fishermen's families and also with the tourists, especially about the "Piracema", which is the period that fishes reproduce; - CI-Pantanal will aid the Rio Negro Landowner Association's monitoring of illegal fishing and wildlife trade by installing two control posts. - CI-Pantanal AquaRAP expedition to the Upper Paraguai Basin will help identify the biodiversity of fishes and highlight threatened species.
<ul style="list-style-type: none"> - Paraguay-Paraná Hydrovia 	<p>The Hydrovia ("hydrovia" means waterway) is a project to make 3,400 km (2,100 miles) of the Rio Paraguay and Rio Paraná navigable to barges and large ships by dredging, straightening bends, digging new channels, and destroying rock outcroppings. The intent is to facilitate the year-round transportation of materials, principally soybeans and iron ore. To increase the efficiency of transportation for several products such as soybean from Pantanal to surrounding areas</p>	<ul style="list-style-type: none"> - Draining and drying of large sections of the Pantanal wetlands, decreased flooding in the upper parts of the Rio Paraguai watershed, and increased flooding downstream. - The possibility of salinization, contamination of drinking waters, and increased risk of oil spills due to increased river traffic exists 	<ul style="list-style-type: none"> - CI-Pantanal has released a video to raise stakeholder's awareness for the threats of the Hidrovia to the Pantanal.
<ul style="list-style-type: none"> Extensive cattle raising in sandy soil 	<ul style="list-style-type: none"> - Traditional and low technology way of beef production. 	<ul style="list-style-type: none"> - Introduction of exotic grasses - Fire use in the dry season - Continuous conversion of Cerrado in pasture and pasture in second growth Cerrado - Serious erosion process 	<ul style="list-style-type: none"> - CI-Pantanal is creating incentives for sustainable cattle (ecobeef) production by certifying producers using appropriate techniques. - The Emas Foundation will help the establishment of land use zones according to agriculture and conservation potential.

<p>-Intensive agriculture in Chapadas (oxisoils), mostly extensive monocultures</p>	<p>- Well established system of production, mechanical and chemical - Governmental incentives in early 70's</p>	<p>- Exploitation of water resources; - Losses of soil and erosion process; - Increase of superficial runoff - Water, soil and fauna contamination by pesticides; - Eradication of natural vegetation in a huge area - Eradication of natural vegetation in protected legal areas - Barriers and constraints for sensitive animals movements</p>	<p>The Emas Foundation and partners will help: 1. Restore legal protected areas (Áreas de Preservação Permanente e Reserva Legal). 2. Monitor faunal movements in agriculture fields 3. Identify faunal sensibility and capability to circulate in disturbed areas 4. Monitor soil losses and erosion process; 5. Monitor water quality and pesticides contamination 6. Develop of lower impact agricultural system</p>
<p>Timber harvesting and charcoal production</p>	<p>Local demand for timber and charcoal</p>	<p>- Clearings of land for pasture, secondary induce timber and charcoal production. - Erosion, opening of roads and access to wilderness areas</p>	<p>CI – Pantanal and the Emas Foundation will seek alternative economically viable activities to replace those harmful to biodiversity and reinforce compliance with environmental legislation.</p>
<p>Lack of sufficient protected areas system in Cerrado and Pantanal</p>	<p>Extensive Biome with very high diversity and heterogeneity under pressure to be converted to productive land</p>	<p>Less than 5% of the area is under legal protection. Protected areas are not fully connected</p>	<p>CI-Pantanal, the Emas Foundation and partners will: 1. Create incentives for new private reserves 2. Reinforce environmental legislation for areas of permanent protection and legal reserves. 3. Provide technical assistance on the design and implementation of the State System of Protected Areas.</p>
<p>Uncontrolled use of fire</p>	<p>- Renew pasture land and agricultural land</p>	<p>- Health problems caused by smoke. - Loss of biodiversity. - Loss of soil fertility - Destruction of habitats</p>	<p>- CI-Pantanal started working with the local fire brigade to implement fire brakes and fire management activities in order to reduce uncontrolled fires in private reserves, this activity is ongoing for the next 4 years.</p>
<p>Intensive agricultural practices in the Cerrado area of the Brazilian shield.</p>	<p>- Pressure towards agricultural extension - Governmental incentives in the early 70's</p>	<p>- Serious erosion process in very sensitive soils - Deeper water table - Eradication of natural vegetation in protected legal areas - Low productivity</p>	<p>- The Emas Foundation will: 1. Help the establishment of land use zones according to agriculture and conservation potential 2. Carry out studies on the effects of fire frequency and periodicity on Cerrado vegetation 3. Identify priority areas for conservation.</p>

Program: Brazil

Objective 1:

Build biodiversity corridor planning and implementation support framework

Anticipated Five-year Benchmarks:

- Corridor planning unit in place
- Common agenda established among
- Consultative process completed with key stakeholders
- Memos of understanding signed among key stakeholders
- Preliminary corridor assessment completed
- Corridor-wide threats assessment completed
- Stakeholder analyses, conflict analyses, functional analyses completed
- Information infrastructure in place
- Data integrated
- Information sharing mechanism developed
- Training provided
- Communication strategy developed and functioning
- Communication campaigns aimed at ?? Audience
- Plan for long-term financial mechanism established
- Funding for corridor coordinated by donors
- Monitoring and evaluation procedures established
- Training provided
- Evaluation, lessons and recommendations communicated to corridor project partners and decision-makers
- Annual learning forum conducted

Year 2 Objective 1 level of effort:

USAID	\$311,851
GEF	\$16,000
CI Unrestricted	\$20,000
Other Donors	\$126,000
Total	\$473,851

Year 2 Higher Level Activities	Status / Background at close of FY00	Year 2 Activities	Year 2 Results	Means of Verification	Year 2 Personnel & Resources	USAID Year 2 Level of Effort (\$)	GEF Year 2 Level of Effort (\$)	CI Unrestricted Year 2 Level of Effort (\$)	DONOR Year 2 Level of Effort (\$)	O	N	D	J	F	M	A	M	J	J	A	S
1.1 Biodiversity corridor assessment completed (baseline legal, biological, economic and social assessments/data gathered) (Bodoquena, Emas National Park, Parque Natural do Pantanal, Parque Nacional do Pantanal, Parque Estadual das Nascentes do Taquan, Paraguayan Cerrado, Rio Apa, and potential core-nuclei/corridor area)																					
	1.1.1 New FY01 Activity	Conduct assessment of threats, stakeholders and stakeholder incentives in corridor area; including compilation of existing socio-economic data on the corridor, gap analysis, and development of strategy to fill in gaps in existing data (Cerrado and Pantanal)	Overview preliminary threats assessment document, including gap identification, written and presented to corridor team by end of Year 2. At least 2 experts contracted to conduct studies aimed at filling in gaps by end of Year 2.	Threats assessment document, TORs	Lead Anita Akella. Staff CI-DC REP, CI-Brazil economist, Corridor staff Resources: staff time, travel, consultants	\$12,608			\$2,300 (Citibank)	x	x	x	x	x	x	x	x	x	x	x	x

Year 2 Higher Level/Activities	Status / Background at close of FY00	Year 2 Activities	Year 2 Results	Means of Verification	Year 2 Personnel & Resources	USAID Year 2 Level of Effort (\$)	GFF Year 2 Level of Effort (\$)	CI Unrestricted Year 2 Level of Effort (\$)	NONR Year 2 Level of Effort (\$)	O	N	D	J	F	M	A	M	J	J	A	S	
1.1.2	New FY01 Activity	Review threats assessment to strengthen strategic activity planning, develop long-term corridor financing mechanisms, devise economic instruments to encourage sustainable land uses/conservation and identify socio-economic indicators to be used in monitoring and evaluation. (Cerrado and Pantanal)	At least 2 issues papers on different socio-economic topics written and compiled, and appropriate socio-economic indicators for M&E identified and described by end of Year 2	Issue papers, list of indicators	Lead: Reinaldo Lourival, Paulo Gustavo & Anita Akella. Staff: CI-DC REP, CI-Brazil economist, Corridor staff Resources: staff time, consultants	\$25,332			\$5,700 (Citibank)				x	x	x	x	x	x	x	x	x	x
1.1.3	New FY01 Activity	CI-DC Resource Economics Team will provide on-the-job training to capacitate corridor staff in land-tenure survey techniques and monitoring of socio-economic indicators. (Cerrado & Pantanal)	At least 3 staff members trained in resource economics techniques by end of Year 2.	Attendance list	Lead: Anita Akella Staff: CI-DC REP, CI-Brazil economist, Corridor staff Resources: staff time, consultants	no cost							x	x	x	x	x	x	x	x	x	x
1.1.4	This is a new activity, based on Activity 1.1.5 from Year 1, but a new strategy for implementation was developed.	Conduct land tenure survey to compile information on private properties in both the Cerrado and Pantanal portions of the corridor. Information collected will include property size, ownership, etc, within preliminary perimeter of the corridor area, consisting of the core nuclei and identified buffer zones (Cerrado and Pantanal)	At least 100 properties surveyed in Cerrado by the end of Year 2. Complete investigations at two major notary offices in the Pantanal within Year 2.	completed questionnaires, information compiled into database	Cerrado Lead: Mário Barroso Pantanal Lead: Mônica Harris Staff: Emas Staff, temporary services for survey team Resources: staff time, equipment, travel, supplies	\$63,966		\$ 20,000 (TWPF)					x	x	x	x	x	x	x	x	x	x
1.1.5	New FY01 Activity	CI Pantanal will plan and execute a 3rd AquaRAP expedition to the upper Paraguay River basin, covering all of the most important areas plus an entire river community. As this activity will require follow-up in FY02, CI Pantanal will complete all traveling and data collection activities by July/Aug 2001. The preliminary report will be produced by Sept 2001. The final report will be produced in 2002. With this expedition we intend to complete sampling of the Upper Paraguay River Basin to obtain a comprehensive picture of the biological health of the Pantanal ecosystem. It is expected that 10 scientists and 4 students will participate (Pantanal)	Expedition completed by Aug 2001; preliminary RAP report produced and distributed to local authorities, press, international scientists and partner institutions by Sept 2001	Data available on the internet by Sept 2001; preliminary report, distribution list	Lead: Monica Harris. Salary (staff time), travel, field supplies, equipment, copies, phone; fax, fuel;	\$57,741															x	x
1.1.6	In FY01 the Corridor Technical Team and Brazilian Corridor Team met with the Director of Guyra Paraguay on several occasions where the potential areas of collaboration were discussed	CI and its partner organization in Paraguay, Guyra Paraguay, will raise funds to conduct a priority-setting exercise for developing a conservation management plan for this area of the corridor (Cerrado and Pantanal)	Funds raised to finance priority setting workshop	Priority setting workshop held.	Lead: John Musinsky CI DC technical team, John Musinsky, Guyra Paraguay,	no cost																x

Year 2 Higher Level Activities	Status / Background at Close of FY00	Year 2 Activities	Year 2 Results	Means of Verification	Year 2 Personnel & Resources	USAID Year 2 Level of Effort (\$)	GEF Year 2 Level of Effort (\$)	CI Unrestricted Year 2 Level of Effort (\$)	DONOR Year 2 Level of Effort (\$)	O	N	D	J	F	M	A	M	A	S
	1.4.5	Throughout the life of this Agreement, the CI-Brazil Corridor Managers and CI-DC Agreement Management Team will work closely to maintain the letter and spirit of the Agreement and ensure cohesion and communication between all Corridors.	CI-Brazil Corridor Managers and CI-DC Agreement Management Team will oversee implementation of corridor project. Management will include site visits to field projects on a regular basis to ensure projects are accomplishing intended results and are running smoothly. Further, CI-Brazil Corridor Managers will oversee the development of progress reports, budgets and expenditures related to corridor project (Cerrado and Pantanal)	Trip Reports, Progress Reports	Reports, workplan, budget and financial reports	Lead: Theresa Drake Staff: Paulo Gustavo Prado, Monica Harns, and Claudia Becker Resource: Staff Time, printing, communication, office supplies, training, working meetings	\$45,219			*	*	*	*	*	*	*	*	*	*
1.5 Corridor project team operational																			
	1.5.1	In FY00 Activity 1.1.3 CI-Pantanal and the Emas Foundation started a database to compile various sources of information in the corridor area. This activity will be ongoing for the life of the agreement.	CI Pantanal will hire local intern to assist in the creation of corridor database and begin entering biological & socioeconomic data. The intern will work closely with the Emas Foundation, Alexandre Dinnouti and DC technical team. Intern will assure that information from the database will be made available on the CI Brasil website (Pantanal)	Intern will be hired and working part time by October 2000. Database available information on website by July 2001	Contract, database available on internet	Lead: Monica Harns. Staff: Intern, Reinaldo Lounval, Enka Guimarães, Alexandre Dinnouti, Emas Foundation. Staff time, web services, office supplies	\$4,092			x	x	x	x	x	x	x	x	x	
	1.5.2	New FY01 Activity	CI Pantanal will hire a part time Environmental Education Coordinator to assist with the implementation of the Pantanal - Corridor educational program. The education program will be a focus "Preservation of the Pantanal Watershed" campaign (Pantanal)	Env. Ed Coordinator contracted by Oct 2000	Contract	Lead: Reinaldo Lounval Staff: Environmental Education Coordinator. Resources: staff time, communication, office supplies	\$8,060			x									
	1.5.3	In FY00 Activity 1.5.1 CI Coordinators identified key personnel to compose the LCU, which act as advisory council to develop, integrate and direct corridor related activities. The LCU to-date is composed by members of Institutions, Universities, other NGOs and Government, so members of the agriculture and livestock production sectors will be selected to have a representative group composing the LCU	The Cerrado-Pantanal Corridor Coordinators will identify four additional members for the LCU (local coordinating unit), 2 from Cerrado and 2 from Pantanal, to represent agriculture and livestock production sectors (Cerrado and Pantanal)	Four additional members identified and brought into the LCU by January 2001	Final list of LCU members	Lead: Reinaldo Lounval and Paulo Gustavo	no cost												

Year 2 Higher Level Activities	Status / Background at close of FY00	Year 2 Activities	Year 2 Results	Means of Verification	Year 2 Personnel & Resources	USAID Year 2 Level of Effort (\$)	GEF Year 2 Level of Effort (\$)	Unrestricted Year 2 Level of Effort (\$)	DONOR Year 2 Level of Effort (\$)	O	N	D	J	F	M	A	M	J	A	S
17 Awareness Program established																				
	17.1	In FY00 DC International Communications Specialist, Haroldo Castro, spent a week in the Corridor Region filming footage for an awareness video	CI-DC International Communications Dept will finish the production of an awareness video on the Cerrado-Pantanal Corridor which will present to stakeholders the Corridor concept and its purpose for biodiversity conservation and improvement of the quality of life of locals, and the role each person/institution has to play to make it happen, especially regarding the establishment of the RPPNs and land use planning and procedures (Cerrado and Pantanal)	100 copies of the Video will be distributed to key audiences by September 2001	Video distribution list and copy of final video.	This activity will be paid with matching funds from GEF	no cost	\$16,000												x
	17.2	New FY01 Activity	The Emas Foundation will host a February 4-P Workshop in conjunction with CI-Brazil/Belo Horizonte and CI-DC Staff This 4-P will establish a strategy for the Emas Foundation's Corridor environmental education and awareness campaign (Cerrado)	Strategy for Environmental Education and Awareness Campaign developed for the Cerrado portion of the Corridor	Strategy planning report	Lead Mano Barroso Staff Emas Foundation, CI-Brasil Resources Travel, Staff time, communication, supplies	no cost		\$4,000 (SEMARH)											
	17.3	New FY01 Activity	The Emas Foundation will produce public awareness and environmental education materials as recommended by the February 4-P Workshop. The materials will include audio material for a radio campaign and printer material for general distribution. These materials will be made available on the Emas Foundation Website (Cerrado)	Materials for campaign produced by September 2001	Copies of printed material, list of radio stations, list of institutions which received printed material	Lead Mano Barroso Staff Emas Foundation, CI-Brasil Resources Travel, Staff time, communication, supplies	no cost		\$4,000 (SEMARH)											
Total						\$311,851	\$16,000	\$20,000	\$126,000											

Anticipated Future Higher Level Activities (year 3-5)	Anticipated Future Activities (year 3-5)	Anticipated Future Results (year 3-3)	Means of Verification	Anticipated Future Personnel & Resources	Estimated USAID Level of Effort (\$)	Estimated DONOR Level of Effort (\$)	F Y 0 2	F Y 0 3	F Y 0 4			
1.1 Biodiversity corridor assessment completed (baseline, legal, biological, economic and social assessments/data gathered)												
	1.1.1	Data assessment and corridor design workshop to review all data collected and plan next steps (beginning of Year 3)		Data manager, LCU, Technical Team, all data collaborators								

Activity ID	Anticipated Future Higher Level Activities (Year 3-5)	Anticipated Future Activities (Year 3-5)	Anticipated Future Results (Year 3-5)	Means of Verification	Anticipated Future Personnel & Resources	Estimated USAID Level of Effort (\$)	Estimated DONOR Level of Effort (\$)	F	F	F			
											Y	Y	Y
											0	0	0
											2	3	4
1.2	Integrated corridor information system designed and operational												
		1.2.1	Hire local data manager		Data manager for Local Coordinating Unit (LCU)								
		1.2.2	Train data manager if needed		CI-Brazil staff, Technical team								
		1.2.3	Design Information system (databases, process for data input etc)		Data manager, Technical team, LCU, data collectors								
		1.2.4	Enter all data into information system		Data manager, data collectors with guidance by Technical team								
		1.2.5	Continuous data input, analysis and management		Reinaldo Lounval, Paulo Prado, LCU,								
1.3	Corridor learning system/adaptive management in place and operational												
		1.3.1	Identify local person as M&E manager- could be corridor coordinator		Reinaldo Lounval, Paulo Prado								
		1.3.2	Develop baseline for monitoring the effectiveness of biodiversity corridor										
		1.3.3	Adaptive management in place										
		1.3.4	Develop a strategy for enforcement based on performance indicators										
1.4	Participatory planning and implementation framework and process established												
		1.4.1	Coordinate with local institutions and stakeholders		LCU, corridor coordinators								
		1.4.2	Build collaborations among partners and stakeholders		LCU, corridor coordinators								
		1.4.3	Develop plan for stakeholder involvement in planning and implementation		LCU								
		1.4.4	Establish procedures with partners (MOUs etc)		LCU, corridor coordinators								
		1.4.5	Training in biodiversity issues and ecotourism options for the State Secretary of Tourism										

	Anticipated Future Higher Level Activities (year 3-5)		Anticipated Future Activities (year 3-5)	Anticipated Future Results (year 3-5)	Means of Verification	Anticipated Future Personnel & Resources	Estimated USAID Level of Effort (\$)	Estimated DONOR Level of Effort (\$)	F02	F03	F04			
1.5	Corridor project team operational													
1.6	Research long-term financial mechanisms													
		1.6.1	Develop position description and recruit staff member to develop fundraising strategy, particularly for EMAS foundation, for corridor area											
1.7	Awareness Program established													
		1.7.1	Continue designing awareness program for corridor			LCU								

Program: Brazil

Objective 2:

Protected areas created, strengthened and extended

Anticipated Five-year Benchmarks:

- Park demarcated
- Park infrastructure in place
- Park staff trained
- Enforcement in place

Year 2 Objective 2 level of effort:
 USAID \$187,312
 Earthwatch Institute \$64,000
 Tropical Wilderness \$4,000
 Fund
 GEF \$36,000
 Total \$291,312

Year 2 Higher Level Activities	Status Background at Close of FY00	Year 2 Activities	Year 2 Results	Means of Verification	Year 2 Personnel & Resources	USAID Year 2 Level of Effort (\$)	Earthwatch Institute Year 2 Level of Effort (\$)	Tropical Wilderness Fund Level of Effort (\$)	GEF Year 2 Level of Effort (\$)	Q	N	D	F	M	A	M	J	J	A	S
2.1 New protected areas (protected areas, private reserves, indigenous reserves/terrones) are created	2 1 1 New FY01 Activity	CI Pantanal, with support from CI's GIS specialist, will assist in the creation of at least three RPPNs in the Pantanal corridor area CI Pantanal will produce maps and reports and will assist land owner in their application for the establishment of an RPPN The maps will be produced based on purchased satellite images acquired in conjunction with CI GIS specialists (Pantanal)	At least 3 RPPN declared by Sept 2001	Publication of RPPN creation in the Diário Oficial	Lead: Samuel Leite (CI - Pantanal GIS Specialist). Resources: purchase of images; staff time, travel (land & fly); GIS precision GPS, notary fees, supplies; communication;	\$12,586					x	x	x	x	x	x	x	x	x	x
2.2 Protected area level infrastructure in place (park guards, posts, etc)	2 2 1 New FY01 Activity	Continue to build upon partnership with Emas Foundation to improve management and infrastructure. This year's activity will entail hiring a Corridor Administrative Manager to oversee the day-to-day operations of the Foundation to ensure future stability, liaise with external accountancy firm, and enable the technical staff hired in Year One to concentrate on the delegated technical tasks. (Cerrado)	Administrative Manager hired by December 2000.	TOR and contract for Administrative Manager	Lead: Mano Barroso Staff: Emas Corridor Coordinator, CI-Cerrado Director, Emas Directorate Resources: Staff time	\$11,904							x	x	x	x	x	x	x	x
	2 2 2 (FY00 2 2 2) In FY 00 CI supported improvements to the infrastructure of the Emas Foundation This work was very initiated late in the fiscal year this activity will carry over into FY01	Provide continued infrastructure support, such as technical assistance and software/hardware purchase, and complete repairs to Emas Foundation building, including electrical repairs structural repairs repaired roof, office furnishings, etc (Cerrado)	Building modifications and safety requirements completed by January '01.	Equipment and software installed	Lead: Mano Barroso. Staff. Engineering consultants, construction crew Resources: construction supplies, engineering firm staff time	\$9,707					x	x	x	x						

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Year 2 Higher Level Activities	Status/Background at close of FY00	Year 2 Activities	Year 2 Results	Means of Verification	Year 2 Personnel & Resources	USAID Year 2 Level of Effort (\$)	Earthwatch Institute Year 2 Level of Effort (\$)	Tropical Inland Forest Fund Level of Effort (\$)	GEF Year 2 Level of Effort (\$)	O	N	D	J	F	M	A	M	J	J	A	S
2.5 Capacity-building at the level of new and existing protected areas																					
	2.5.1 New FY01 Activity	Provide infrastructure and specimens for local biological reference collections at FIMES and Fed. Univ of Goias. (Cerrado)	At least one biological reference collection created and staffed by end of Year 2.	Collection	Lead: Mario Barroso Staff: Corridor staff Resources: staff time, equipment and materials	\$5,883								x	x	x					
	2.5.2 New FY01 Activity	Provide training for Emas staff on creation of RPPNs, Videography analysis and other topics as needed. (Cerrado)	One staff trained in analysis techniques and creation of RPPNs by June '01	Staff trained	Lead: Mano Barroso Staff: Pantanal corridor staff, Cerrado corridor volunteer Resources: staff time, travel	\$1,169													x		
	2.5.3 New FY01 Activity	Provide training for CI Brazil and Corridor staff in landscape analysis to enable the corridor team to perform assessments for the potential creation of natural reserves During the training, existing satellite imagery will enable staff to conduct a fragment analysis and landscape ecological assessment, including identifying appropriate vegetation classification scheme, vegetation mapping, and field validation (Cerrado and Pantanal)	At least five staff trained in landscape analysis by end of Year 2. Baseline biological data gathered and digitized into corridor map by September '01	Staff trained; map	Lead: John Musinsky, Paulo Gustavo and Reinaldo Lourival. Staff: corridor staff, CABS Regional Analysis staff Resources: staff time, travel	\$11,866				x	x	x	x	x	x	x	x	x	x	x	x
	2.5.4 (FY00 Activity 1.1.2) In FY00 the Corridor Launching Workshop was held and all results were obtained except for the revised map of the identified corridor. The revised map of the corridor area is a follow-up deliverable which will carry over into FY01	CI Pantanal in partnership with the State Secretary for the Environment will offer a Videography and aerial photography training to technicians from Emas Foundation, Catholic University, Terra Sul, CI Brasil and SEMA (State Secretary for the Environment). As part of the training, overflights will take place in Oct 2000 and images will be analyzed and validated. The target areas for the training process will be the recently established Rio Negro State Park and the headwaters of the Rio Negro basin. This type of information is an important tool for analyzing land use, land tenure and forest fragments (Pantanal)	Training offered to 10 people by Oct 2000	Attendance list and maps produced	Lead: John Musinsky	no cost			\$32,000												

Year 2 Higher Level Activities	Status/Background at close of FY00	Year 2 Activities	Year 2 Results	Means of Verification	Year 2 Personnel & Resources	USAID Year 2 Level of Effort (\$)	Earthwatch Institute Year 2 Level of Effort (\$)	Tropical Wilderness Fund Level of Effort (\$)	GEF Year 2 Level of Effort (\$)	O	N	D	J	F	M	A	M	J	J	A	S	
	2.6.4 This activity is a continuation of FY00 Activity 2.6.1. In FY00 two EWI visits occurred and were highly successful. It became apparent, however, that for future collaboration, research infrastructure needs at the farm would have to be met.	CI Pantanal will continue an established partnership with EWI, by hosting a field coordinator hired by EWI to increase the number of principal investigators (PIs) and EWI field expeditions, using their unique volunteer research scheme. CI Pantanal will also support the current 3 principal investigators in developing their 5 research field trips planned for 2001 to the Rio Negro Farm. These volunteers researchers assist in the collection of valuable which result in the reports about biodiversity and other ecological issues of the Rio Negro area. (Pantanal)	EWI Field Coordinator housed at Rio Negro Farm and CI Pantanal office by Jan 2001; 3 successful field trips conducted	Attendance list of volunteers; research report; contract of field coordinator	Lead: Reinaldo Lounval and EWI Field Coordinator.	No cost	\$50,000 from EWI (Ford grant)															
2.7 Develop and implement awareness campaign for new or existing protected areas																						
	2.7.1 New FY01 Activity	CI Pantanal will draft, develop and produce 5000 (B&W 1 page) copies of popular texts targeting adults and children in the Pantanal corridor. This was a suggested activity which resulted from the April 2000 "Corridor Launching Workshop". The texts will be written and designed to increase awareness among rural/urban population regarding the biodiversity corridor in the Pantanal, endangered species and illegal trade of wild animals. (Pantanal)	5000 publications distributed in at least 3 cities (Aquidauana, Bonito, Campo Grande, Rio Negro region) by July 2001	Distribution list, publications	Lead: Mariza Silva. Staff: CI-Pantanal. Resources: staff time, publication costs, supplies, travel, phone/fax, CI Brasil Communication staff	\$5,890		\$4,000														
	2.7.2 New FY01 Activity	CI Pantanal Education Coordinator hired (see act 1.5.2) will launch a "Preservation of the Pantanal Watershed" campaign. This conservation based education campaign will target two main audiences at the local Pantanal schools (Escolas Pantaneiras). CI Pantanal will offer support to the municipality of Aquidauana for the development and production of materials to stimulate young pantaneiros to take care of their environment and place greater value on their traditions. Secondly, CI-Pantanal will work with the Rio Negro community, in an attempt to control the effects of erosion/siltation which directly affects the swamps and flooding areas. In coordination with local schools, CI Pantanal will draft and produce written, audio and video materials, which will encourage children to discuss new topics. The publications will be distributed by the EE coordination in outreach sessions. (Pantanal)	publication distributed to all students of at least 10 local schools by Sept 2001	Distribution list, publication	Lead: Mariza Silva Staff: CI-Pantanal, local schools. Resources: editing; printing; travel, supplies; researcher, staff time, mail,	\$15,128																

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Anticipated Future Higher Level Activities (Parent)	Anticipated Future Activities (Sub-Parent)	Anticipated Future Objectives (Sub-Objectives)	Means of Verification	Anticipated Future Risks (Sub-Risks)	Estimated USAID Level of Effort (S)	Estimated DONOR Level of Effort (S)														
	2.3.3	Create an emergency fund to support protected areas and leverage protection																		
	2.3.4	Promote and support enforcement of existing protected areas																		
	2.3.5	Assist Landowners in Registering their Land as Legally Recognized Private Reserves																		
	2.3.6	Support the Creation of Private reserve Landowner Associations																		
	2.3.7	Strengthen Public Institutions that Regulate Private Reserves																		
2.4		Develop and implement management plans for new and existing protected areas																		
	2.4.1	Develop and implement management plans for public conservation units																		
	2.4.2	Develop and implement management plans for Emas National Park																		
	2.4.3	Assist Landowners in the Design and Implementation of Private Reserve Management Plans																		
2.5		Capacity-building at the level of new and existing protected areas																		
	2.5.1	Provide Technical Support for the Surveying of Private Lands for Potential Set-Asides																		
	2.5.2	Conduct Annual Ranchers Assistance Seminars and Publish Results																		
2.6		Information gathering, integration and analysis for protected area creation and strengthening (new or targeted biological, social, legal and/or economic data)																		
	2.6.1	Conduct RAP(s) in Targeted New Protected Areas to Develop Management Plans																		
	2.6.2	Conduct Socioeconomic Assessment(s) to Develop Management Plans																		

Anticipated Future Higher Level Activities (year 3-5)	Anticipated Future Activities (year 3-5)	Anticipated Future Results (year 3-5)	Means of Verification	Anticipated Future Personnel & Resources	Estimated USAID Level of Effort (\$)	Estimated DONOR Level of Effort (\$)	F Y 0 2	F Y 0 3	F Y 0 4			
	2.6.3	Other assessments will be needed, including spatial analysis, social studies, etc.										
	2.6.4	Facilitate and provide technical support for research program among institutions (such as FIMES, IBAMA, Pro Carnivores, EMBRAPA, IESA), incorporating all data gathered into corridor information system.										
2.7		Develop and implement awareness campaign for new or existing protected areas										
	2.7.1	Continuous development of tools to make stakeholders advocates										
	2.7.2	Create partnerships with local institutions, such as FIMES, to provide forum for dissemination of environmental information, through such means as seminars, workshops, and printed material.										
	2.7.3	Review and update awareness strategies for protected areas										

Anticipated Future Higher Level Activities (Year 3-5)	Anticipated Future Activities (Year 3-5)	Anticipated Future Results (Year 3-5)	Means of Verification	Anticipated Future Personnel & Resources	Estimated USAID Level of Effort (\$)	Estimated DONOR Level of Effort (\$)	Y02	Y03	Y04	Y05
	3.2.2 Promote initiatives such as management of intact ecosystems, fire control, ecotourism, marketing of sustainable extracted products									
3.3	Engage core nuclei stakeholders for future corridor development (workshops, lobbying (promoting))									
3.4	Economic analysis and policy level work and/or analysis to identify land uses that meet conservation objectives at nuclei level									
3.5	Awareness program designed and made operational									
	3.5.1 Develop tools to make stakeholders advocates									
	Conduct 2-3 4P workshops to develop communications strategies for the Pantanal-Taquan watershed and the Pantanal-Rio Negro basin, cerrado)			Haroldo Castro, LCU, Corridor coordinator						
	Disseminate materials and products from 4P workshops									
3.6	Information gathering, integration and analysis for core nuclei (new or targeted biological, social, legal and/or economic data) [Please note that 3.6 was removed and 3.7 became 3.6]									
	3.6.1 Identify trends in cattle and agriculture production along the corridor and its effects on conservation									
	3.6.2 Evaluate taxes and zoning policies to encourage conservation									

Anticipated Future Higher Level Activities (Year 3-5)	Anticipated Future Activities (Year 3-5)	Anticipated Future Results (Year 3-5)	Means of Verification	Anticipated Future Personnel & Resources	Estimated USAID Level of Effort (\$)	Estimated DONOR Level of Effort (\$)	Y 02	Y 03	Y 04
	3.6.3	Economic analysis to identify land uses that meet conservation objectives at nuclei level							
	3.6.4	Select indicator species and promote research on them for integration at the corridor level							

	Anticipated Future High Level Activities (Year 3-5)	Anticipated Future Activities (Year 3-5)	Anticipated Future Results (Year 3-5)	Means of Verification	Anticipated Future Personnel & Resources	Estimated USAID Level of Effort (\$)	Estimated DONOR Level of Effort (\$)	F Y 2	F Y 3	F Y 4			
4.1	Analyze biological, economic, and social data to identify priority areas for connection												
4.2	Design and promote policy interventions to alter economic decision-making environment across corridor.												
		4.2.1	Promote green policies to local, regional and federal officials										
		4.2.2	Stimulate implementation of green taxes (ICMS-ecologico)										
4.3	Define and monitor biological, social, and spatial indicators for change at the corridor level												
		4.3.1	Define information-rich indicators for corridor success										
			Analyze and apply information on population genetics for monitoring of corridor efficiency										
4.4	Promote changes in legislation incompatible with corridor goals is completed												
4.5	Develop market connections for alternative certified products/goods from the corridor												
		4.5.1	Develop market connections to increase organic production in agriculture and cattle										

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Anticipated Future Higher Level Activities (Year 3-5)	Anticipated Future Activities (Year 3-5)	Anticipated Future Results (Year 3-5)	Means of Verification	Anticipated Future Personnel & Resources	Estimated USAID Level of Effort (\$)	Estimated DONOR Level of Effort (\$)	FY 2002	FY 2003	FY 2004			
4.6 Information gathering, integration, and analysis for corridor activities (new or targeted biological, social, legal and/or economic data)												
	4.6.1 Collect biological, economic, and social data to identify priority areas for connection, monitor corridor success and build local capacity											
	Select and collect information on population genetics for monitoring of corridor efficiency											
	Conduct analysis of economic data											
	Conduct assessments of alternative policies and implement feedback information into policy design											
4.7 Awareness program designed and made operational at corridor level												

NARRATIVE SUPPLEMENT TO THE GUYANA YEAR 2 IMPLEMENTATION PLAN
 10/5/00

I. THREATS

The tropical forests of Guayana Shield are under threat of unsustainable exploitation through logging and mining and other economic development initiatives. In global terms, the nature of the threat to the forest is by no means unique; examples of destructive extractive activities in other tropical forests of the world are legion. Despite recognition of the regions importance to the international community, the natural and cultural diversity of the Guayana Shield has been facing increased pressure from ill-planned, unregulated development activities in the last decade. The current economic conditions in the countries of the Guayana Shield have contributed to the auctioning off of parts of their forests for relatively little return. Recent studies done by CI and WRI have demonstrated the lack of revenues generated for the governments and local populations and the great amount of damage done to the ecosystems and cultures of the region by current development practices. The integrity of the ecosystems of the region and the communities who rely on them for their survival are seriously threatened as a result of these practices.

BASIC THREATS ASSESSMENT: GUYANA

THREATS	ROOT CAUSES	EFFECTS	OPPORTUNITIES
Small Scale Gold Mining	Poverty Global demand for Gold	Mercury in rivers Fishkill High levels of mercury in fish Illness in people Erosion, Siltation, alteration of courses of rivers; Opening of airstrips and access points Population increase in remote areas Loss of traditional lifestyle in areas impacted by mining Overhunting and fishing in areas where miners congregate	- Monitor water quality - Monitor mining sites - Introduce Mercury recapture mechanisms - Enforcement - Baseline surveys/Aqua rap of river systems in Guyana - Communities impacted by polluted rivers could be strong lobby
Large Scale Gold Mining	Global Demand for Gold Poverty	Potential leaks of heavy metals and Cyanide into river systems Increased access to remote areas by road building and airstrip development Overhunting and fishing Illness	Develop best practices in mining Develop protected area in Kanuku Mountains Forge alliances with major companies/corporations involved in mining Assist with EIA's and actively participate in

			EI review process
Road construction – Guyana Road to Brazil/ lack of appropriate land-use planning/zoning to mitigate threat	Road built connecting the coast of Guyana to Brazil	Increased migration of Brazilians into Guyana Unplanned development and squatting along road to Brazil Overhunting in remote areas/reduced wildlife populations Access to timber and other resources increased Increase human population along road	Monitor development along road; lobby for a regional development strategy; Assist in regional planning and zoning along road Enforce border patrol in Guyana; Educate decision makers on impact of road development;
Timber harvesting	Global, national, and local demand for timber	Clearing of land for timber and plywood production, erosion, opening of roads and access to gold and other minerals. Roads allow access for population migration	Conservation Concession leased in Guyana Economic analysis of timber industry Develop alternative economic development projects Monitor state of the Forest using Satellite imagery and digital overflights
Wildlife Trade – overharvesting	Poverty Need for jobs Global demand for pet trade; insufficient support for enforcement mechanisms	Populations of key species reduced Change in ecosystem dynamics	Baseline population studies of harvested wildlife Monitoring of wildlife trade Increase enforcement capacity at national and local level Development of ecologically sound economic alternatives Conservation Awareness increased
Overfishing and hunting in communities	Population increase in site specific communities need for protein source; traditional use of fish poisons Sale of fish to outside sources	Wildlife populations reduced	Aquaculture/fishery development Investigation of potential for Introduction of alternative protein sources in areas severely impacted Education/Awareness Promote ecologically sound economic development projects

<p>Lack of sufficient protected areas system in Guyana</p>	<p>Young country minimal history of protection, Lack of awareness of importance of biodiversity conservation and impact of environmental degradation</p>	<p>Only 2 areas protected in the country. No protected area legislation</p>	<p>Participate in newly established Protected Areas Secretariate to identify and promote protected areas development; Work with communities, GOG, and donor agencies to identify financing for protected areas and capacity building; Participate on Kaieteur Board Conservation Awareness Campaign Environmental Education</p>
<p>Dependence of economy on natural resource extraction,</p>	<p>History of resource extraction as main source of development</p>	<p>Government actively seeks foreign investment in the mining and forest sectors.</p>	<p>Introduction of economic alternatives such as: Ecotourism, ecoenterprise and Conservation concessions Increased donor support for ecologically sound development and conservation initiatives</p>

Although CI cannot address all threats to biodiversity in Guyana, we are working on a number of those identified, either directly through project intervention, or indirectly through creating awareness with decision-makers, the general public, rural communities and other stakeholders. This tactic, coupled with an increase in our environmental education programs within the schools and through summer camps, has proven successful over the years.

In the case of the proposed southern Guyana Conservation Corridor, we have been working to mitigate all existing and potential threats. We have held discussions and negotiations with Vanessa Mining Corporation, the main large scale mining company active in the region, we have engaged local communities in eco-enterprise activities that focus on sustainable harvesting techniques and provide much needed income without ecosystem degradation. In the upcoming year, we expect to increase our enterprise activities, by directly marketing products on the internet and by identifying other products, such as cashew harvesting, peanuts, and developing cooperatives with existing enterprises such as the Rupununi Weavers Association, and examining the potential for increasing nature tourism to the area.

In addition, the idea of the conservation concession was developed in direct response to the threat of large scale timber concessions being purchased across the country. By analyzing the economic impact of logging and comparing it to conservation services, we have developed a model in which we can provide financing to Guyana equal or greater to what they would make from timber, just by leaving the forest standing. We have made it through the first phase of this by gaining the exploratory lease, and are hopeful to have a long-term lease granted within the next year.

Of course, long-term monitoring of the region is essential. It is with this in mind, that we are initiating digital overflights and vegetation mapping of the proposed corridor. The information gathered will result in detailed maps of the area identifying important ecosystems, areas of human habitation and use, and potential threats. Further, the socio-economic surveys already completed in Year 1, will continue to be followed up in year 2 through consultations, awareness initiatives and participatory traditional resource use mapping. The mapping exercise will provide data on specific human resource use and allow community participation in design and development of any protected area which is imperative if we are to be successful in the long-term.

Finally, throughout the project period and beyond we fully expect that additional threats and needs will be identified. As always, we are committed to either providing assistance directly or creating alliances and partnerships with other institutions to reach our conservation goals.

2. Co-financing for Year 2 of Guyana Corridor Planning and Implementation Program

Through CI's Tropical Wilderness Protection Fund (TWPF) and the support of the W. Alton Jones Foundation and others, CI has been able to match dollar for dollar USAID's support for the conservation corridor in Guyana. In Year 2 the TWPF will provide over 400,000 dollars to support conservation projects such as the conservation concession in the proposed corridor region, and traditional resource use mapping in the Kanuku Mountains. The W.Alton Jones Foundation has continued its support by providing 150,000 to cover most of CI-Guyana's office and staffing needs.

3. Description of Corridor Activities funded with support from donors other than USAID.

The TWPF will support several corridor building activities in Guyana – On of our most most important initiatives is the recently granted exploratory timber concession in the Upper Essequibo Region. In September 2000, The Government of Guyana (GOG) granted an exploratory lease to Conservation International to evaluate the potential of a forested area in southern Guyana, to become the world's first "Conservation Concession." This Concession will enable CI to preserve a segment of Guyana's forests in its natural state and compensate the country for the environmental services it provides to the world by leaving this area of forest intact. A Conservation Concession is similar to a standard forestry concession, or Timber Sales Agreement (TSA), in that it follows the same legal model regulated by the GFC. The terms of the Concession, its size, fees, and stewardship, are all the same as in a traditional logging Concession - the difference is that the forests within a Conservation Concession will be maintained in a pristine state. At the same time, it will provide environmental services to the global community, such as protecting biological diversity and helping to curb global warming.

Further, a Conservation Concession will significantly catalyse Guyana's economic development. Concession fees will be paid to the GFC in accordance with the value of the standing timber within the Concession. According to the proposed agreement, CI will also invest an amount equivalent to, or greater than, what would have accrued from logging.

Thankfully the GOG waived the need for an environmental impact assessment, however, a social impact assessment is of utmost importance and will be conducted as a preliminary step towards establishing the Conservation Concession. During the exploratory period, stakeholder meetings will be held to examine Amerindian issues associated with the establishment of a Conservation Concession. These issues are a priority, and will be integrated directly into the Concession. In addition, we will be working with Amerindian communities to continue existing non-destructive traditional land uses in the area while providing employment in the management of the Concession.

In addition to the conservation concession, the TWPF will support the development of eco-enterprise initiatives with communities living in and around the corridor area, promote environmental education and awareness at the local and regional levels, as well as support detailed mapping of traditional resource use by communities living in the Kanuku Mountains. Knowing exactly what the area is that the communities consider traditional or utilize is of imperative to the design of a protected area. The participatory process being developed to carry out this initiative will rely heavily on the input and design by community members themselves, and ensure their participation in all levels of protected area development and management.

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Program: Guyana

Objective 1:

Build biodiversity corridor planning and implementation support framework: In Guyana, we have determined that the first objective and its activities are critical first steps in the corridor process, in particular the gathering of baseline data, the establishment of a corridor information system and assembling the corridor project team

Anticipated Five-year Benchmarks:

- Corridor planning unit in place
- Common agenda established among
- Consultative process completed with key stakeholders
- Memos of understanding signed among key stakeholders
- Preliminary corridor assessment completed
- Corridor-wide threats assessment completed
- Stakeholder analyses, conflict analyses, functional analyses completed
- Information Infrastructure in place
- Data integrated
- Information sharing mechanism developed
- Training provided
- Communication strategy developed and functioning
- Communication campaigns aimed at ?? Audience
- Plan for long-term financial mechanism established
- Funding for corridor coordinated by donors
- Monitoring and evaluation procedures established
- Training provided
- Evaluation, lessons and recommendations communicated to corridor project partners and decision-makers
- Annual learning forum conducted

Year 2 Objective 1 level of effort:

USAID	263,399
Wilderness Protection Fund	190,000
CI-Intercom	0
CI-Guyana/CI-Wash	0
Total for Objective 1	453,399

Year 2 Higher Level Activities	Status/Background at close of FY00	Year 2 Activities	Year 2 Results	Means of Verification	Year 1 Personnel & Resources	USAID Year 2 Level of Effort (\$)	Tropical Wilderness Protection Fund Year 2 Level of Effort (\$)	CI-Intercom Year 2 Level of Effort (\$)	CI-Guyana/CI-Wash Year 2 Level of Effort (\$)	O	N	D	E	F	M	A	M	J	J	A	S	
1 1 Biodiversity corridor assessment completed (baseline legal, biological, economic and social assessments/data gathered)																						
	1 1 1 MOUs with the Smithsonian Institution and CSBD have been signed and access granted to existing data	MOUs will be sought with The University of Utrecht, the Guyana Forestry Commission and the University of Guyana The DC team will work on accessing Utrecht and Smithsonian data and specify fields of database to be created The Guyana-based team will work on accessing GFC and University of Guyana data	MOUs obtained by November 2000	MOUs	Personnel Activity Leader Corridor Manager Bernard DeSouza, CI-WA Cons Biology Staff Resources Staff time	0				*	*											
	1 1 2 FY01 New Activity	Databasing of herbarium specimens at University of Guyana by herbarium staff for inclusion in corridor information system All information in corridor information system will be utilized to make decisions regarding important areas for biodiversity conservation, protected area boundaries, zoning, and areas in need of further research	All biological data below the fourth parallel compiled by March 2001	Database	Personnel Activity Leader Corridor Manager Bernard DeSouza University of Guyana Staff Resources Computer (3,000), Herbarium Supplies, travel Total=7,600	9,424				*	*	*	*	*	*							

Year 2 Higher Level Activities	Status/Background at close of FY00	Year 2/Activities	Year 2/Results	Means of Verification	Year 1 Personnel Resources	USAID Year 2 Level of Effort (\$)	Tropical Wilderness Protection Fund Year 2 Level of Effort (\$)	CI Intercom Year 2 Level of Effort (\$)	CI Guyana/CI Wash Year 2 Level of Effort (\$)	O	M	D	F	M	A	M	J	J	A	S	
	1 1 3	FY01 New Activity	Databasing of all historic biological collections available at the Smithsonian Institution for the corridor region and other areas below the 4th parallel in Guyana. As part of its MOU with CI, the Smithsonian will hire a database specialist to input the data into the database for use in the corridor information system.	All biological data compiled by January, 2001	Database	Personnel: Activity Leader, RAP Director - Lianne Alonso, Database specialist at Smithsonian Institution in Washington, D.C.	5,902			*	*	*									
	1 1 4	FY01 New Activity	All relevant specimen data housed at the Guyana Forestry Commission will be databased for input into Corridor Information system by a University of Guyana database expert or intern. Process to be determined in MOU with GFC that Corridor Manager will be developing as stated in 1 1 1.	All data compiled by March 2001	Database	Personnel Activity Leader Corridor Manager Bernard DeSouza, database specialist or intern at University of Guyana or Guyana Forestry Commission	1,240			*	*	*	*	*							
	1 1 5	FY01 New Activity	Acquire biological information on Corridor region from University of Utrecht in the Netherlands. As stated in 1 1 1. An MOU with Utrecht University in the Netherlands will be developed between CI and Utrecht. Director of RAP program at CI in Washington will identify relevant data and personnel necessary to database information for inclusion in Corridor Information System. Trip to Utrecht to collect data included.	All data compiled by February 2001	database	Personnel Activity Leader RAP Director - Lianne Alonso, University of Utrecht	5,349			*	*	*	*	*							
	1 1 6	FY01 New Activity	Landscape Ecological assessment will be completed for corridor region utilizing digital videography and overflights of the corridor. Satellite imagery will be purchased, aerial videography and field data for ground truthing of image classification will be acquired. Appropriate vegetation classification scheme useful for mapping ecological communities and assessing biological priorities will be developed. CI Washington GIS specialist and videography specialists will carry out project. A Forest Ecologist with experience in the Guianas will be identified to participate in overflights and groundtruthing.	Landcover and vegetation data processed by September 2001	landcover and vegetation data and maps produced	Personnel DC GIS Specialist, Videography specialist, CIG staff, Forest Ecologist Resources - Staff time, International travel, Use of GIS equipment	45,940			*	*	*	*	*	*	*	*	*	*	*	*

Year 2 Higher Level Activities	Status/Background (Close of FY00)	Year 2 Activities	Year 2 Results	Means of Verification	Year 2 Personnel Resources	USAID Year 2 Level of Effort (\$)	Tropical Wilderness Protection Fund Year 2 Level of Effort (\$)	CI Intercom Year 2 Level of Effort (\$)	CI Guyana/CI Wash Year 2 Level of Effort (\$)	Q	J	F	M	A	M	J	J	A	S
1 1 7	The initial socio-economic survey of communities surrounding Kanuku Mountains completed	CIG will distribute Socio-Economic Survey Report to communities for review through Touthau Council/Leadership Meeting representing all communities in the Kanuku Mountain Region Gaps in data will be identified through a participatory process involving communities Gaps will be filled during traditional resource-use mapping project and additional community consultation and awareness activities	Socioeconomic survey results reviewed by November 2000	Survey data	Personnel Activity Leader Guyana Program Director - Neville Waldron, CI-G Staff and community representatives, Guyanese Anthropologist Resources: Staff time, copies of report	12,003													
1 1 8	FY01 New Activity	A Resource-use mapping specialist will be identified and hired CI-G will facilitate a traditional use mapping process in the communities surrounding the Kanuku Mountains If any, gaps in the socio-economic data will be filled during the mapping process	Resource-use mapping specialist hired by December 2000 Initial communities identified and mapping process begun by March 2001	Traditional Resource use-maps completed for identified communities by October 2001	Personnel Activity Leaders Director, Guianas Program - Lisa Famolare and Guyana Program Director - Neville Waldron, CI-G staff, Resource-use mapping specialist, community representatives	0	150,000												
1 1 9	FY01 New Activity	CIG will engage the Government of Guyana and NRMP in the process of acquiring map of titled Amerindian lands Failing acquisition from the government, examine alternative options of acquiring titled land information	Government and NRMP approached by November 2000	Map of titled Amerindian Lands	Personnel Activity Leader Comdor Manager - Bernard DeSouza, CI-G Staff Resources Staff time	0													
1 1 10	Economic analysis of timber industry complete Awaiting official report and analysis	Final report on the economic analysis of timber industry in Guyana will be acquired by CI Washington Guianas program staff from CI Washington Chief Resource Economist to ensure availability to CI-G Staff	Report submitted to CI-G by November, 2000	Report available to CI-G Staff	Personnel Activity Leader CI Washington Chief Economist - Richard Rice Resources Staff time	0													

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Year 2 Higher Level Activities	Status/Background of FY00	Year 2 Activities	Year 2 Results	Means of Verification	Year 1 Personnel Resources	USAID Year 2 Level of Effort (F)	Tropical Wilderness Protection Fund Year 2 Level of Effort (G)	CI Intercom Year 2 Level of Effort (S)	CI-Guyana/CI Wash Year 2 Level of Effort (G)	O	N	D	M	F	J	A	S
	1 1 11	Year 1 Workshop was held in August FY00	In August/September Year 2 of the project, CI-Guyana and CI - Washington Staff members will convene a Year 2 Review meeting and Year 3 Planning in Guyana to review all activities and results and to determine the continued viability of the corridor concept and adapt the strategy and/or planned activities if necessary (Kanuku Mountain and Upper Essequibo Regions)	Meeting convened by September 2001 Planned activities developed for Year 3 of the project	FY02 Implementation Plan (completed and approved)												
1 2		Integrated Corridor Information System designed and operational															
	1 2 1	Corridor Information System design outstanding	CI-WA GIS Specialist will develop database format which accommodates integration of all databasing activities of corridor projects. The format will be disseminated to Corridor participants for input of data. New data will continue to be gathered and input into database by CIG database manager	Database template completed by December 2000	Database template, initial information input into database template		33,412										
1 3		Corridor learning system/adaptive management in place and operational															
	1 3 1	FY01 New Activity	CI-Guyana Corridor Manager will attend an M&E training in CI's Strategic Management Approach in Washington, D C in October 2000	Corridor Manager trained in M&E by December 2000	Monitoring plan finalized by February 2001		2,232										
	1 3 2	FY01 New Activity	Corridor Manager, CI-Guyana Projects Manager to attend Corridor Planning meeting, Florida - Spring 2001. This meeting will focus on sharing information on global corridor projects, and continued training on project cycle management and M&E	Corridor Manager and Projects Manager attend corridor meeting	Meeting attended		3,224										
	1 3 3	FY01 New Activity	CIG Corridor Manager, Corridor Technical Team, and CI Washington M&E Staff will develop a monitoring plan for Guyana Corridor. Initial work will be developed during training sessions identified in Activities 1 3 1 And 1 3 2	M&E Plan developed and disseminated by January 2001	Guidelines		0	0	0	0							

Year 2 Higher Level Activities	Status/Background at Close of FY00	Year 2 Activities	Year 2 Results	Means of Verification	Year 1 Personnel Resources	USAID Year 2 Level of Effort (\$)	Tropical Wildl./Wildl. Protection Fund Year 2 Level of Effort (\$)	CI-Intercom Year 2 Level of Effort (\$)	CI-Guyana/CI-Wash Year 2 Level of Effort (\$)	O	N	D	J	F	M	A	M	J	J	A	S
1.4 Participatory planning and implementation framework and process established																					
	1.4.1 FY01 New Activity	October 9-14 CI-G will participate in a Protected Areas development Training Workshop. Training will include an introduction to protected areas, Participatory Rural Appraisal processes, and steps to establishing protected areas. Other topics to be covered are, planning, zoning, community consultation and participation, sustainable funding strategies and management issues. During the final day of the training, CI-G will finalize a strategy for engaging the relevant stakeholders (including GOG, Communities, and regional administration).	Training of CI Staff completed by November 2000. Consultation strategy completed by December 2000.	Training TOR and Workshop notes. Internal consultation strategy document.	Personnel: Activity Leader, Guianas Program Director - Lisa Famolare, CI-G Staff, Park Plan Gerry Patten, CI Washington Corridor Staff. Resources: Staff Time.	13,502															
	1.4.2 FY01 New Activity	CI-G will hold consultations with stakeholders (such as GOG, communities, regional authorities, others) to develop a participatory planning strategy/approach with stakeholders to promote the creation of a protected area of the Kanuku Mountain region. This strategy will focus on generating support for biodiversity conservation, community resource management, and protected areas.	Consultations with all stakeholders (community and government complete). 5 meetings with community leaders and regional authorities in region 9, continued consultation with GOG and other relevant stakeholders, NGO's etc.	Minutes of consultation meetings and traditional resource mapping process scheduled.	Personnel: Activity Leader, Guyana Program Director - Neville Waldron, CI Guyana staff. Resources: Domestic travel, field gear, survey materials, printing costs.	57,040				*	*	*	*	*	*	*	*	*	*	*	*
	1.4.3 Initial meeting with Vanessa Mining held in Year 1	Pending a decision from Vanessa regarding where they plan to pursue a Concession, CI-G will develop an appropriate strategy to address potential conflicting interests (if necessary).	If mining is to take place in Kanukus by Vanessa Mining Company, meetings will be held between CI-G, CI Center for Environmental Leadership in Business (CELB), and Vanessa Mining to discuss potential mitigation etc.	Meeting minutes, strategy document.	Personnel: Activity Leader, Corridor Manager Bernard DeSouza, CI-G Staff and Center For Environmental Leadership in Business. Resources: Staff time, travel.	0				*	*	*	*	*	*	*	*	*	*	*	*

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Year 2 High Level Activities	Status/Background at close of FY00	Year 2 Activities	Year 2 Results	Means of Verification	Year 1 Personnel Resources	USAID Year 2 Level of Effort (\$)	Tropical Wilderness Protection Fund Year 2 Level of Effort (\$)	CI Intercom Year 2 Level of Effort (\$)	CI Guyana/CI Wash Year 2 Level of Effort (\$)	O	N	D	F	M	A	J	J	A	S	
1 5 Corridor project team operational	1 5 1 A Corridor Coordinator has been hired in Year 1	CI's Corridor Manager and CI-DC Agreement Management Team will oversee implementation of corridor project. Management will include site visits to field projects on a regular basis to ensure projects are accomplishing intended results and are running smoothly. Further, Corridor Manager will oversee the development of progress reports, budgets and expenditures related to corridor project.	Site visits and progress reports	Progress reports completed, trip reports	Personnel: Corridor Manager	64,025							*	*	*	*	*	*	*	
1 6 Research long-term financial mechanisms	1 6 1 A financial mechanism to sustain the concession and the Kanuku Mountains Protected Area still to be developed	CI's Conservation Finance Specialist will conduct an analysis of long-term financial mechanisms for protected areas and conservation concessions (Kanuku Mountain and Upper Essequibo Regions)	Analysis completed and recommendations provided by December 2000	Report	Personnel: Activity Leader: Guianas Program Director, Lisa Famolare, CI-Washington's Conservation Finance Specialist - Legal Counsel - Guyana USAID - Guyana Mission Director, U S Embassy Economist Resources: Staff time International travel	0	\$40,000												*	
1 7 Awareness Program established																				
Total						263,399	190,000	0	0											

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	Anticipated Future High Level Activities (Year 3-5)			Anticipated Future Activities (Year 3-5)	Anticipated Future Results (Year 3-5)	Means of Verification	Anticipated Future Personnel & Resources	Estimated USAID Level of Effort (\$)	Estimated Tropical Wilderness Protection Fund Level of Effort (\$)	GL Intercom Level of Effort (\$)	Estimated G. Guyana/CI/World Level of Effort (\$)					
11	Biodiversity corridor assessment completed (baseline legal, biological, economic and social assessments/data gathered)															
12	Integrated comdor information system designed and operational															
13	Comdor learning system/adaptive management in place and operational															
		132		Develop an adaptive management plan for the comdor project	Plan developed and disseminated by end of Year 3	Comdor Monitoring and Evaluation Plan										
		133		Develop a strategy for evaluation based on performance indicators	Performance indicators and evaluation strategy developed by end of Year 3	Comdor Monitoring and Evaluation Plan										
14	Participatory planning and implementation framework and process established															
15	Corridor project team operational															
16	Research long-term financial mechanisms															
17	Awareness Program established															

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Program: Guyana

Objective 2:

Protected areas created, strengthened and extended:

Anticipated Five-year Benchmarks:

- Park demarcated
- Park infrastructure in place
- Park staff trained
- Enforcement in place

Year 2 Objective 2 level of effort:

USAID	44,240
Tropical Wilderness Protection Fund	105,000
CI-Intercom	0
CI-Guyana/CI-Wash	0
Total for Objective 2	149,240

Year 2 Higher Level Activities	Status/Background at close of FY00	Year 2 Activities	Year 2 Results	Means of Verification	Year 2 Personnel & Resources	USAID Year 2 Level of Effort (\$)	Tropical Wilderness Protection Fund Year 2 Level of Effort (\$)	CI-Intercom Year 2 Level of Effort (\$)	CI-Guyana/CI-Wash Year 2 Level of Effort (\$)	O	N	D	J	F	M	A	M	J	J	A	S
2.1 New protected areas (protected areas, private reserves, indigenous reserves/territories) are created																					
	2.1.1	A complete proposal has been drafted but submission to the GOG is on-hold until the political situation is favorable.	CIG to write a letter to GOG reiterating commitment to support the development of a Kanuku Mountain Protected Area. Letter to be followed-up with a visit from CI Guyana Director Neville Waldron (Kanuku Mountain Region). Additional presentations and discussions will be held with relevant government and non-government agencies in Georgetown such as the EPA, Protected Areas Secretariate, Office of the President, Guyana First, members of the opposition party, etc.	Letter sent by November 2000, presentations scheduled, meetings scheduled	Memo and letter to Office of the President, minutes of meetings	Personnel: Activity Leader Comdor Manager - Bernard DeSouza, CI-Guyana corridor team Resources: Staff time	3,720														
	2.1.2	The application for an exploratory lease (conservation concession) has been submitted Application fees submitted to GFC	CI Chief Resource Economist and relevant staff will conduct economic valuation of the timber within the proposed concession area The data gathered will be used to negotiate long-term lease fees	Valuation completed by February 2001	Report on Valuation of timber in exploratory lease area	Personnel: Activity Leader, Chief Resource Economist - Richard Rice Consultant - Resource Economist Manager, Tropical Wilderness Protection Fund Legal Counsel - U.S., Legal Counsel, Guyana Resources Staff time, international and domestic travel, application fee	0	20,000		*	*	*	*								
	2.1.3	New FY01 Activity	CIG Director and CI Washington Chief Resource Economist will continue negotiations for long-term exploratory lease of conservation concession in the Upper Essiquibo region with the Government	Establishment of long-term conservation concession	Timber Sales Agreement	Personnel: Activity Leader Chief Resource Economist - Richard Rice	0	15,000		*	*	*	*	*							

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Year 2 Higher Level Activities	Status/Background at close of FY00	Year 2 Activities	Year 2 Results	Means of Verification	Year 2 Personnel & Resources	USAID Year 2 Level of Effort (\$)	Tropical Wilderness Protection Fund Year 2 Level of Effort (\$)	CI - Intercom Year 2 Level of Effort (\$)	CI - Guyana/CI - Wash Year 2 Level of Effort (\$)	O	N	D	J	F	M	A	M	J	J	A	S
2.2 Protected area level infrastructure in place (park guards, posts, etc.)																					
2.3 Strengthen or extend existing protected areas																					
2.4 Develop and implement management plans for new and existing protected areas																					
	2.4.1	We are currently developing the management plan for the Concession area.	CIG staff, CI Washington Chief Resource Economist and relevant CI staff will develop a Management Plan for conservation concession. (Upper Essequibo Region)	Plan drafted and submitted to Guyana Forestry Commission by June 2001	Management Plan	Personnel: Activity Leader: CI Chief Resource Economist - Richard Rice, relevant economist staff, CIG Director, CI Guianas Regional Program Director, Guyanese Forestry Consultant Resources. Staff time, international and domestic travel mapping/GIS equipment use	0	50,000				*	*	*	*	*	*	*	*	*	*
2.5 Capacity-building at the level of new and existing protected areas																					
2.6 Information gathering, integration and analysis for protected area creation and strengthening (new or targeted biological, social, legal and/or economic data)																					
	2.6.1	FY01 New Activity	CIG, Resource Economist and Guyanese Anthropologist to conduct social impact assessment of exploratory lease area. Relevant communities living near the concession area will be identified and consultations will be held with communities. Findings and recommendations will be included in the management plan	Assessment completed and recommendations included in management plan to be drafted by September 2001	Report and Recommendations	Personnel: Chief Resource Economist, CIG Director; CIG Corridor Manager, Guyanese Anthropologist Resources: Staff time; travel, field supplies	0	20,000				*	*	*	*	*	*	*	*	*	*

Year 2 Higher Level Activities	Status/Background at close of FY01	Year 2 Activities	Year 2 Results	Means of Verification	Year Personnel & Resources	USAID Year 2 Level of Effort (\$)	Tropical Wilderness Protection Fund Year 2 Level of Effort (\$)	CI Intercom Year 2 Level of Effort (\$)	CI Guyana/CI Wash Year 2 Level of Effort (\$)	O	N	D	J	F	M	A	M	J	J	A	S
	2 6.2	FY01 New Activity	Initial scoping exercise to identify location for rapid biological assessments, access to remote areas, and potential participants. The initial assessments will be completed in either February or August of 2000. RAPs will be scheduled for years 3-5	Assessment/scoping trip completed by September 2001	Report and Recommendations	Personnel: RAP Director; CIG staff; University of Guyana; Smithsonian Institution; communities	22,490														
2 7		Develop and implement awareness campaign for new or existing protected areas																			
	2 7.1	FY01 New Activity	At the request of communities in Kanuku Mountain Region, Protected Areas Training workshops to be held in each of the communities in Region 9 by CIG. This activity will follow activity 1.4.1. The goal of this training is to introduce the concept of Protected Areas to the communities so that they can participate meaningfully in subsequent discussions regarding the creation of a Protected Area in the Kanuku Mountain Region.	Training workshops and discussions held in Region 9 January-September 2001	Minutes of meetings and report	Personnel: Activity Leader: Guyana Program Manager Sandy Gniffith and Corridor Manager Bernard DeSouza, CIG Staff and CIG Corridor and Communications Staff	18,030							*	*	*	*	*	*	*	*
Total:						44,240	105,000	0	0												

Anticipated Future Higher Level Activities (year 3-5)	Anticipated Future Results (year 3-5)	Anticipated Future Activities (year 3-5)	Anticipated Future Results (year 3-5)	Means of Verification	Anticipated Future Personnel & Resources	Estimated USAID Level of Effort (\$)	Estimated Tropical Wilderness Protection Fund Level of Effort (\$)	Estimated CI Intercom Level of Effort (\$)	Estimated CI Guyana/CI Wash Level of Effort (\$)	F Y 0 2	F Y 0 3	F Y 0 4
2 1		New protected areas (protected areas, private reserves, indigenous reserves/terrones) are created										
	2 1 1	Continue data gathering, consultations, education and awareness activities, and negotiations with the communities surrounding the Kanuku Mountain region and relevant government agencies and other stakeholders	Memoranda of Understanding recognizing the proposed park boundaries and resource use rights with local communities by the end of Year 2.		Personnel: CIG Staff, CI-Washington Director, Resource Economics Program, Team of Guyanese Anthropologist and indigenous representatives (to be identified) Resources: International and domestic travel, field gear, survey materials, printing costs							

Anticipated Future Higher Level Activities (Year 1-5)			Anticipated Future Activities (Year 1-5)	Anticipated Future Results (Year 1-3)	Means of Verification	Anticipated Future Personnel & Resources	Estimated USAID Level of Effort (\$)	Estimated Tropical Wilderness Protection Fund Level of Effort (\$)	Estimated Gf Guyana/CI Intercom Level of Effort (\$)	Estimated Gf Guyana/CI Wash Level of Effort (\$)	F Y 0 2	F Y 0 3	F Y 0 4
	2.1.2		Using the biological, socioeconomic, traditional resource use mapping, landcover data, and consultation results collected in Years 1-2, submit a formal proposal for the establishment of a Kanuku Mountains protected area to the Government of Guyana.	Proposal submitted by end of Year 3.	Proposal	Personnel: CI-Guyana Staff, U.S. Technical team Resources: Staff time, International travel, workshop, publication and printing costs							
2.2	Protected area level infrastructure in place (park guards, posts, etc)												
	2.2.1		Invest in infrastructure for the Kanuku protected area and Essequibo conservation concession including guard and monitoring staff trained.										
2.3	Strengthen or extend existing protected areas												
	2.3.1		Assist the Government of Guyana in the legal establishment of the Kanuku protected area (launching, legislation, boundary demarcation, etc)										
2.4	Develop and implement management plans for new and existing protected areas												
	2.4.1		Develop management plan for Kanuku protected area										
	2.4.2		Assist the Government of Guyana in the implementation of the Kanuku protected area (technical assistance).										
2.5	Capacity-building at the level of new and existing protected areas												
	2.5.1		Provide training for park management operations										

Anticipated Future Higher Level Activities (year 3-5)	Anticipated Future Activities (year 3-5)	Anticipated Future Results (year 3-5)	Means of Verification	Anticipated Future Personnel & Resources	Estimated USAID Level of Effort (\$)	Estimated Tropical Wilderness Protection Fund Level of Effort (\$)	Estimated CI-Wash Intercom Level of Effort (\$)	Estimated CI-Guyana/Wash Level of Effort (\$)	FY 02	FY 03	FY 04
2.6 Information gathering, integration and analysis for protected area creation and strengthening (new or targeted biological, social, legal and/or economic data)											
	2.6.1	Conduct rapid biological assessment of the Kanuku Mountain region.	Biological assessment completed and results recorded, analyzed and disseminated by end of Year 2	Personnel: Director, Rapid assessment Program (RAP) RAP Team Leader, RAP Team Assistant, Tribal/Community Coordinator, Guyana Project Coordinator, Director, Guianas Regional Program Resources. Staff time, international and domestic travel, field supplies, aerial overflights, publication and printing							
	2.6.2	Continue traditional resource-use mapping exercise for the Kanuku Mountain region.	Community mapping exercise completed and maps published and disseminated by the end of Year 3.	Personnel CI-Washington Director, Resource Economics Program, Team of Guyanese Anthropologist and indigenous representatives (to be identified)							
2.7 Develop and implement awareness campaign for new or existing protected areas											
	2.7.1	Continue implementation of community awareness and education strategy developed in Year 2									

Year 2 Higher Level Activities	Status/Background	Year 2 Activities	Year 2 Results	Means of Verification	Year 2 Personnel & Resources	USAID Year 2 Level of Effort (\$)	World Bank/Protection Fund Year 2 Level of Effort (\$)	CI/Intercom Year 2 Level of Effort (\$)	CI Guyana/CI Wash Year 2 Level of Effort (\$)	D	N	D	E	M	A	M	A	S		
	3.2.3	New FY01 Activity	In conjunction with community consultations and resource mapping activities, CIG Conservation Enterprise Expert and Conservation Enterprise Coordinator will conduct needs assessments/resource analysis in communities surrounding Kanuku Mountains for conservation enterprise activities. Identify additional communities with desire/potential for conservation enterprise activities. Identify entrepreneurs/group managers to attend training workshop on business development to be held in region 9	Potential conservation enterprise activities identified in additional communities identified in consultation process. Preliminary plan developed for initiating enterprise activities in 3 additional communities by April 2001.	Report on target community's conservation enterprise potential. Completed business plans for new enterprise activities	Personnel: CIG Director, Conservation Enterprise Program; CIG Conservation Enterprise Expert and Coordinator; CIG Director.	0	5,000												
	3.2.4	New FY01 Activity	CIG Conservation Enterprise Expert and Conservation Enterprise Coordinator will explore other long-term funding sources for the development of conservation enterprise initiatives in Region 9.	List of possible funding opportunities developed by December 2000	Report on available funding resources	Personnel: Activity Leader CIG Conservation Enterprise Expert - Susan Stone; CIG Director, Conservation Enterprise Program, CIG Enterprise Coordinator	1,550													
	3.2.5	New FY01 Activity	CIG to conduct one 2 day workshop for existing enterprises and potential enterprises in Region 9 offering training in conservation enterprise concepts, business formation, market development, resource management, cash management, and community participation, and business associations. Evaluations designed to indicate level of awareness of business issues resulting from workshop, and further training needs	Awareness of Conservation Enterprise principles and basic business concepts raised for existing and potential entrepreneurs/group managers in Region 9. Additional training needs identified through analysis of evaluations by February 2001. Meetings arranged with 2 existing enterprises to develop goals and objectives for further development, and business plans to achieve identified goals by April 2001.	Workshops conducted. Report on results completed. Recommendations for further training developed. Meetings with enterprises held and business plans completed	Personnel: Activity Leader, CIG Conservation Enterprise Expert; CIG Conservation Enterprise Program, CIG Director; Corridor Manager	6,870	10,000												
3.3		Engage core nuclear stakeholders for future corridor development (workshops, lobbying (promoting))																		
3.4		Economic analysis and policy level work and/or analysis to identify land uses that meet conservation objectives at nuclear level																		

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Year 2 Higher Level Activities	Status/Background at close of FY00	Year 2 Activities	Year 2 Results	Means of Verification	Year 2 Personnel & Resources	USAID Year 2 Level of Effort (\$)	Tropical Wilderness Protection Fund Year 2 Level of Effort (\$)	CI Intercom Year 2 Level of Effort (\$)	Guyana/G Wash Year 2 Level of Effort (\$)	O	N	D	L	F	M	A	M	J	J	A	S
3.5 Awareness program designed and made operational																					
REGIONAL-LEVEL AWARENESS ACTIVITIES																					
	3.5.1 FY01 New Activity	Strategizing meeting to be held in Georgetown to develop approach to rural environmental education and community awareness raising.	Meeting held by November 2000	Strategy document	Personnel: CI-G Education/Program Manager - Sandy Griffith; CI-G communications Coordinator and Enterprise development staff, CI Washington International Communications specialist, two regional representatives, and a community education expert, Ministry of Education Resources travel, accommodation, per diem for regional reps	5,431															
	3.5.2 FY01 New Activity	Based on the strategy developed in 1.7.1, appropriate educational and awareness materials will be developed for hinterland audience. Possible materials to be developed could include: environmental coloring book, comic book, story boards, and a mobile biodiversity display. The goals of the materials will be to raise awareness of biodiversity issues, the benefits of protected areas and sustainable enterprise.	Materials developed by March 2001	education and awareness material	Personnel: CI-G Education Coordinator/Program Manager Sandy Griffith, CI-G Communications Coordinator and Enterprise Staff, International Communications Resources	0	\$15,000			*	*	*	*	*							
	3.5.3 Teacher training	Conduct two environmental educational training workshops in region 9 (Annai and Lethem) to: 1) introduce educational materials to the communities, 2) develop a program of outreach using teachers, and 3) develop a monitoring plan	Conduct two Environmental education workshops focusing on biodiversity conservation by September 2001 (Annai, Lethem)	Attendance List; seminar reports	Personnel: CI-G Education Coordinator and Local Education professionals Resources Materials (as per 1.7.2), Staff Time, Travel, Accommodation, per-diem	16,785				*	*	*	*	*	*	*	*	*	*	*	*

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Year 2 Higher Level Activities	Status/Background and (start of FY00)	Year 2 Activities	Year 2 Results	Means of Verification	Year 2 Personnel & Resources	USAID Year 2 Level of Effort (\$)	Tropical Wilderness Protection Fund Year 2 Level of Effort (\$)	CI Intercom Year 2 Level of Effort (\$)	CI Guyana/WASH Year 2 Level of Effort (\$)	O	N	D	J	F	M	A	M	J	J	A	S		
	3.5.4	FY01 New Activity	Establish a resource center at CI-Guyana's office which can be accessed by students and members of the general public to broaden their understanding of environmental issues beyond sanitation, and to include biodiversity conservation. This resource center will house materials relevant to conservation of biodiversity. It will also be accessed by CI-Guyana staff, government agencies and NGO's and utilized as a resource for research on international conservation issues and projects.	Resource-Center opened to public by February 2001	List of publications procured	Personnel: Activity Leader: CI-G Education Coordinator/Program Manager: Sandy Griffith Resources Written Materials, Videos, Publications, Bookshelves, Journal Subscriptions etc.	4,960																
	3.5.5	Summer Camp in Georgetown held in FY00 - not included in original workplan	Two Summer Camp Sessions will be held (one in Region 9 and one Region 4) The Summer Camp program will be in keeping with the curriculum established in 1.7.1. Possible activities could include "Make you own Balata Figure"(which demonstrates eco-product development), skits focusing on biodiversity, songs and poems, a final "challenge project" (FY00 challenge product asked the kids to write letters about the importance of biodiversity to the President of Guyana), feature articles for newspapers, lectures for the school assembly, etc.	Two separate camp sessions held by September 2001 with approximately 35-40 students enrolled	Attendance Lists	Personnel: Activity Leader CI-G Education Coordinator/Program Manager - Sandy Griffith, CI-G Staff, Regional Educator Resources. Travel, Accommodations, Miscellaneous educational materials, School supplies etc	16,213																
NATIONAL-LEVEL AWARENESS ACTIVITIES																							
	3.5.6	FY01 New Activity	CI-G will host the Environmental Biodiversity Reporting Award for FY01 This award is made to the three top journalists who write the best article on biodiversity in Guyana in the local media	Biodiversity Reporting Award held by October 2000	Award granted, News Releases	Personnel: Activity Leader CI-G Communications Coordinator: Sandra Seeraj, CI-WA Vice-Pres of Intercom, CI-WA Media Manager	0	\$4,000															

Year 2 Higher Level Activities	Year 2 Status/Background at close of FY01	Year 2 Activities	Year 2 Results	Means of Verification	Year 2 Personnel & Resources	USAID Year 2 Level of Effort (\$)	Global Wildlife Protection Fund Year 2 Level of Effort (\$)	CI Intercom Year 2 Level of Effort (\$)	CI Guyana/C Wash Year 2 Level of Effort (\$)	C	N	D	J	F	M	A	M	J	A	S	
	3.5.7	FY01 New Activity	CIG and CI Washington International Communications Program and the International Federation of Environmental Journalists will host a One-day Biodiversity Training Workshop will train 15-20 local journalists in biodiversity reporting. A field trip for journalists and reception for participating journalists will also be held	Biodiversity training held and attended by 15-20 people by October 2000	Attendance list; newspaper articles	Personnel: Activity Leader: CI-G Communications Coordinator - Sandra Seeraj, CI-WA Vice-Pres of Intercom, CI-WA Media Manager, IFEJ representatives	0	\$5,000													
	3.5.8	FY01 New Activity	CIG will launch a media campaign announcing the Conservation Concession Exploratory granted in September 2000. This event will announce the signing of the exploratory Conservation Concession exploratory lease granted to CI-G and includes: signing ceremony, photo opportunity, a media manager's brunch, interviews, and the actual announcement event. The goal of this event is to reach a national audience with this news. International press will also be involved - specific articles will be published in the New York Times Science Section, and the BBC News	Media Campaign completed by November 2000	Press releases, articles, video coverage by local TV stations	Personnel: Activity Leader: CI-G Communications Coordinator - Sandra Seeraj, Chief Resource Economist, CI Washington Media personnel Resources: Staff Time, Press kits, refreshments	0	\$10,000													
	3.5.9	FY01 New Activity	Four new Radio and Television PSA's promoting protected areas (with emphasis on Kanuku Mountain Region) will be developed and launched in Guyana - both nationally in Georgetown and regionally (focusing on Region 9 - the Kanuku Mountain Region). These PSAs will target both urban and rural populations to stimulate their support for the creation of protected areas	Radio and Television spots will be aired by June 2001	4 30 second radio PSAs. 4 30 second video PSAs	Personnel: Activity Leader: CIG Communications Coordinator - Sandra Seeraj, CI-WA Intercom, CIG Education Coordinator, Director, and Corridor Manager Resources: Accommodation and International travel for 1 person, Hired narrator, video and audio duplication, distribution costs	6,160	15,000													

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Year 2 Higher Level Activities	Status/Background at close of FY01	Year 2 Activities	Year 2 Results	Means of Verification	Year 2 Personnel & Resources	USAID Year 2 Level of Effort (\$)	Wilderness Protection Fund Year 2 Level of Effort (\$)	GEF/Interim Year 2 Level of Effort (\$)	CI-Guyana/CI-Wash Year 2 Level of Effort (\$)	O	N	D	J	F	M	A	M	J	A	S
	3 5 10	FY01 New Activity	CIG with CI Washington International Communications Staff will develop and distribute promotional materials supporting the development of a protected area in the Kanuku Mountain Region. These promotional materials will include a Year 2001 calendar, and one poster promoting the Kanuku Mountains as a protected area. 2000 of each will be printed and distributed in-country to relevant agencies, organizations and schools throughout the country.	2000 calendars printed and distributed by December 2000. 2000 posters printed and distributed by April 2001.	Calendars, posters, distribution list	Personnel: Activity Leader: CIG Communications Coordinator - Sandra Seeraj, Senior Director, International Communications, CI-Guyana Education Coordinator Ministry of Education representative(s), Office of the President representative(s), local media representatives, regional education professionals Resources: Staff time, International and domestic travel Audio/Visual	3,627	7,500												
	3 5 11		CI-G will host a series of regional children's writing competitions in each of Guyana's 10 regions. The competition will focus on environmental topics relevant to that region. The best entries will be published in a booklet and in a semi-annual CI-G newspaper supplement (see 1 7 10 and 1 7 12) in the Guyana Chronicle (the national newspaper with widest distribution across the country).	Material promoting contest distributed, essays written and provided to CIG and distributed to regional and national judges	essay series, booklet printed, newspaper supplements developed	Personnel: Activity Leaders CI-G Communications Coordinator Sandra Seeraj; and Education Coordinator - Sandy Griffith, and Awareness Staff, Regional Judges Resources: Prizes	7,843													
	3 5 12	FY01 New Activity	CI-G will produce a newspaper insert/pull-out semi-annually. The insert will include information on biodiversity and children's artwork and stories which promote biodiversity conservation in Guyana. The goal of the inserts is to reach the widest audience in Guyana as possible, and to build support for the development of protected areas.	Two newspaper pull-outs designed and published in national Newspaper (with widest distribution range) by September 2001	Copies of pullouts	Personnel: Activity Leader CI-G Communications Coordinator - Sandra Seeraj; Education Coordinator Resources: staff time, travel, promotional materials	3,627	6,000												

Year 2 Higher Level Activities	Status/Background at Close of FY00	Year 2 Activities	Year 2 Results	Means of Verification	Year 2 Personnel & Resources	USAID Year 2 Level of Effort (\$)	Tropical Wilderness Protection Fund Year 2 Level of Effort (\$)	CI-Intercom Year 2 Level of Effort (\$)	CI-Guyana/CI Wash Year 2 Level of Effort (\$)	O	N	D	I	F	M	A	M	J	J	A	S
36 Select indicator species and promote research on them for integration at the corridor level																					
37 Information gathering, integration and analysis for core nuclei (new or targeted biological, social, legal and/or economic data)																					
total						Total	85,348	118,500	9,000	0											

Anticipated Future Higher Level Activities (year 3-5)		Anticipated Future Activities (year 3-5)	Anticipated Future Results (Year 3-5)	Means of Verification	Anticipated Future Personnel & Resources	Estimated USAID Level of Effort (\$)	Estimated Tropical Wilderness Protection Fund Level of Effort (\$)	Estimated CI-Intercom Level of Effort (\$)	Estimated CI-Guyana/CI Wash Level of Effort (\$)	F	F	Y	Y	0	0	3	4	
31 Select and monitor the priority areas and connections within the nuclear area to best protect biodiversity																		
32 Promote environmentally compatible activities in corridor buffer zones		Continue development of eco-enterprise activities in areas around Kanuku Mountains	increase in sales of NTFP's and other products from the region; identification of new enterprises; financial support secured from donors	increase in sales,	Regional enterprise cooperatives, ecoenterprise expert, CIG													
33 Engage core nuclei stakeholders for future corridor development (workshops, lobbying (promoting))																		
34 Economic analysis and policy level work and/or analysis to identify land uses that meet conservation objectives at nuclei level		Update economic analysis of necessary of conservation concession area, negotiate increase conservation concession area to 1 million acres	updated reports/economic analysis of conservation concession area	Report	Chief Resource Economist; CIG;													
35 Awareness program designed and made operational		Develop communications program with communities impacted by conservation concession and/or protected area and	increase in awareness of importance of biodiversity conservation at regional and national level	Reports, strategies and timelines developed	CIG, communities and indigenous representatives													
36 Select indicator species and promote research on them for integration at the corridor level																		
37 Information gathering, integration and analysis for core nuclei (new or targeted biological, social, legal and/or economic data)																		

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Anticipated Future Higher Level Activities (Year 3-5)	Anticipated Future Activities (Year 3-5)	Anticipated Future Results (Year 3-5)	Means of Verification	Anticipated Future Personnel & Resources	Estimated USAID Level of Effort (\$)	Estimated Tropical Wilderness Protection Fund Level of Effort (\$)	Estimated Global Forest Watch Level of Effort (\$)	Estimated CI/Guyana/CI-Wash Level of Effort (\$)	FY 02	FY 03	FY 04
4.1 Analyze biological, economic, and social data to identify priority areas for connection											
	4.1.1 Expand Corridor program to include other biologically important areas in Guyana.										
4.2 Design and promote policy interventions to alter economic decision-making environment across corridor											
	4.2.1 Work with the Government of Guyana to develop new, comprehensive protected areas legislation.										
	4.2.2 Promote adaptations in Guyanese forestry policy to allow for conservation concessions.										
4.3 Define and monitor biological social and spatial indicators for change at the corridor level		Identify and monitor indicators across corridor: analyze gene flow across corridor and movement, monitor social indicators, satellite imagery analysis									
	4.3.1										
4.4 Promote changes in legislation incompatible with corridor goals											
	4.4.1										
4.5 Develop market connections for alternative certified products/goods from the corridor		Continue to develop market opportunities for nontimber forest products.									
	4.5.1										
4.6 Information gathering, integration, and analysis for corridor activities (new or targeted biological, social, legal and/or economic data)											
	4.6.1										
4.7 Awareness program designed and made operational at corridor level		Continue implementation of the ongoing National Conservation Awareness Campaign and Environmental Education Program.									

NARRATIVE SUPPLEMENT TO THE SIERRA MADRE BIODIVERSITY CORRIDOR YEAR 2 IMPLEMENTATION PLAN

2/14/01

1. Overview of the SMBC Project

The Sierra Madre Biodiversity Corridor (SMBC) is located in the eastern portion of the Island of Luzon and encompasses the largest tract of lowland rainforest remaining in the Philippines. Based on the Department of Environment and Natural Resources (DENR) statistics, the corridor covers approximately 1 million hectares of forest, including roughly half of the remaining 800,000 hectares of old growth forest in the Philippines. The area is rugged and still thickly forested, and includes substantial portions of hinterland still uncharted and unexplored scientifically. The range stretches from north to south and is bordered on the west by an extensive area of development and intensive agricultural production. To the east lies several hundred kilometers of coastline. In addition to its biological importance, the area is still home to large indigenous populations, such as the Agtas in Cagayan, Isabela and Aurora provinces and the Bugkalots in Quirino and Nueva Vizcaya.

Currently, the SMBC extends through five provinces (Cagayan, Isabela, Quirino, Aurora and Quezon); however, CI Philippines (CIP) is considering eventually expanding the corridor into four additional provinces (Nueva Vizcaya, Nueva Ecija, Bulacan and Rizal). The proposed expansion of the SMBC evolved out of stakeholder consultations/orientations on the project. The initial suggestions were made by the Local Government Units covering the Sierra Madre range and the Regional Development Councils (RDC), which coordinate all development initiatives in the region. The strategic importance of the expansion areas was reinforced by the results of a spatial analysis, which indicated that the incorporation of these areas is critical to successful conservation within the SMBC. The expansion should not affect the existing budget or implementation plan because the proposed areas are contiguous to the original area, and planned activities and objectives are readily adaptable to include these areas. The proposed expansion is already included in an implementation plan prepared for SMBC beyond the period covered by the USAID Corridor agreement.

CIP is implementing and promoting the Sierra Madre as a biodiversity conservation corridor, which entails the development of a more coordinated and improved management system for the region. The corridor approach seeks to connect existing protected areas, forest reserves, watershed reservations and other management units [i.e. Community Based Forest Management Agreements (CBFMA) and Certificates of Ancestral Domain Claims (CADC)] under an integrated planning and management system stretching across the SMBC. At present, there are 22 existing Protected Areas that will serve as the core nuclei for a corridor linking the Northern Sierra Madre Natural Park with the Maria Aurora Memorial Park. Since existing protected areas, watershed reservations, forest reserves and management units are established in fragments along the corridor, large areas have been left open to access and occupation. These areas do not currently have a management system to ensure that they are developed appropriately.

To date, there are still three logging companies currently allowed to operate in the corridor area until the expiration of their permits. According to the DENR, the latest will expire in 2007. Two special economic zones are also being established, one in the northernmost portion (Cagayan province) and the other one in the southernmost portion (Quezon province) of the corridor. The government also proposes to establish two major road systems traversing the Sierra Madre range. The intention is to connect the coastal municipalities with the major growth centers located on the valley side of the Sierra Madre range and around Manila. As a result of the enactment of a mining law, there are already several applications for mining permits within the corridor area. It is expected that mining investment will continue to have a big impact on the area due to the presence of gold, chromite, and other valuable minerals. If not handled appropriately, these development and extractive investments pose a grave threat to the biodiversity of the corridor area, particularly when considered comprehensively. In addition, the growing population in the region can be expected to result in increased agricultural conversion of forest areas.

The project is utilizing the Rapid Assessment of Corridor Economics (RACE) methodology and spatial analysis techniques (e.g. GIS) to analyze the current state of the corridor area and to refine the threats analysis. By compiling existing maps and information from the different government agencies (such as the DENR, the National Economic and Development Authority [NEDA] and provincial governments) and using aerial photography in critically threatened areas, it will be possible to formulate appropriate strategies and management interventions compatible with the existing land use systems in the area. Current activities entail the development of the SMBC framework needed to

prioritize and target threats and to build the necessary constituency for the project. In Year Two of the project, it is expected that more direct interventions will be implemented based on current analysis and planning. These interventions include the investigation of appropriate livelihood and development alternatives, the launching of awareness campaigns and policy advocacy directly addressing identified threats, the strengthening of existing protected areas, and the promotion of additional protected areas or other management units within open access areas.

2. Project status/updates and Challenges/issues

In Year One, project activities focused on developing and expanding coordination, networking, and other outreach activities, as well as promoting and refining the corridor concept with major stakeholders across the region. CIP successfully staffed up the project and expanded its on-site presence and capacity.

CIP made presentations to and engaged in discussions with NGOs and important government stakeholder agencies, including the DENR, NEDA, and Local Government Units (LGUs) at both the provincial and municipal level. As a result of this outreach and information campaign, a variety of stakeholders have expressed their interest and support for the project. Endorsements of support were received from the Protected Area Management Board (PAMB) of the Northern Sierra Madre Natural Park, DENR officials of the Regions covered (Region 2, 3 and 4) and many of the LGUs of the provinces encompassing the SMBC. The PAMB endorsed the project with a resolution, the DENR expressed their support through a letter of commitment to Conservation International, the NEDA-RDC with their endorsement, and the provincial LGUs by creating Provincial Sustainable Development Councils. Likewise, NGOs have given support to the SMBC, and the Foundation for Philippine Environment (FPE) has adopted the SMBC framework for all of their projects within the Sierra Madre Corridor. Currently, CI is working on an MOA with FPE to complement ground activities in Cagayan province.

Important progress has been made in the gathering of baseline data and information toward the development of a corridor information system that will support the framework and implementation plan. The baseline data includes biological, socio-economic, land cover, land-use plans, and regional, provincial and municipal development plans. The data gathered to date are being compiled using the CIP GIS unit. The majority of biological data, particularly on plants, were generated from the Northern Sierra Madre Natural Park, reflecting the limited biological data available for the region. In Year Two, CIP will use analyses of the data and information to further define, and where necessary revise, the design of strategies and management interventions that most effectively address biodiversity threats in the area.

The immediate threat of biodiversity loss/destruction is aggravated by the proposed establishment of roads, special economic zones, and the continuation of logging and mining operations in the area. A new road, which has been partially constructed in Cagayan province, will cut across old growth forest. The Regional Council for Sustainable Development of Region 2 and Multi Sectoral Forest Protection Group (RCSD-MSFPG) stopped the operation pending the issuance of an Environmental Compliance Certificate for the project. It should be emphasized, however, that these on-going development/investment initiatives are covered within existing laws and within the framework of existing investment plans of the government. In this context, CIP promotes careful participatory planning to develop the best plan to address these threats to biodiversity without compromising the legality of existing investments. Planning with the participation of all stakeholders, including the agencies regulating the implementation of these projects, LGUs, concerned NGOs and local communities, will promote the acceptance of appropriate interventions and build confidence and transparency in the formulation of development alternatives.

3. The Threats to the SMBC and the Initial Activities/ Interventions to Address the Threats

The primary direct threats in the SMBC area are the development of roads across the Sierra Madre range, logging, mining, land conversion for agriculture, the development of special economic zones and the construction of dams for energy generation. Infrastructure development plans include hydroelectric installations, agro-industrial growth centers and regional trade and industrial centers. Despite the protected status of the park, there are still proposals to de-list some portions for additional concessions and related infrastructure development. The Cagayan Valley Strategic Development Plan for Region 2 outlines several development projects, including the three trans-Sierra Madre roads and one coastal road within Northern Sierra Madre Natural Park territory. The Local Government Units at the provincial and municipal levels have generally welcomed this development plan as a means of generating employment and increased market access. Transportation of goods in and out of the Northern Sierra Madre Natural Park remains a challenge, and the local people seek improved access to the rest of the country. The RACE process will elucidate the issues and incentives related to development and infrastructure projects, and will facilitate the further investigation of

alternatives and/or best practices. The land use and land cover assessments will determine biodiversity priority areas, including critically important ecosystems, areas of vulnerability and other key focal geographic sites.

Though logging in the primary forests has been banned, Timber License Agreements continue to exist. Moreover, the lack of legal protection of traditional forest tenure allows outsiders unchecked access to forest resources. In Northern Sierra Madre Natural Park, most of the timber poaching is carried out by people from Quezon, but inhabitants are involved as well. CIP will address the logging threat by conducting an intensive education campaign on the importance of biodiversity within the park and by supporting the Community Forest Guards (Bantay Kalikasan Brigade) and strengthening the Northern Sierra Madre Natural Park-Protected Area Management Board (NSMNP-PAMB). Additionally, CI's continuation of in-kind support to the Protected Area Superintendent of Northern Sierra Madre Natural Park will directly strengthen the effectiveness of the park's management. CI will also facilitate the process of building broad-based consensus for the creation and support of specific protected areas across the corridor.

The enactment of the Mining Act (Republic Act No.7942) in 1995 put a vast portion of the Sierra Madre under several mining applications, which continues to pose a grave danger to the biological diversity in the area. Currently, some of the mining applications within Cagayan province have obtained permits; however, the operations are stalled due to the absence of approved Environmental Compliance Certificates. Other obstacles include overlaps in area coverage with Community-Based Forest Management Areas (CBFMA) and Certificate of Ancestral Domain Claims (CADC) issued to communities prior to the mining permits. The SMBC project will facilitate the implementation of appropriate actions to counter the mining operations based on the compilation and analysis of all relevant data/information available for the area, including the results of the RACE. Data gathering and analysis will also be performed to provide stakeholders and decision-makers with the information needed to make wise decisions on resource use and planning. CIP will continue building alliances and partnerships to engage and generate support from provincial governments, Local Government Units and local communities affected by these extractive activities. The continuation of consultations on the SMBC will increase awareness among all stakeholders of the long-term costs of mining on community development and biodiversity conservation.

Given the numerous and varied threats to the SMBC area, the project strategy will be refined based on the identification and analysis of the scale and intensity of the different threats. To date, CIP has collected a wide range of data on regional planning as well as information on stakeholder actors across the corridor region. CIP will perform an initial assessment of land use and tenurial instruments within the SMBC. The assessment will consist of developing a GIS database on existing land uses in the SMBC, including infrastructure development plans, in order to determine overlapping land uses and potential areas of strategic focus. The assessment results from this activity will be used to facilitate the RACE process.

CI's Resource Economics Program and CI Philippines' Resource Economist will design and initiate the RACE for the SMBC. The RACE will analyze and prioritize the major threats to biodiversity across the SMBC, with the results used to refine and target project interventions to the underlying causes of the threats. Each prioritized threat will be analyzed by CI staff resource economists together with local expert consultants to produce a report identifying the geographical distribution of the threat, the economic drivers, related political and management causes, and the economic incentives for different stakeholders. Reports will be prepared on the following major regional threats: (i) road development; (ii) industrial estate development; (iii) logging; (iv) mining and (v) dam development. Based on the information and analysis that will be conducted through the RACE process, CIP will be able to develop a cost-benefit-analysis (CBA) and provide appropriate policies and interventions to address some of the key threats within the corridor. Subsequent activities will focus on localized areas defined as critical through the GIS and RACE assessments. Different stakeholders, including local communities, will participate in the RACE process in order to generate acceptable and credible results.

Overall, there is lack of appreciation and understanding among local governments and communities of the importance of biodiversity and its relevance to their long-term sustainable development interests. There is also weak coordination between government agencies, as well as overlapping and unclear mandates. CIP will continue to facilitate consultations and biodiversity orientations with various stakeholders to strengthen the coordination and integration of activities within the proposed corridor.

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Sierra Madre Biodiversity Corridor Threats Assessment

ROOT CAUSE(S)	PROXIMATE THREATS	Environmental Effect	CI-Philippines Activities	Activity's Effect on the Threats
<p>Local demand to reduce economic isolation (East-West)</p> <p>National trans-SM super-highway (North-South)</p> <p>Coastal Road w/in NSMNP</p> <p>National Poverty Alleviation Program and national-level economic development and infrastructure planning initiatives</p>	<p>Road Development (East-West) (North-South)</p> <p>Timber extraction/ Logging;</p> <p>Migration;</p> <p>Easier Access for Mining;</p> <p>Tourism Increase (Unregulated);</p> <p>Increased Social Conflict;</p> <p>Displacement of Indigenous Communities</p>	<p>Primary:</p> <p>Habitat loss/ Alteration;</p> <p>Biodiversity loss;</p> <p>Increased Sedimentation</p> <p>Secondary:</p> <p>Pollution/Garbage build-up;</p>	<p>CI Philippines will:</p> <ol style="list-style-type: none"> 1. Purchase/collect and compile on SMBC (1.1.1), i.e. development plans, timber and concession data, land use data and existing vegetation data as basis to for the formulation of appropriate management interventions and formulating advocacy strategy. 2. Process cloud free satellite images (1.1.2) and conduct over flights and ground truthing (1.1.3) to determine the location of the proposed roads and the extent of the threats posed in constructing the roads, including the identification of critical important and/or vulnerable areas. The data generated in these activities will be used to develop the appropriate interventions. 	

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ROOT CAUSE(S)	PROXIMATE THREATS	Environmental Effect	CI-Philippines Activities	Activity's Effect on the Threats
<p>National Economic Goals/Priorities: GDP Growth, Employment, Increased trade/foreign and domestic investment Development of Alternatives to small-holder agriculture Increase local level incomes Promote economic/industrial migration centers outside</p>	<p>Development of Industrial Estates Road Construction; Population pressure; Increased Demand for Resources; Displacement of Indigenous People;</p>	<p>Primary: Increased Demand for Resources; Habitat loss/alteration; Pollution/Industrial Waste Secondary: Water and soil erosion; Destruction of Marine ecosystems</p>	<p>CI-Philippines will:</p> <ol style="list-style-type: none"> 1. Design and initiate Rapid Assessment of Corridor Economics (RACE) along the propose corridor (1.1.6). The RACE will focus on major threats to biodiversity across the corridor. Each of the threats will be mapped out and identify the economic drivers, political and management related causes and the economic incentives held by the different stakeholders. 2. Establish biological Resource Center (1.1.9) in order to show/share information on the biodiversity of the Sierra Madre and its importance to development. 3 Continue to engage in dialogue and awareness campaign to the different stakeholders through consultations and orientations (1.4.2 and 1.7.3) to generate support and create awareness on the importance of biodiversity. 	<p>The RACE process will provide information and analysis to support the development of policies and alternatives to extractive industries. Cost Benefit Analysis will be done on each of these threats and develop options to be provided to the decision-makers. Currently, data are being gathered to establish the extent of threat of each development plans.</p> <p>Baseline biological data will be incorporated in the analysis to show us the impact of such project on biodiversity. This will also provide the basis for the development of alternatives to the projects, which will cause less impact on biodiversity.</p> <p>The results of the analysis will be conveyed to decision-makers and discussed with them, including alternatives. CIP will foster awareness and provide pertinent information for decision-makers.</p>

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ROOT CAUSE(S)	PROXIMATE THREATS	Environmental Effect	CI-Philippines Activities	Activity's Effect on the Threats
<p>Pressure to utilize resource base to prevent outsiders from benefiting from use (within NSMNP)</p> <p>Logging outside of concession areas due to low risk of sanctions (economic opportunism)</p> <p>Domestic and international demand for tropical hardwood</p>	<p>Logging (large-scale legal and small-scale illegal)</p> <p>Increased access to new areas for hunting and agriculture;</p> <p>Destructive or inappropriate alternative livelihood activities (coffee growers)</p>	<p>Primary: Habitat Alteration & Fragmentation; Habitat and forest loss Soil erosion – siltation of rivers Sedimentation of coastal reefs/mangroves;</p> <p>Secondary: Increase in vector-borne disease incidence;</p>	<p>CI Philippines will:</p> <ol style="list-style-type: none"> 1. Compile existing data (1.1.1) logging, land use development plan, etc. and conduct RACE (1.1.6) to serve as basis for policy advocacy activities, identification and formulation of appropriate interventions that would address the underlying causes of the logging threat. 2. Establish biological Resource Center (1.1.9) in order to show/share information on the biodiversity of the Sierra Madre and its importance to development. 3. Continue to engage in dialogue and awareness campaign to the different stakeholders through consultations and orientations (1.4.2 and 1.7.3) to generate support and create awareness on the importance of biodiversity. 4. develop media events and products (1.7.3) such as press releases, environmental book launching and exhibits to raise national awareness of biodiversity conservation 	<p>The data generated from the RACE process and the biological information will be used to convey the effects of this threat. This will help raise awareness of the local community in NSMNP and provide the NSMNP - Protected Area Management Board (PAMB) pertinent information for decision-making.</p> <p>The continuous consultation and dialogue with the stakeholders will help generate information on the actual status and update CIP with what is happening on the ground. This will help CIP improve our strategy and developed activities that will help address these threats that are acceptable and easily conveyed to the stakeholders.</p> <p>National awareness is also important in the awareness campaign to educate the decision makers at the national level</p> <p>Data generated from the RACE process will be conveyed to the decision-makers at the national level. This will provide the decision-makers the sense of what is really happening on the ground.</p>

ROOT CAUSE(S)	PROXIMATE THREATS	Environmental Effect	CI-Philippines Activities	Activity's Effect on the Threats
<p>Foreign Investment (international markets)</p> <p>Domestic and international demand for gold, nickel and chromite, copper</p> <p>Lack of awareness of potential impact on human and environmental health</p>	<p>Mining large-scale exploration, development and extraction</p> <p>small -scale exploration, development and extraction, including the use of mercury and other toxic chemicals</p>	<p>Primary: Water/Soil Contamination; Habitat Destruction; River Sedimentation/Soil Erosion; Human Health Impacts -- poisoning, malaria pools, food source contamination</p>	<p>CI Philippines will:</p> <ol style="list-style-type: none"> 1. Compile existing data (1.1.1) logging, land use development plan, etc. and conduct RACE (1.1.6) to serve as basis for policy advocacy activities, identification and formulation of appropriate interventions that would address the underlying causes of the logging threat. 2. Establish biological Resource Center (1.1.9) in order to show/share information on the biodiversity of the Sierra Madre and its importance to development. 3. Continue to engage in dialogue and awareness campaign to the different stakeholders through consultations and orientations (1.4.2 and 1.7.3) to generate support and create awareness on the importance of biodiversity. 4. develop media events and products (1.7.3) such as press releases, environmental book launching and exhibits to raise national awareness of biodiversity conservation 	<p>Please refer to remarks 1 and 2</p>

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ROOT CAUSE(S)	PROXIMATE THREATS	Environmental Effect	CI-Philippines Activities	Activity's Effect on the Threats
Energy demand for Luzon Casecnan Dam	Dam Development Electricity Generation; Roads and associated infrastructure development; Expansion of tourism/recreation use; Community displacement;	<p>Primary: Flooding/inundation; Disruption of aquatic habitat and ecology and habitat loss; Disruption of water systems</p> <p>Secondary:</p>	<p>CI Philippines will:</p> <ol style="list-style-type: none"> 1. Compile existing data (1.1.1) logging, land use development plan, etc. and conduct RACE (1.1.6) to serve as basis for policy advocacy activities, identification and formulation of appropriate interventions that would address the underlying causes of the logging threat. 2. Establish biological Resource Center (1.1.9) in order to show/share information on the biodiversity of the Sierra Madre and its importance to development. 3. Continue to engage in dialogue and awareness campaign to the different stakeholders through consultations and orientations (1.4.2 and 1.7.3) to generate support and create awareness on the importance of biodiversity. 4. develop media events and products (1.7.3) such as press releases, environmental book launching and exhibits to raise national awareness of biodiversity conservation 	See Above

Biodiversity Corridor Planning and Implementation Program (Corridor)
 Cooperative Agreement No. LAG-A-00-99-00046-00

ROOT CAUSE(S)	PROXIMATE THREATS	Environmental Effect	CI-Philippines Activities	Activity's Effect on the Threats
<p>Low awareness of biodiversity importance Limited financial resources/ primacy of other development priorities</p>	<p>Lack of effective national and local capacity to manage, equip and police protected areas; Human encroachment into existing protected areas; Failure to establish new protected areas</p>	<p>Unimpeded biodiversity destruction/loss of habitat;</p>	<p>CI Philippines will:</p> <ol style="list-style-type: none"> 1. Continue to engage in dialogue and awareness campaign to the different stakeholders through consultations and orientations (1.4.2 and 1.7.3) to generate support and create awareness on the importance of biodiversity. 2. Establish biological Resource Center (1.1.9) in order to share the biodiversity of the Sierra Madre with other scientist and the general public. 3. provide support to the operations and capacity building trainings of the Protected Area and management Board and the DENR-Park Superintendent in protecting the Northern Sierra Madre Natural Park and will help the establishment of the community forest guards that will assist the DENR in the protection work (2.2.1 and 2.2.3) 4. explore debt for Nature swap opportunities and assess as possible financing mechanism for the Sierra Madre biodiversity Corridor (1.6.1) 	<p>See Above</p>

ROOT CAUSE(S)	PROXIMATE THREATS	Environmental Effect	CI-Philippines Activities	Activity's Effect on the Threats
Source of income from revolutionary taxes	Increased rebel activities	Logging/habitat alteration	<p>CI Philippines will:</p> <ol style="list-style-type: none"> 1. Continue to engage in dialogue and awareness campaign to the different stakeholders through consultations and orientations (1.4.2 and 1.7.3) to generate support and create awareness on the importance of biodiversity. 2. Establish biological Resource Center (1.1.9) in order to share the biodiversity of the Sierra Madre with other scientist and the general public. 3. provide support to the operations and capacity building trainings of the Protected Area and management Board and the DENR-Park Superintendent in protecting the Northern Sierra Madre Natural Park and will help the establishment of the community forest guards that will assist the DENR in the protection work (2.2.1 and 2.2.3) 4. explore debt for Nature swap opportunities and assess as possible financing mechanism for the Sierra Madre biodiversity Corridor(1.6.1) 	See Above

4. Financial Sustainability Activities for Year 2 of the SMBC Program

CI-Philippines has taken programmatic measures to ensure long-term financial sustainability of the SMBC. CI-Philippines and CI's Conservation Policy and Finance Manager will explore debt-for-nature swap opportunities under the Tropical Forest Conservation Act and will assess as possible financing mechanism for the Sierra Madre Biodiversity Corridor. In addition, CI will continue to build financial sustainability of the corridor by building the technical and financial capacity of SMBC partners and stakeholders. Technical and financial support to established People's Organizations in Cagayan and Isabela provinces will include training on financial management, conflict resolution and networking. Technical support will include assistance in accessing funding for operations.

In addition to programmatic interventions, CI will also bring significant co-financing sources to Year 2 implementation. CI has been able to match over 20% of USAID's support for SMBC. CI continues to seek additional funding for this ambitious program, and has already been successful in engaging private sector support in the Philippines. In addition to continuing support from the First Philippine Conservation, Inc., the Foundation for Philippine Environment has agreed in principle to coordinate its funding and activities in the region with CI. The SMBC program has also received support from Ricoh Corporation, Japan for conservation outreach and education activities, and is exploring further support. CI's Tropical Wilderness Protection Fund, contributing match funding for the RACE component, can be expected to leverage additional funding for the SMBC in the future.

5. Stakeholder Participation Activities for Year 2 of the SMBC Program

In Year 2, CIP will take important steps to concretize stakeholder support of the SMBC planning and implementation framework. Many regional organizations and agencies have become aware and interested in the Corridor approach. CI-Philippines will conduct biannual meetings with identified SMBC partners: Foundation for Philippine Environment (FPE), Plan International (PI), National Integrated Protected Area Inc. (NIPA), Department of Environment and Natural Resources (DENR), the National Economic Development Authority (NEDA), and Local Government Units (LGUs-provincial and municipal) to coordinate corridor activities and inform partners of new developments.

Right now, the Foundation for Philippine Environment and CI Philippines are forging a Memorandum of Agreement to jointly work for the implementation of biodiversity conservation projects in the Cagayan province. The Regional Offices (Regions 2, 3 & 4) of the Department of Environment and Natural Resources have expressed support to the project through letters of commitment issued by the concerned Regional Directors and are now working with the SMBC team on the on-going consultation and awareness campaign. The provincial government units agreed to create provincial sustainable development councils in support to the program. In addition to the awareness campaign, these stakeholders will also be included in the RACE process.

In addition to providing activity updates and additional information, CI-Philippines will continue to hold consultations on the corridor framework with stakeholders at various levels. Key stakeholders to be addressed are DENR's regional and provincial offices, the Community Environment and Natural Resources Office (CENRO) in Regions 2 and 4, Local Government Units, provincial and municipal governments, NGOs and People's Organizations with community-based forest management agreements within the corridor area.

6. Information, Education and Communication Activities for Year 2 of the SMBC Program

CIP will conduct strategically targeted education and communication activities in Year 2. Major activities include the design of an awareness campaign for conservation within the Northern Sierra Madre Natural Park and the promotion of the corridor concept to policy makers in key government agencies. As information and analyses become available from the GIS and RACE assessments, they will be incorporated into communication materials and/or disseminated through workshops and reports. The different stakeholders of the park will jointly implement the awareness campaign

activities. The Department of Environment and Natural Resources, which is mandated by the government to implement biodiversity conservation programs, will spearhead the continuation of the awareness campaign to include current activities and consultations. Local Coordinating Units created in every province will coordinate the awareness campaign activities.

CIP will conduct presentations at stakeholder meetings, workshops and consultations. CI-Philippines will develop informational and educational materials, including a corridor brochure, to be used by Site Coordinators and Community Organizers in outreach efforts to SMBC stakeholders and potential partners. Activities will include seminar/lectures concerning ecology, biodiversity conservation, environmental protection and wildlife management to targeted audiences (local communities and students) during the training sessions conducted in Divilacan and Maconacon. CI-Philippines will also set up an interpretive ecological display in the office of the Protected Areas Superintendent (PASu) of NSMNP as an educational resource.

To galvanize public support, develop a national constituency and exert pressure on decision-makers, CI also seeks to develop a national awareness-building campaign on the Sierra Madre. Anticipated activities include the development of Public Service Announcements (excellent footage is available, seeking match funding for production costs) and other media outreach. CI has already had a series of discussions with TV and advertising companies interested in helping to promote the "Save the Sierra Madre" message.

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Anticipated Future Higher Level Activities (years 3-5)	Anticipated Future Activities (years 3-5)	Anticipated Future Results (year 3-5)	Means of Verification	Anticipated Future Personnel & Resources	Estimated USAID Level of Effort (\$)	Estimated DONOR Level of Effort (\$)	FY '02	FY '03	FY '04	FY '05					
1.1 Biodiversity corridor assessment completed (baseline legal, biological, economic and social assessments/data gathered)															
	1.1.1	Biodiversity corridor assessment completed (baseline legal, biological, economic, and social assessments/data gathered)	Review Meeting(s)												
	1.1.2	Technical focus groups will be formed around each report produced by the RACE in Year 2. These groups will refine and improve the reports, and serve as a vehicle for strengthening consensus building initiated in the review and consultations carried out towards the end of Year 3.	Updated Threat reports generated during FY '02 Technical focus group consultation events performed during FY '02	Listing of technical group members final reports											
	1.1.3	A further report will be produced giving an overview of community livelihoods, their reliance and/or impacts on SMBC habitats, and social feasibility issues across SMBC. This report will be based on the results of a key informant participatory workshop with NGO and other non-government institution field extension workers.	Community livelihoods report completed in FY '02 Key informant participatory workshop conducted in FY '02	Report, list of workshop participants											
	1.1.4	The technical focus groups and community livelihoods workshop will be followed by a workshop for senior level decision makers from communities, government and the private sector to raise awareness for and discuss the economic justification for the SMBC.	Senior level decision-maker consultations and workshop performed during FY '02	List of workshop participants											
1.2 Integrated corridor information system designed and operational															
1.3 Corridor learning system/adaptive management in place and operational															
1.4 Participatory planning and implementation framework and process established															
1.5 Corridor project team operational															
1.6 Research long-term financial mechanisms	1.6.1	Explore opportunities for long-term financing of NSMNP													
1.7 Awareness Program Established															

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Anticipated Future Level Higher Activities (Years 3-5)	Anticipated Future Activities (Years 3-5)	Anticipated Future Results (year 3-5)	Means of Verification	Anticipated Future Personnel & Resources	Estimated USAID Level of Effort (\$)	Estimated DONOR Level of Effort (\$)	FY '02	FY '03	FY '04	FY '05				
2.1 New protected areas (protected areas, private reserves, indigenous reserves/territories) are created														
2.2 Protected area level infrastructure in place (park guards, posts, etc)														
2.3 Strengthen or extend existing protected areas														
2.4 Develop and implement management plans for new and existing protected areas														
		2.4.1	Stakeholder meetings to discuss issues, disseminate information and build consensus on park management strategies for NSMNP											
2.5 Capacity-building at the level of now and existing protected areas														
2.6 Information gathering, integration and analysis for protected area creation and strengthening (new or targeted biological, social, legal and/or economic data)														
2.7 Develop and implement awareness campaign for new or existing protected areas														
2.8 Promote restoration and environmentally compatible activities in protected areas														

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Program: Philippines

Objective 3.

Core nuclei of protected areas established

Anticipated Five-year Benchmarks:

Plan for restoration and connection completed, presented, and implemented

Year 2 Objective 3 level of effort.
 USAID-G/ENV 0
 CI-Tropical Wilderness Protection Fund 0
 CI-First Philippine Conservation Inc 0
 CI-Other 0
 CI-Intel 0
 USAID - Philippines 0
 Total for Objective 3 0

Year 2 Higher Level Activities		Year 2 Activities	Expected Year 2 Results	Means of Verification	Year 2 Personnel & Resources	USAID-G Year 2 Level of Effort (\$)	DONOR Year 2 Level of Effort (\$)	Match	DONOR Year 2 Level of Effort (\$)	Match	DONOR Year 2 Level of Effort (\$)	Match	O	N	D	J	F	M	A	M	J	J	A	S
3 1	Identify and monitor the priority areas and connections within the nuclear area to best protect biodiversity	3 1 1																						
3 2	Promote environmentally compatible activities in corridor buffer zones	3 2 1																						
3 3	Engage core nuclei stakeholders for future corridor development (workshops, lobbying [promoting])	3 3 1																						
3 4	Economic analysis and policy level work and/or analysis to identify land uses that meet conservation objectives at nuclei level	3 4 1																						
3 5	Awareness program designed and made operational	3 5 1																						
3 6	Select Indicator species and promote research on them for integration at the corridor level	3 6 1																						
3 7	Information gathering, integration and analysis for core nuclei (new or targeted biological, social, legal and/or economic data)	3 7 1																						
Anticipated Future Higher Level Activities (year 3-5)		Anticipated Future Activities (year 3-5)	Anticipated Future Results (year 3-5)	Means of Verification	Anticipated Future Personnel & Resources	Estimated USAID Level of Effort (\$)	Estimated DONOR Level of Effort (\$)	Match	Estimated DONOR Level of Effort (\$)	Match	Estimated DONOR Level of Effort (\$)	Match	FY 02	FY 03	FY 04	FY 05								
3 1	Identify and monitor the priority areas and connections within the nuclear area to best protect biodiversity	3 1 1	Choose and monitor selected indicators of connection success (biological, socioeconomic, spatial (land cover), attitudes policies)																					
		3 1 2	Choose priority areas for inclusion in nucleus																					
		3 1 3	Design boundaries for nuclei																					
3 2	Promote environmentally compatible activities in corridor buffer zones	3 2 1	Explore enterprise development in connections																					
		3 2 2	Reforestation projects/rehab						CABS															
		3 2 3	Promote best practices for specific activities (e.g. mining industry logging)																					
3 3	Engage core nuclei stakeholders for future corridor development (workshops, lobbying [promoting])	3 3 1	Work with stakeholders (all levels) for land use planning																					

Anticipated Future Higher Level Activities (year 3-5)	Anticipated Future Activities (year 3-5)	Anticipated Future Results (year 3-5)	Means of Verification	Anticipated Future Personnel & Resources	Estimated USAID Level of Effort (\$)	Estimated DONOR Level of Effort (\$)	Match	Estimated DONOR Level of Effort (\$)	Match	Estimated DONOR Level of Effort (\$)	Match	FY '02	FY '03	FY '04	FY '05
	3 3 2 [networking stakeholders - planned] within nucleus, between nuclei				AID										
3.4 Economic analysis and policy level work and/or analysis to identify land uses that meet conservation objectives at nuclei level															
	3 4 1 Petitions etc. versus logging and mining concessions (in connections, not parks)				AID										
	3 4 2 Work with government etc. to promote enforcement of logging bans and licensing agreements (in connections, not parks)				AID										
	3 4 3 PACE at regional level				AID										
	3 4 4 Consult with government for new zoning connections				AID										
	3 4 5 Design possible policy interventions for connections				AID										
	3 4 6 promote best practices for regional operations														
3 5 Awareness program designed and made operational															
	3 5 1 Communic strategy implemented in N Quezon, Quirno, Cagayan				AID										
	3 5 2 Communication strategies as needed in nuclei														
3 6 Select indicator species and promote research on them for integration at the corridor level															
	3 6 1 Incorporated into 3 1														
3 7 Information gathering, integration and analysis for core nuclei (new or targeted biological, social, legal and/or economic data)															
	3 7 1 Assess stakeholders and institutions in nuclei				AID										
	3 7 2 Spatial information				AID										
	3 7 3 Collect and analyze data for connections for gaps identified in 1 6 and train local stakeholders in these methods biological, social, economic, legal, political														

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Program: Philippines

Objective 4:

Biodiversity comdor of connected core nuclei established

Anticipated Five-year Benchmarks:

Plan for connection of core nuclei completed
Compatible alternatives developed and demonstrated

Year 2 Objective 4 level of effort:
USAID-G/ENV 0
CI-Tropical Wilderness Protection Fund 0
CI-First Philippine Conservation Inc 0
CI-Other 0
CI-Intel 0
USAID - Philippines 0
Total for Objective 4 0

Year 2 Higher Level Activities		Year 2 Activities	Expected Year 2 Results	Means of Verification	Year 2 Personnel & Resources	USAID-G Year 2 Level of Effort (\$)	DONOR Year 2 Level of Effort (\$)	Match	DONOR Year 2 Level of Effort (\$)	Match	DONOR Year 2 Level of Effort (\$)	Match	O	N	D	J	F	M	A	M	J	J	A	S	
4 1	Collect biological, economic, and social data to identify priority areas for connection, monitor comdor success and build local capacity																								
		4 1 1																							
4 2	Design and promote policy interventions to alter economic decision-making environment across comdor																								
		4 2 1																							
4 3	Select and collect information on population genetics for monitoring of comdor efficiency																								
		4 3 1																							
4 4	Promote changes in legislation incompatible with comdor goals is completed																								
		4 4 1																							
4 5	Develop market connections for alternative certified products/goods from the comdor																								
		4 5 1																							
4 6	Information gathering, integration, and analysis for comdor activities (new or targeted biological, social, legal and/or economic data)																								
		4 6 1																							
4 7	Awareness program designed and made operational at comdor level																								
		4 7.1																							
Anticipated Future Higher Level Activities (year 3-5)		Anticipated Future Activities (year 3-5)	Anticipated Future Results (year 3-5)	Means of Verification	Anticipated Future Personnel & Resources	Estimated USAID Level of Effort (\$)	Estimated DONOR Level of Effort (\$)	Match	Estimated DONOR Level of Effort (\$)	Match	Estimated DONOR Level of Effort (\$)	Match	FY '02	FY '03	FY '04	FY '05									
4 1	Collect biological, economic, and social data to identify priority areas for connection, monitor comdor success and build local capacity																								
		4 1 1	Select priority areas from data collected in 4 6 (1 6)																						
		4 1 2	Design boundanes for comdor																						
4 2	Design and promote policy interventions to alter economic decision-making environment across comdor																								
		4 2 1	Develop alternative spending strategy for road construction			AID																			

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Anticipated Future Higher Level Activities (year 3-5)	Anticipated Future Activities (year 3-5)	Anticipated Future Results (year 3-5)	Means of Verification	Anticipated Future Personnel & Resources	Estimated USAID Level of Effort (\$)	Estimated DONOR Level of Effort (\$)	Match	Estimated DONOR Level of Effort (\$)	Match	Estimated DONOR Level of Effort (\$)	Match	FY '02	FY '03	FY '04	FY '05
4.3 Select and collect information on population genetics for monitoring of corridor efficiency															
	4.3.1 Identify and monitor indicators across corridor: analyze gene flow across corridor and movement, monitor social indicators, satellite imagery analysis														
4.4 Promote changes in legislation incompatible with corridor goals is completed															
	4.4.1 Influence national/reg/landscape/local legislation for environment														
4.5 Develop market connections for alternative certified products/goods from the corridor															
	4.5.1 Design alternative market access for communics					AID									
4.6 Information gathering, integration, and analysis for corridor activities (new or targeted biological, social, legal and/or economic data)															
	4.6.1 As needed to connect nuclei (biological, social, economic, spatial)														
4.7 Awareness program designed and made operational at corridor level															
	4.7.1 Implement corridor communication strategy														