

of the PAMBC at the national and international levels; (iv) improving natural resource management in priority areas of the PAMBC; and (v) reducing colonization of priority areas of the PAMBC by strengthening protected areas management and indigenous land tenure.

### Priority Areas For Project Intervention

During 1996, an intensive process of physical, biological and participatory planning resulted in Panama's developing a national proposal which identified its potential contributions to the Mesoamerican Biological Corridor (MBC). The process was completed by INRENARE as part of a regional Mesoamerican Biological Corridor study assisted by GEF/UNDP. The official output is the "*National Protected Areas and Biological Corridor Plan*", a document which defines the global strategy in Panama for the MBC. The study provided the initial delineation of national biological corridors, established conservation priorities based on biological values and provided a diagnostic of issues relevant to their conservation. Planning for the proposed project took the *Corridor Plan* as its point of departure and began from the perspective of focusing GEF resources on securing the conservation of intact ecosystems rather than on restoration or rehabilitation of converted landscapes. This served to focus priorities on Panama's Atlantic slope and the contiguous intact ecosystems found in the Pacific portions of Darién National Park. Through these areas, a *de facto* biological corridor remains which transverses Panama from its southern border with Colombia to its northern border with Costa Rica.

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Subsequent prioritization was carried out based on: (i) the objective of maintaining connectivity through these intact and relatively intact ecosystems; (ii) estimates of threats to such connectivity based on historic deforestation processes (comparisons between 1986 and 1992) and current economic development activities and trends; (iii) estimates of opportunity costs to conserve the biological corridor; (iv) social evaluations and consultations with indigenous and non-indigenous authorities, NGOs, and organizations to identify opportunities and potential conflicts; (v) INRENARE's expressed priorities; and (vi) an analysis of existing financing for activities consistent with the biological corridor concept within the Atlantic watershed. In addition, a detailed diagnostic for prioritization within National Protected Areas System, completed by the preparation of the IBRD-financed *Rural Poverty and Natural Resource Management Project*, was used to strengthen conclusions regarding priorities within protected areas.

A summary of the results are presented in Attachments 1, 2, and 3. The attachments reference all of the areas where currently intact and relatively intact ecosystems are found which together comprise the *de facto* biological corridor. The priority areas established for local interventions by the proposed project are highlighted in the Attachments.

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From the planning processes, a very clear strategy for project intervention evolved. Of the 2.8 million hectares which comprise the terrestrial portion of the PAMBC, approximately 1.3 million hectares are within areas with legal declarations as protected areas while 1.1 million hectares are within areas with legal declarations as indigenous *comarcas*. Significant overlaps between these two areas exists. An additional 0.2 million hectares of indigenous territories (Teribe and Wargandi) are currently under discussion as being legally declared as *comarcas*; the discussions on the declaration of the Teribe *comarca* are well-advanced and there is apparently an emerging consensus which is expected to result in the declaration within 1-2 years. The protected area system and the indigenous *comarcas* and territories provide a clear foundation and opportunity to promote conservation and sustainable development compatible with the concept of the PAMBC: (i) there is an existing legal framework; (ii) legal aspects of land tenure and ownership are unambiguous and an open access situation does not exist, although conflictive and complicated elements remain to be resolved; and (iii) local populations demonstrate a higher degree of social organization and have expressed interests in securing development assistance for sustainable livelihood and resource conservation.

Based on the assessments of threats, risks, development priorities and existing (and proposed) financing, the priority areas selected for local project intervention are:

- *Province of Bocas del Toro*, which is an area of high biodiversity value with relatively little existing financing for conservation and where the completion of a road project (Chiriqui Grande to Almirante) will, over the next few years, result in a significant increase in development pressure. Warranted measures include securing protected areas and indigenous lands; identifying and enhancing protection for other high value areas; and securing consensus with communities, private sector interests and local and national authorities on future developments. This area is

designated as the highest priority for the project.

- *International Park La Amistad, Volcan Baru National Park and the La Fortuna Forest Reserve*, which are the “backdoors” to Bocas Del Toro province and require relatively little incremental financing to enhance their current protection.
- *El Copé National Park*, an isolated “island” within the vulnerable center of the PAMBC where the agricultural frontier is threatening to break through to the Atlantic coast. A strategic focus is required in this area as currently there is little existing financing for conservation and sustainable development activities within which to engage local stakeholders. Needs in that area are beyond this project’s ability to respond. A recent IFAD project (“Triple C”) has been approved which could potentially provide key assistance to the PAMBC in this area. INRENARE will be working with IFAD under that project’s natural resources component to coordinate efforts within the PAMBC. This project will thus focus assistance on: (i) El Copé National Park to complement INRENARE’s actions with the Triple C project; (ii) assisting INRENARE to leverage additional financing to cover the link between Bocas Del Toro (and the Ngobe-Bugle *comarca*) and El Copé National Park through the “*Montañoso de Veraguas Biological Corridor*”; and (iii) financing initial studies which could lead to protected area declarations for the “Rio Indio Multiple Use Area” and the “Doñoso Forest Reserve” as key elements to consolidate the “center” of the PAMBC.
- *San Blas Comarca, Corregimiento #1*, where the Kuna Congress has requested assistance to: (i) strengthen protection of the Narganá wildlands on the western edge of the *comarca* where there is pressure steadily increasing from colonization and road building; and (ii) demarcate and protect an area in the south of Nusagandi which is under increasing colonization pressure.
- *Comarca Madugandi and the Wargandi territory*, both Kuna indigenous areas, where assistance has been requested by the Madugandi Congress to demarcate and protect a portion of their southern limit under increasing colonization pressure and by both groups for assistance in management of land conflicts and strengthening vigilance and protection.
- *Darién National Park*, where the project will finance strategic activities (e.g., infrastructure, involvement of local communities in Park management) to enhance protection. Incremental financing is not required in the park buffer zones or connecting biological corridors as significant donor resources are already targeted to these areas and Inter-American Development Bank is currently preparing a “Darién Sustainable Development Project”. A key role for the project will be to assist INRENARE in coordinating activities between donors to increase focus on activities compatible with the PAMBC.

Actions will include support to local capacity building, PAMBC planning and coordination, promotion and awareness, conflict management, demand-driven sustainable use and conservation projects, and protected area management. Activities at the national-level will provide support to the PAMBC as a whole as well as assist to maintain support for the local initiatives. Details are provided below.

**Project Component 1 - Corridor Planning and Biodiversity Monitoring** (US\$2.53 million; GEF US\$2.07 million) would focus on filling in gaps in knowledge critical to refining and negotiating the corridor framework with national and local level actors, would include:

*Subcomponent 1 - National Planning and Intersectoral Coordination* (US\$0.64 million; GEF US\$0.58 million) The Mesoamerican Biological Corridor is rapidly transforming into a regional initiative with broad support from national governments and multilateral and bilateral donors; it is a top priority for the CCAD, which represents the executive branch of national governments through the countries’ Ministers of Environment and Natural Resources. The modest resources available to this project are thus focused on capitalizing on this broad support and initiating processes required to attain the levels of investments necessary to consolidate the Panamanian section of the Mesoamerican Biological Corridor and to ensure the sustainable use of its biological resources. In common with most of the other GEF-financed MBC investments in the region, the principal contribution of the project is the promotion of the MBC vision of conservation and sustainable use of biodiversity and the leveraging project funds by influencing the principal stakeholders of the project. Initial efforts will focus on influencing, targeting, prioritizing and improving efficiency of existing financing through achieving agreements on the importance of the PAMBC and enhancing cooperation and coordination. The short-term desired result would thus be increased financing for PAMBC-compatible activities in priority areas and reduced financing of non-compatible activities.

Of the various stakeholders in the area of the Corridor, among the most important in terms of defining its long-term survival are major decision-makers at various levels of government and key private sector and civil society actors. This subcomponent aims to influence decision-making and long-term strategies of these stakeholders. Specifically, the various investments are targeted at influencing various branches of government, private sector mining interests, and international donors and financiers.

The different activities planned under the subcomponent are:

- Develop and agree upon sector strategies and guidelines for the PAMBC and biodiversity conservation with INRENARE (forests, protected areas, environmental assessment), MICI (mining), MOP (transport), ME (education), AMP (marine resources), IPAT (tourism), MIDA (agriculture), MIPPE (economic policy and planning), and the division of Indigenous Policy in the Ministry of Governance and Justice (indigenous *comarcas*). This activity includes consultants, studies, workshops and meetings, and preparation and dissemination of strategic documents.
- Develop a strategy and proposal for adjudication of forested national lands as a specific task under the general heading of strategic support to INRENARE. The activity will primarily cover costs of an international and local consultant.
- Assist INRENARE and MICI in the development of a strategy for ensuring that mining interests in the PAMBC begin the process of fully integrating the concept of the Corridor and the importance of biodiversity conservation. In addition to development of a strategy, the activity will finance an environmental audit of Moléjon and Petaquilla Mining Projects.
- Finance annual coordination workshops with bilateral and multi-lateral donors, NGOs, local authorities, relevant GOP agencies, and key institutions representing other sectors whose activities have potentially important impacts on biodiversity conservation and the PAMBC.
- Support annual meetings at the national level to discuss and formalize the global strategy and policy for the PAMBC. Initially, the leadership and forum for the ~~meeting will be the Administrative Committee of the PAMBC~~ project. This is expected to be replaced by the National Environment Council (CNA) when it is formed under the proposed General Environment Law. This is expected to occur within the first year of the project.

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Subcomponent 2 - Local & Regional Planning in Priority Areas (US\$1.14 million; GEF US\$1.03 million). In addition to the activities which foment new ways of thinking at the national level, it is critical to ensure that the fundamental concepts of the Corridor, conservation, and sustainable use are implemented at the local and regional levels. Incipient planning processes at various local levels are now taking place in Panama. This subcomponent will support participatory planning activities which integrate the PAMBC, refine its definition based on locally supported opportunities, as well as influence them so that, where appropriate, they are consistent with national sectoral and PAMBC strategies. The tools developed for integration of the PAMBC in participatory planning processes will be disseminated to local governments, NGOs, and other programs and projects operating throughout the PAMBC.

The subcomponent will specifically support planning activities in geographic areas that have been prioritized as the key areas for project intervention within the Panama Atlantic Mesoamerican Biological Corridor. In addition to working with planning initiatives at various governmental levels, the project through this subcomponent will support indigenous groups and planning for key Corridor protected areas. Activities include:

- Develop participatory land use management plans with regional and local stakeholders within selected priority areas of the PAMBC, including the indigenous *comarcas* of Ngobé-Bugle, Kuna Yala, and Madugandi; and with the indigenous territory of the Teribe. The areas where plans are to be financed are identified and supporting information provided in background documents; the activity will finance studies, special advisory consultants, workshops, and some equipment costs.
- Develop management plans for four protected areas (La Amistad, San San Pond Sak, Bastimentos, and Palo Seco), carry out resource evaluations and inventories in another four protected areas (El Cope, La Fortuna, Palo Seco, and Darién), and hold public consultations and validations of protected area annual operating plans.

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*Subcomponent 3 - Biodiversity Monitoring (US\$0.75 million; GEF US\$0.46 million).* A corridor monitoring system is essential to measure the degree to which the goals of the project are being met as well as to provide valuable information to decision-makers. Critical information includes the extent of remaining natural vegetation and the speed of advance of the agricultural frontier. In addition to information on the quantity of habitat, the quality of habitat must also be monitored since the mere presence of forests does not guarantee they still provide for the survival of naturally functioning ecosystems. Finally, given the tremendous difference between raw data and useful information (i.e., processed data), a functional monitoring system must be able to count on resources for analysis and dissemination of information.

The monitoring of habitat quantity in the corridor will depend initially on the establishment of a useful baseline. In the case of Panama, coarse-scale maps exist of remaining forest cover in the country; however, these are outdated and of insufficient detail. The project will support the preparation of a vegetation ecosystems map at a scale of 1:250,000. The actual monitoring of changes in habitat quantity will rely on the collection and interpretation of remote satellite imagery.

Effective monitoring of habitat quality is notoriously elusive because of the difficulty of collecting information at a species level, of measuring population trends, and of desegregating natural variability from observed trends. Nevertheless, even crude measures of population changes in a few indicator species can provide helpful information on major trends in habitat quality. The project will invest modest resources in monitoring the status of several indicator species. This system would be linked to both ongoing (e.g., standardized reporting by park guards and field foresters) and ad hoc (e.g., Rapid Ecological Assessments, discussed above, and biodiversity/ecological research) data collection mechanisms; initial application of the Rapid Assessments will be in the mining zones of Moléjon and Petaquilla. All of the project's monitoring efforts would be closely coordinated with the regional monitoring scheme for the MBC supported by the GEF/CCAD/UNDP project.

The main activities of the subcomponent would include:

- Design and install a Monitoring System, including acquisition of necessary equipment and training of necessary personnel. An internationally-recruited consultant will be contracted to assist with the design of the system and a monitoring specialist, located in INRENARE, will be contracted through the life of the project. During the initial design phase, an effort would be made to inventory existing studies, initiatives, and projects. Based on the findings during the phase of initial design, the monitoring system could take advantage of existing capacity of the Panama Canal Monitoring Project (INRENARE/ Smithsonian initiative with funding from USAID; currently scheduled to continue until December 1998).
- Preparation of a vegetation and ecosystems map for Panama. The bulk of remaining natural vegetation and intact ecosystems are located in the Atlantic section of Panama's Mesoamerican Biological Corridor, thus there is little additional cost involved in preparing a vegetation map of the entire country. It is planned that a map at a scale of 1:250,000 will be produced. Similar maps have recently been produced in other Central American countries and every effort will be made to ensure compatibility with existing or planned maps in these neighboring countries. In particular, this map will be coordinated with the ongoing PROARCA initiative to produce a vegetation map of Central America. With a budgeted cost of about US\$260,000, this activity covers the cost of specialized experts, remote satellite image acquisition (LANDSAT and possibly radar images), data collection, ground-truthing, workshops with Panamanian experts, production of GIS-based maps, and printing.
- Change detection exercises. Once an initial baseline map has been produced of forest cover in the PAMBC, changes in natural habitat quality may be monitored through change detection exercises using remote satellite imagery. Although the exact methodology to be followed will be determined during the design phase of the component, it is probable that the change detection analyses will rely on LANDSAT remote images. It should also be noted that change detection exercises for the Mesoamerican Biological Corridor as a whole are planned under the regional GEF MBC Project, allowing for significant opportunities for cost-sharing and coordination between the two projects.
- In order to complement the baseline data provided by the preparation of the vegetation and ecosystems map as well as to improve the state of knowledge about certain critical areas of the PAMBC, rapid biological assessments will fill in knowledge gaps in priority areas. Priority areas for rapid assessments include the Moléjon and Petaquilla mining areas, with others selected during project execution; this activity will finance short but intense assessments of areas within the corridor which are believed to be rich in biological diversity and for which an inventory is considered important (e.g., areas under imminent threat, areas under consideration for incorporation into the

protected area network).

- In order to take into account the quality of corridor natural habitats, the monitoring component will monitor the population status of a small number of indicator species (easily monitorable species whose presence and population stability are indicators of some level of overall ecosystem health). The species to be studied and the exact methodological protocols will be determined during the design phase of the study; it should be noted that successful monitoring of indicator species has been carried out as part of the Panama Canal Monitoring Project. The actual data will be collected primarily in protected areas through an innovative methodology developed for this project by which most data collection will be undertaken by park guards and supplemented by field-based experts as necessary. One major sub-activity will involve support for a monitoring program of the Harpy Eagle. INRENARE has an ongoing program with the Peregrine Fund to monitor this species in the Darién; through this project, monitoring will extend to the rest of the PAMBC.

Finally, analysis and dissemination of monitoring data will be established and supported through a monitoring network comprised of universities, researchers, and NGOs currently involved in collection of relevant data.

**Project Component 2 - Mesoamerican Biological Corridor (MBC) Awareness and Promotion (US\$1.15 million; GEF US\$1.07 million)** would focus on creating the MBC as a concept, vision and image within Panamanian society in general and among key stakeholders specifically. Specifically, it would attempt to raise to the level of public debate on the operational concept of the MBC; create broad public support and strengthen national and local advocacy for the MBC as a means of enhancing social and political incentives to the participation of key stakeholders; educate key stakeholders as to the goals of the MBC; and promote the integration of biodiversity concerns and the MBC within other GOP and donor supported programs.

**Subcomponent 1 - National Awareness (US\$0.82 million; GEF US\$0.35 million)** This subcomponent is aimed at ensuring high visibility for the biological corridor as a concept and as a strategy for integrating biodiversity concerns within national, regional and local development. Educational activities would be focused at the general public, key national and regional leaders, and primary school teachers and children as a means of creating public support for the biological corridor as well as for the conservation of its key elements (e.g., indigenous lands, protected areas, primary forests, critical watersheds). The subcomponent includes:

- **Public Awareness Campaign.** This activity groups investments that target the general public as opposed to decision-makers. It includes consultants to finalize the design of the program; publicity campaigns through special events, radio and television; preparation of special communication material; sponsorship of fairs or other public events on biodiversity or the Corridor; support ongoing environmental education programs of the Ministry of Education; and surveys.
- **Promotion among national and local leaders.** Awareness activities would promote increased awareness among leaders and representatives at the national and local levels regarding: (a) the existence, objectives, and value of the MBC as it relates to sustainable development in Panama; (b) the importance of biodiversity to sustainable development; and (c) opportunities for sustainable development compatible with MBC objectives. This activity would principally finance a series of special events or workshops.
- **Local environmental education** to incorporate the PAMBC into the existing environmental education program and curriculum of the Ministry of Education (in cooperation with INRENARE) for primary schools and assist with its implementation in priority areas of the PAMBC. This activity would finance development of curriculum modules, printing cost and dissemination, workshops with teachers, and special events (e.g., ecological fairs, youth group activities).

**Subcomponent 2 - International Promotion (US\$0.33 million; GEF US\$0.30 million)** The second subcomponent aims to reinforce the vision of the MBC and biodiversity conservation by creating international awareness and interest in Panama as an ecotourism destination and as a country seriously attempting to conserve its biological resources. International marketing campaigns efforts will be coordinated with the regional CCAD-managed MBC Project and other national initiatives. The project, in cooperation with the Panamanian Institute of Tourism will: (a) finance development of an ecotourism strategy for the MBC; (b) promote and facilitate international communication of information on the MBC, including establishment and maintenance of a web page on the MBC in Panama; (c) develop, print, and disseminate promotion instruments; and (d) conduct opinion surveys among international visitors.

**Project Component 3 - Capacity Building for Conservation & Sustainable Use of Biodiversity** (US\$1.98 million; GEF US\$1.18 million) would focus on strengthening of government and non-government organizations and communities for the conservation and sustainable use of biodiversity in the PAMBC. Subcomponents include:

*Subcomponent 1 - Strengthening at the Community Level* (US\$0.99 million; GEF US\$0.63 million) would assist indigenous and non-indigenous communities and their representatives in priority areas of the PAMBC to: (a) participate effectively in the local, regional, and national planning processes; (b) utilize biodiversity resources sustainably; and (c) access and make effective use of the resources available for investments in priority areas (under Project Component 4). Specifically, activities would include:

- Selection and training of 64 local PAMBC promoters. This activity would cover costs of selecting and training volunteer promoters and would cover their operational costs during the implementation of the project.
- 120 indigenous and non-indigenous leaders trained on PAMBC objectives, activities and implementation arrangements.
- Development of the overall program of training.
- Training in conflict mediation for indigenous representatives in issues related to land use.
- Strengthening of local and regional committees.
- Strengthening of provincial and *comarca* planning units.
- Strengthening in planning and legal issues.
- Training for women's groups in sustainable use of resources.
- Training in appropriate technologies.
- Exchange tours to allow local communities to learn of best practice experiences in other areas.
- Training in project preparation and implementation.

*Subcomponent 2 - Training in Environmental Management* (US\$0.21 million; GEF US\$0.20 million) would offer a series of sixteen workshops for private sector companies on the PAMBC and biodiversity; EIA best practices for biodiversity issues; and international business trends and opportunities relevant to biodiversity and sustainability (e.g., ISO 9000, certification of ecotourism, forestry and agricultural products). This subcomponent would also provide special training for environmental professionals in areas of environmental management as yet undeveloped in Panama. Activities include:

- Eight workshops for the private sector on the PAMBC, biodiversity conservation, and environmental assessments. The target audiences would include investors in the mining, construction, tourist and forestry sectors.
- Eight workshops for the private sector on international trends and opportunities regarding biodiversity and sustainability.
- Training of environmental professionals in methodologies for economic valuation of biodiversity and natural resources and methods incorporating biodiversity concerns in sectoral and regional planning.
- Training of environmental professionals in concepts and methods of policy analysis and biodiversity.
- Training of environmental professionals in special issues of concern regarding the mining industry and the Mesoamerican Biological Corridor.

*Subcomponent 3 - Modernization of NAPAS* (US\$0.77 million; GEF US\$0.34 million) This subcomponent would support efforts aimed at modernizing Panama's protected area system, focusing upon protected areas within the PAMBC. This includes development of a modernization strategy and revision of internal procedures. As a major element of implementing the modernization strategy, the project will support training for executive, managerial and administrative staff from DPAW's central, regional and protected areas offices on administrative, technical, and social aspects of protected area management and biodiversity conservation. Park guards and volunteers would receive specialized training in their duties and biodiversity monitoring. This subcomponent would also train local representatives seated on the provincial and local committees that will be the main interlocutors between INRENARE and civil society. Specific activities envisaged under this project include:

- Evaluate the organization and current administrative efficiency of the NAPAS and develop a reorganization plan as required, including technical assistance in reorganization and the development of internal procedures, to strengthen protected areas management within the PAMBC

- Develop and implement a strategy to increase resource generation to improve the financial sustainability of protected areas management and protection within the PAMBC.
- Training of central, regional and local DPAW staff on administrative, technical, and social aspects of PA management. This activity will also include legal training for INRENARE staff on resolution of legal and tenure conflicts.
- Training of 150 park guards and volunteers in park management and protection. ?

**Project Component 4 - Investments in Priority Areas of the PAMBC** (US\$6.04 million; GEF US\$3.09 million) would provide grants to finance eligible costs of securing the long-term protection of the biological corridor and biodiversity, including equipment, consultants, operational expenses, studies, workshops, training, study tours and development and dissemination of materials. In all cases, component expenditures are restricted to pre-defined geographical areas which have been identified as high priority. Subcomponents include:

*Subcomponent 1 - Support for Conservation and Sustainable Use of Biodiversity: Subprojects (US\$3.25 million; GEF US\$1.32 million)* This subcomponent will provide grants to support activities aimed at strengthening indigenous land security and land use, with the objective of promoting the long-term conservation and sustainable use of biodiversity within the PAMBC. Proposals would be developed during project implementation directly with the indigenous authorities, their officially designated representatives, and indigenous communities. Furthermore, this subcomponent would provide grants to support indigenous and non-indigenous communities in implementing alternative activities and technologies of resource use. Successful implementation would have a multiplicative effect and would be favorable to the PAMBC by reducing pressure of local communities on natural resources in the core of the corridor. Attachment 4 (see below) provides a summary of indicative eligibility criteria, which will be further refined during the finalization of the Project Operations Manual. Eligible subprojects would include:

- Demarcation subprojects, including demarcation of approximately 175 kilometers of *comarca* limits in areas under pressure from colonization and support for patrol programs of *comarca* limits. Areas for demarcation have been pre-defined in consultation with indigenous congresses. Demarcation subprojects will only be supported in areas where boundaries are legally established, where potential for violence is not a constraint, and the Ministry of Government and Justice's Office of Indigenous Policies provides a no-objection.
- Vigilance subprojects in support of ongoing efforts by indigenous communities to limit invasions by individual colonists into indigenous *comarcas*. The subprojects will primarily finance such activities as training individuals to locate and map locations of current colonists, facilitate field communications, and mobilization.
- Joint subprojects between indigenous and non-indigenous communities which support ongoing activities to promote improved relations and reduced conflicts between principals. Eligible activities would primarily be social and organizational activities. Subprojects of this nature will require minimal financing.
- Traditional and cultural knowledge subprojects in support of systematizing, disseminating and training of trainers to assist communities in maintaining systems for sustainable use.
- Subprojects which support conservation or sustainable use of biodiversity with communities. Co-financing requirements for investments would range from 20% for conservation subprojects to 40% for sustainable use subprojects. The level of co-financing has been calculated to reflect appropriate cost-sharing between the national baseline and the global increment. Full details on the subprojects and eligibility criteria are included in the Operational Manual and a summary is included in Attachment 4. Subproject prioritization and selection will be done at the level of the Local Sustainable Development Committees with no-objections based on eligibility and available financing criteria made either at the provincial, *comarca*, or PEU-levels depending on total cost.
- A biodiversity prospection subproject to finance a model project for inclusion of communities, local benefits, and local intellectual and cultural property rights. Financing will be made available for one biodiversity prospection subproject in which GEF financing is utilized to ensure local participation and equitable benefits. There are currently bioprospection activities in Panama, but little attempt has been made to replicate the INBio model (from Costa Rica) where local individuals are trained as para-taxonomists and employed through the projects nor has there been much advance in ethnobotanic based prospection. Activities eligible for GEF financing will include those leading to: (i) clarification and negotiation of intellectual and cultural property issues and the benefits to accrue locally from them; and (ii) training of local individuals to be subsequently employed by the subproject. Co-financing requirements will be a minimum of 65%. The successful proposal will have achieved the prior and

informed consent from participating communities and will be selected based on its estimated potential to provide local benefits, achieve at least medium term sustainability, and its inclusion of a feasible, transparent collection protocol to ensure that collection levels are compatible with ecosystem and species resilience and do not harm biodiversity. Proposals will be submitted directly to the PEU with final approval contingent on a no-objection from the World Bank.

In addition, financing will be provided under this subcomponent for operational support for the functioning of project selection and oversight committees.

*Subcomponent 2 - Investments in Protected Areas (US\$2.79 million; GEF US\$1.76 million)* The investments under this subcomponent will be administered through INRENARE and aim to ensure adequate protection and conservation of biodiversity in priority protected areas in the PAMBC. Project activities would include:

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- Protected areas management infrastructure, including design work for infrastructure such as visitor centers, guard posts, and offices. This activity also includes costs of equipment required for protected area management.
  - Park management infrastructure for INRENARE-managed protected areas that are located within indigenous *comarcas* or territories. In these areas of overlap between protected areas and indigenous areas, investments will need to be planned and executed jointly between INRENARE and the indigenous groups concerned.
  - Special programs including interpretive programs in visitors centers and nature trails, and a volunteer park guards program to involve local communities and assist INRENARE staff.
  - Physical demarcation of 295 km strategic limits in areas under pressure from colonization.

**Project Component 5 - Project Management** (US\$1.10 million; GEF US\$0.99 million) would contribute toward financing the incremental costs of project administration, coordination, and management related to GEF-financed activities. This includes project coordination unit personnel (Project Coordinator, Financial Officer, and Administrative Assistant); project monitoring and evaluation; office supplies and equipment; printing and other operational expenses. The PCU will collaborate in overall project management, while the PEU will coordinate day-to-day management of the project.

*volunteer park guards*



## Annex 2 Attachment 1

### Project Description Panama Atlantic Mesoamerican Biological Corridor Project

#### PAMBC and Threats Represented by Deforestation Processes in the PAMBC in 1992 (areas in bold are project priority areas)

Name	Annual Threat (measured in base of cover in 1992)						
	Deforestation			Area Interven. (ha)	Threat Total		
	Within (ha)	%	Outside (ha)		Subtotal (ha)	(ha)	%
Existing National Parks	6,006	0.7%	10,153	16,159	-	16,159	1.88%
N.P. Amistad	961	0.5%	1,267	2,228	-	2,228	1.11%
N.P. Volcán Barú	732	4.9%	589	1,321	-	1,321	11.55%
N.P. Isla Bastimentos	12	0.6%	143	155	-	155	8.27%
N.P. Omar Torrijos/El Copé	74	0.6%	291	365	-	365	1.80%
N.P. Portobelo	121	0.8%	191	312	-	312	2.02%
N.P. Chagres	1,836	1.6%	2,427	4,263	-	4,263	4.08%
N.P. Darién	2,270	0.4%	5,245	7,515	-	7,515	1.49%
Other Protected Areas	4,750	2.0%	4,549	9,298	-	9,298	4.03%
W.I.I. San San-Pond Sack	76	9.3%	259	336	-	336	3.65%
P.F. Palo Seco	3,058	2.4%	1,608	4,666	-	4,666	4.00%
F.R. La Fortuna	853	3.6%	202	1,056	-	1,056	5.57%
F.R. La Yeguada	409	10.4%	194	603	-	603	20.78%
N.M. Barro Colorado <sup>1</sup>	-	-	-	-	-	-	0.00%
R.A. Lago Gatún	1	1.4%	-	1	-	1	0.59%
W.R. Narganá y Comarca de San Blas	352	0.4%	2,285	2,637	-	2,637	3.17%
Proposed Protected Areas	1,414	3.2%	2,114	3,528	297	3,825	5.15%
N.P. Amistad (addition)	486	8.8%	652	1,138	-	1,138	43.54%
R.C. Escudo de Veraguas	-	0.0%	-	-	-	-	0.00%
N.P. Santa Fé	13	0.1%	116	130	-	130	1.21%
M.U.A. Corregimiento de Río Indio	-	0.0%	-	-	297	297	0.88%
N.P. Fuerte San Lorenzo	95	1.2%	-	95	-	95	1.01%
R.A. Lago Gatún (adición)	22	4.5%	88	110	-	110	20.01%
R.C. Isla Galeta	0	0.1%	9	10	-	10	3.28%
N.P. Chagres (adición)	-	0.0%	25	25	-	25	0.36%
Humedal Bahía de Escribano	-	0.0%	-	-	-	-	0.00%
R.C. Isla Majé (Bayano) <sup>1</sup>	-	-	-	-	-	-	0.00%
W.R. de Punta Garachiné	797	6.0%	1,223	2,020	-	2,020	23.34%
Corridors Proposed	23,958	2.1%	17,312	41,270	6,761	48,032	4.32%
A.C. Teribe-San San-Pond Sack	625	2.9%	381	1,006	-	1,006	4.76%
B.C. Isla Bocas del Toro	144	4.4%	446	590	-	590	18.26%
A.C. Palo Seco	900	9.5%	94	994	-	994	18.96%
H.C. de Montaña	6,489	5.2%	3,540	10,029	-	10,029	10.81%
B.C. Caribeño	7,658	6.2%	562	8,220	-	8,220	10.27%
B.C. Montañoso de Veraguas	1,522	1.0%	1,111	2,632	-	2,632	1.73%
B.C. Copé-Río Indio	3,113	2.8%	-	3,113	5,051	8,165	5.48%
B.C. de la Costa Bajo	127	3.8%	-	127	1,710	1,837	5.72%
B.C. Lacustre	50	13.4%	46	96	-	96	129.69%
B.C. Interoceánico	55	4.3%	100	156	-	156	5.80%
B.C. Playa Colorado-Diurdí	-	0.0%	88	88	-	88	0.72%
B.C. Comarca Madugandí	1,026	0.5%	1,318	2,344	-	2,344	1.14%
B.C. Comarca San Blas Correg. #2,#3 y #4	713	0.8%	141	854	-	854	0.98%
B.C. Comarca Emberá-Wounaan, etc.	1,535	0.6%	9,485	11,020	-	11,020	4.12%
Grand Total	36,127	1.6%	34,128	70,255	7,058	77,314	3.40%

ote: Inconsistencies in area estimates are attributable to slight differences between map products of the 1986 and 1992 forest cover and the PAMBC. "Interven." signifies "forest in 1986 and intervened in 1992". "Regen." signifies areas without forest in 1986 and with forest (or intervened forest) in 1992. "Deforestation" is calculated based on area deforested divided by the sum of area deforested and the area of forest which has not changed use (total divided by 6).

**Annex 2**  
**Attachment 2**

**Project Description**  
**Panama Atlantic Mesoamerican Biological Corridor Project**

**The PAMBC - Corregimientos, Priorities, and Estimated Population <sup>1</sup>**  
(areas in bold are project priority areas)

<i>Corregimiento</i>	Rural/ Urban	District	Province	Priorities				Est. Population (07/97) <sup>1</sup>		
				Connectivity *		NPAS	Socio- Cultural	Total	Indig.	Non - Indig.
				PAMBC	Local					
Bocas del Toro	U	Bocas del Toro	Bocas del Toro	1	1			5,798	2,499	3,299
Bahia Azul	R	"	"	1	1		X	4,883	4,146	737
Bastimentos	R	"	"	1	1	X		1,226	565	661
Calovebora	R	"	"	1	3			3,740	3,243	497
Punta Laurel	R	"	"	1	1			1,007	829	178
Tobobe	R	"	"	1	1		X	7,284	6,840	444
Changuinola	U	Changuinola	"	1	2	X	X	46,920	21,489	25,431
Almirante	U	"	"	1	1	X	X	15,550	6,142	9,408
Guabito	U	"	"	1	2	X	X	15,757	8,635	7,122
Chiriqui Grande	U	Chiriqui Grande	"	1	2	X	X	11,714	8,903	2,811
Canquintu	R	"	"	1	2		X	4,752	4,562	190
Guoroni	R	"	"	1	3			1,458	1,435	23
Mununi	R	"	"	1	3			754	745	9
Piedra Roja	R	"	"	1	3			2,521	2,486	35
Punta Robalo	R	"	"	1	1	X	X	4,604	3,508	1,096
El Harino	R	La Pintada	Coclé	2	1	X		7,234	-	7,234
Llano Grande	R	"	"	1	2	X		5,339	-	5,339
Piedras Gordas	R	"	"	2	1	X		4,177	-	4,177
El Copé	R	Olá	"	2	1	X		1,268	-	1,268
El Palmar	R	"	"	2	3			1,997	-	1,997
Tulú	R	Penonomé	"	2	3			4,407	-	4,407
Chagres	R	Chagres	Colón	3	3			348	-	348
Achiote	R	"	"	3	3			806	-	806
El Guabo	R	"	"	3	3			1,422	-	1,422
La Encantada	R	"	"	3	3			2,998	-	2,998
Palmas Bellas	R	"	"	3	3			1,800	-	1,800
Piña	R	"	"	3	3			701	-	701
Salud	R	"	"	3	3			2,367	-	2,367
Miguel de la Borda	R	Donoso	"	1	2		X	2,826	-	2,826
Coclé del Norte	R	"	"	2	1		X	3,209	-	3,209
El Guasimo	R	"	"	2	2		X	2,468	-	2,468
Gobea	R	"	"	2	2		X	671	-	671
Rio Indio	R	"	"	2	2		X	1,073	-	1,073
San Jose del General	R	"	"	2	1			1,623	-	1,623
Portobelo	U	Portobelo	"	3	1			3,343	-	3,343
Cacique	R	"	"	3	3			280	-	280
Garrote	R	"	"	3	2			724	-	724
Isla Grande	R	"	"	3	1			723	-	723
Maria Chiquita	R	"	"	3	3			1,622	-	1,622
Palenque	R	Santa Isabel	"	2	2			353	-	353
Cuango	R	"	"	2	2			205	-	205
Nombre de Dios	R	"	"	2	3			1,266	-	1,266
Palmira	R	"	"	2	1		X	351	-	351
Playa Chiquita	R	"	"	2	2			228	-	228
Santa Isabel	R	"	"	2	1		X	216	-	216
Viento Frio	R	"	"	2	3			477	-	477
Ailigandi	R	Comarca	San Blas	1	3			13,971	13,496	475
Narganá	R	"	"	1	1	X	X	15,386	14,478	908
Puerto Obaldía	R	"	"	1	2			1,154	59	1,095
Tubualá	R	"	"	1	3			8,215	8,108	107
Boquete	U	Boquete	Chiriquí	1	2	X		11,996	1,667	10,329

Corregimiento	Rural/ Urban	District	Province	Priorities				Est. Population (07/97) <sup>1</sup>		
				Connectivity *		NPAS	Socio- Cultural	Total	Indig.	Non - Indig.
				PAMBC	Local					
Caldera	R	"	"	2	1	X		1,230	-	1,230
Cerro Punta	U	Bugaba	"	2	2	X		6,970	1,150	5,820
Volcán	U	"	"	2	1	X		8,446	591	7,855
Homito	R	Gualaca	"	2	2	X		1,139	23	1,116
Rio Sereno	R	Renacimiento	"	2	1			3,053	162	2,891
Monte Lirio	R	"	"	2	1			5,838	747	5,091
Cascabel	R	San Felix	"	3	1			809	801	8
Boca de Balsa	R	San Lorenzo	"	3	2			4,182	4,065	117
Emplanada de Corcha	R	"	"	2	2	X		1,933	1,838	95
Soloy	R	"	"	3	1			2,173	2,112	61
Chichica	R	Tolé	"	3	1			5,375	4,907	468
Peña Blanca	R	"	"	3	1			2,347	2,316	31
Sitio Prado	R	"	"	3	1			4,491	4,410	81
Chepigana	R	Chepigana	Darfen	2	1	X		18,225	3,973	14,252
Jaqué	R	"	"	3	1			1,965	1,059	906
Puerto Piña	R	"	"	2	2			634	335	299
Tucutí	R	"	"	2	2	X		1,786	1,184	602
Boca de Cupe	R	Pinogana	"	2	2	X		1,083	327	756
Yaviza	U	"	"	2	2			12,381	2,303	10,078
Paya	R	"	"	2	2			445	396	49
Púcuro	R	"	"	2	1	X		492	458	34
Yape	R	"	"	2	2			228	175	53
Cirilo Guaynora	R	Cémaco	"	2	3			1,952	976	976
Lajas Blancas	R	"	"	2	2	X		3,618	2,912	706
Manuel Ortega	R	"	"	2	2	X		2,553	2,180	373
Jinguru dó	R	Sambú	"	2	2			507	146	361
Rio Sábalo	R	"	"	2	2			2,190	1,791	399
Las Margaritas	U	Chepo	Panamá	3	1			4,290	56	4,234
Cañita(Com. Madugandi)	R	"	"	2	2		X	1,959	39	1,920
El Llano(Com. Madugandi)	R	"	"	2	2		X	16,394	3,246	13,148
Chitra	R	Calobré	Veraguas	3	2			2,012	-	2,012
La Yeguada	R	"	"	3	1			1,538	-	1,538
Santa Fé	R	Santa Fé	"	2	1			2,843	57	2,786
Calovebora	R	"	"	2	1		X	3,632	1,627	2,005

\* - "Connectivity" is a subjective measure derived through an expert system, taking into account relative biological importance, current conservation status, degree of threat, and distribution of financing and institutional responses to ensure adequate conservation. Areas designated as "1" are of highest priority, "2" medium, 3 "lowest" for project intervention in pursuit of the global objective of conserving and maintaining the PAMBC. It is extremely important to interpret these rankings as preliminary and subject to change based on the more detailed and valid processes of local planning and consultation to take place through the project. What is not subject to change are the areas identified; they represent the areas within which there currently exists a biological corridor and which thus merit special attention regarding development, investment and land use.

Urban Population:	143,165	(1) Note:	Population figures are based on applying official population growth figures to 1991 census data. Indigenous/non-indigenous population estimates are derived from applying 1991 census estimated percentage of indigenous populations. The results are unverifiable and should be interpreted as being indicative of total population and of the relative balance between indigenous and non-indigenous populations. They are not official figures, nor are there reliable official figures available. A wide range of estimates exist between sources.
Rural Population:	220,760		
Population, Total:	363,925		
Population, Indigenous:	160,198		
Percent, Indigenous:	44%		
Population, Non-Indigenous:	203,727		
Percent, Non-Indigenous:	56%		

## Annex 2 Attachment 3

### Project Description Panama Atlantic Mesoamerican Biological Corridor Project

#### Principal Financing For Rural Development And Natural Resource Management Within the PAMBC

##### Eastern Panama

- Sustainable Rural Development, Darién (IFAD): a six year (1996-2002), US\$ 14.3 million project for communities along the six main rivers in and around the National Park. The project emphasizes improvement of productive systems and commercialization and marketing of agricultural and forest products.
- Biodiversity Conservation, Darién (GEF/UNDP): a five year (1994-99), US\$ 2.5 million project. Project activities focus on the identification of options for sustainable development which take into account management and conservation of biodiversity inside and outside of protected areas; involvement of indigenous communities; and supporting research and monitoring activities.
- Community Management of Cativo Forest (ITTO): a five year (1996-2000), US\$ 1.6 million project in the provinces of Darién and Panama for management of natural forests with communities.
- Agricultural Frontier (EEC): a five year (1996-2000), US\$ 2.4 million project in Darién to set up community forest management systems, diversify production, commercialization and marketing activities, agroforestry in park buffer zones, and community organization

<b>Subtotal:</b>	<b>US\$ 21.1 million</b>
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##### North-Central Panama

- Management and Development of Protected Areas - FIDECO (USAID/GOP/TNC): a US\$ 25 million trust fund which annually provides 50% of interest income to Fundación Natura for subproject financing for rural communities in sustainable natural resource management and the other 50% to INRENARE for protected area management. Primary emphasis is on the Canal Zone. The trust fund would yield about US\$1.5 million per year or US\$7.5 million in financing during the life of the proposed GEF project.
- The 'Triple-C' (IFAD): a recently approved US\$ 14 million project which will start in 1998. Its objectives would be similar to those of the Sustainable Rural Development, Darién project with the inclusion of a central objective on natural resource management. It will operate in the provinces of Coclé, Colón and Panama and likely have similar financing levels as the other two IFAD projects.
- Portobelo National Park project (SICA): a US\$ 1.1 million which is providing assistance to the national park and within its buffer zone.
- Sustainable Forest Management Donoso District, Colón (ITTO): a one year project, US\$0.6 million project, to develop forest management planning approaches for sustainable forest management in the humid tropical zone of Panama.

<b>Subtotal:</b>	<b>US\$ 23.2 million</b>
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##### Western Panama

- Ngobe-Buglé (IFAD): a six year project (1994-2000), US\$ 14 million project working with indigenous communities in sustainable livelihood and rural development.
- Conservation for Sustainable Development (CATIE/OLAFO): a three year (1993-98), US\$ 0.7 million project focused on community and smallholder resource management.
- Cooperative Agroforestry, Bocas del Toro (CATIE/GTZ): a four year (1995-98) US\$ 0.35 million project.
- PROARCA (USAID): a regional five year project (1995-2000), US\$ 0.6 million (approx.) focused on marine and coastal zone management issues.

<b>Subtotal:</b>	<b>US\$15.7 million</b>
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<b>Total:</b>	<b>US\$60.0 million</b>
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Canal Zone watershed

22

## Annex 2 Attachment 4

### Project Description Panama Atlantic Mesoamerican Biological Corridor Project

#### Project Eligibility Definition of Geographical Priorities:

Eligible Corregimientos	Eligible Indigenous Areas	Eligible Regions	Eligible Protected Areas
<p><b>Definition:</b> <i>Corregimientos</i> are the smallest administrative districts in Panama. Below are listed the 21 priority <i>corregimientos</i> selected for project intervention. In defining geographic eligibility for activities as being based on the following <i>corregimientos</i>, it is important to note that this definition includes indigenous <i>comarcas</i> and territories, e.g., the Teribe Territory is within the <i>corregimientos</i> of Changuinola and Guabito in Bocas del Toro.</p>	<p><b>Definition:</b> <i>Comarcas</i> are semi-autonomous indigenous areas, created by law. They constitute indigenous administrative districts. Indigenous territories are areas where there are indigenous land claims, for which there is no legal declaration. In the case of the Teribe territory, it is expected to have an official declaration as a <i>comarca</i> within the first or second year of project implementation.</p>	<p><b>Definition:</b> Regions are defined either as provinces or <i>Comarcas</i>, except in the case of the Teribe Territory which as yet has no legal definition, rather, only a geographical definition.</p>	<p><b>Definition:</b> Protected areas within the project cover a range of management categories:</p> <ul style="list-style-type: none"> <li>• National Parks (NP)</li> <li>• Wetlands of International Importance (WII)</li> <li>• Protection Forests (PF)</li> <li>• Forest Reserves (FR)</li> <li>• Wildland Reserve (WR)</li> </ul> <p>All have legal declarations which define their boundaries and the activities permitted or prohibited within them.</p>
<p><b>Bocas del Toro Province</b> Bocas del Toro, Municipality</p> <ol style="list-style-type: none"> <li>1. Bahia Azul</li> <li>2. Bastimentos</li> <li>3. Bocas del Toro</li> <li>4. Calovebora</li> <li>5. Punta Laurel</li> <li>6. Tobobe</li> </ol> <p>Changuinola Municipality</p> <ol style="list-style-type: none"> <li>7. Almirante</li> <li>8. Changuinola</li> <li>9. Guabito</li> </ol> <p>Chiriqui Grande Municipality</p> <ol style="list-style-type: none"> <li>10. Canquintu</li> <li>11. Chiriqui Grande</li> <li>12. Guoroni</li> <li>13. Mununi</li> <li>14. Piedra Roja</li> <li>15. Punta Robalo</li> </ol> <p><b>Chiriquí Province</b> Boquete Municipality</p> <ol style="list-style-type: none"> <li>16. Boquete</li> <li>17. Caldera</li> </ol> <p>Bugaba Municipality</p> <ol style="list-style-type: none"> <li>18. Volcán</li> </ol> <p><b>Panamá Province</b> Chepo Municipality</p> <ol style="list-style-type: none"> <li>19. Cañita</li> <li>20. El Llano</li> </ol> <p><b>San Blas Comarca</b> 21. Narganá</p>	<p><b>Bocas del Toro Province</b></p> <ol style="list-style-type: none"> <li>1. Teribe Territory</li> <li>2. Ngobe-Buglé <i>Comarca</i></li> <li>3. San Blas <i>Comarca</i></li> <li>4. Panamá Province</li> <li>5. Madugandi <i>Comarca</i></li> <li>6. Darién Province</li> <li>7. Wargandi Territory</li> </ol>	<ol style="list-style-type: none"> <li>1. Bocas Del Toro Province</li> <li>2. Teribe Territory</li> <li>3. Ngobe-Bugle <i>Comarca</i></li> <li>4. San Blas <i>Comarca</i></li> <li>5. Madugandi <i>Comarca</i></li> </ol>	<p><b>Bocas del Toro Province</b></p> <ol style="list-style-type: none"> <li>1. NP Isla Bastimentos</li> <li>2. WII San San Pond Sak</li> <li>3. NP La Amistad</li> <li>4. PF Palo Seco</li> </ol> <p><b>Chiriquí Province</b></p> <ol style="list-style-type: none"> <li>5. NP Volcan Baru</li> <li>6. FR La Fortuna</li> </ol> <p><b>Veraguas, Coclé, Colon Provinces</b></p> <ol style="list-style-type: none"> <li>7. NP El Copé</li> </ol> <p><b>San Blas Comarca</b></p> <ol style="list-style-type: none"> <li>8. WR Narganá</li> </ol> <p><b>Darién Province</b></p> <ol style="list-style-type: none"> <li>9. NP Darién</li> </ol>

Project Components/Sub-components:	Geographical eligibility or Focus
<b>1. Corridor Planning and Biodiversity Monitoring</b> 1.1 National Planning and Intersectoral Coordination.  1.2 Local & Regional Planning In Priority Areas  1.3 Biodiversity Monitoring	PAMBC  Local: Eligible <i>corregimientos</i> and indigenous areas. Regional: Eligible Regions  PAMBC
<b>2. Awareness and Promotion</b> 2.1 National Awareness 2.1.1 Public Awareness Campaign  2.1.2 Promotion among national and local leaders  2.1.3 Environmental Education  2.2 International Promotion	Nationwide  Representatives of key stakeholder groups in the PAMBC and national political and sectoral leaders.  Eligible Regions  International
<b>3. Capacity Building for Conservation &amp; Sustainable Use of Biodiversity</b> 3.1 Strengthening of Local Communities  3.2 Training in Environmental Management  3.3 Modernization of NAPAS	Eligible <i>corregimientos</i> and indigenous areas  Qualified representatives of key PAMBC stakeholder groups  INRENARE Central Office and PAMBC
<b>4. Investments in Priority Areas</b> 4.1 Support for Conservation and Sustainable Use of Biodiversity: Subprojects  4.2 Investments in Priority Protected Areas	Eligible indigenous and non-indigenous areas  Eligible protected areas

## Preliminary Subproject Financing Criteria

*All the criteria below are subject to change based on implementation experience. Required changes will be identified by the PEU, Local Sustainable Development Committees or INRENARE. All changes will require a previous "no-objection" of the World Bank. The project operations manual provides more detail.*

Subproject	Eligible Groups or Organizations	Co- Financing	Criteria
<b>Support for Conservation and Sustainable Use of Biodiversity</b>			
General Criteria		20% for conservation-oriented and 40% for sustainable use	<ul style="list-style-type: none"> <li>• In rural zones in eligible <i>corregimientos</i>, with exception to the "rural" criteria where the subproject directly protects biodiversity.</li> <li>• Following the completion of local planning, all eligible subprojects must respond to priorities identified in the local or protected areas plans; prior to development of local plans, based on participatory planning processes that have included consultation and recommendations from stakeholders outside the beneficiary group.</li> <li>• Favor directly or indirectly the conservation of biodiversity</li> <li>• Is not eligible for financing from another source</li> <li>• Is technically, institutionally, and socially feasible and sustainable under local conditions</li> <li>• Includes the necessary training to allow successful implementation and for sustainability</li> <li>• Beneficiaries are organized groups or communities and have a good reputation among their neighbors as serious and honest.</li> </ul>
Technical Criteria			<ul style="list-style-type: none"> <li>• Demand-driven</li> <li>• Clearly identifies beneficiaries and mechanisms of participation for identification, design, and execution</li> <li>• Proposals simple and focused on a very limited number of sub-activities.</li> <li>• Activities, systems or technologies proposed based on locally available resources and of low cost; "low cost" defined from perspective of participating group.</li> <li>• Includes no significant environmental risk</li> </ul>
Demarcation subprojects	Indigenous Congresses and local communities	35%	<ul style="list-style-type: none"> <li>• pre-defined limits in San Blas (Narganá), Madugandi, and Teribe (following legal declaration)</li> <li>• responds to predefined priority</li> <li>• maximum of 175 km between all subprojects</li> <li>• maximum of US\$50,000 financing per subproject</li> <li>• equitable distribution of funds between eligible areas</li> <li>• only in legally established <i>Comarcas</i>, along legally defined boundaries</li> <li>• only where potential for violent confrontation is not an issue</li> <li>• only with the no-objection of the Ministry of Government and Justice's Department of Indigenous Policies</li> </ul>
Vigilance subprojects	Indigenous Congresses, NGOs and local communities	35%	<ul style="list-style-type: none"> <li>• in eligible indigenous areas</li> <li>• organized groups or communities</li> <li>• only in legally established <i>Comarcas</i> within legally defined boundaries</li> <li>• only where potential for violent confrontation is not an issue</li> <li>• responds to predefined priority</li> <li>• maximum of US\$10,000 financing per subproject</li> <li>• equitable distribution of funds between eligible areas and by women</li> </ul>
Joint subprojects between indigenous and non-indigenous communities	Indigenous NGOs and local communities	35%	<ul style="list-style-type: none"> <li>• in eligible indigenous areas</li> <li>• organized groups or communities</li> <li>• maximum US\$5,000 financing per subproject</li> <li>• equitable distribution of funds between eligible areas and by women</li> <li>• pre-signed agreement between indigenous and non-indigenous participants</li> <li>• potential to develop into eligible subproject for Community Investments in Sustainable Use of Biodiversity</li> </ul>
Traditional and Cultural Knowledge	Indigenous NGOs and local communities	25%	<ul style="list-style-type: none"> <li>• in eligible indigenous areas</li> <li>• organized groups or communities</li> <li>• proposal relevant to sustainable use or conservation of natural resources</li> <li>• maximum US\$25,000 financing per subproject</li> <li>• potential to generate eligible subproject for Community Investments in Sustainable Use of Biodiversity</li> <li>• equitable distribution of funds between eligible areas and by women</li> </ul>
Equity Criteria			<ul style="list-style-type: none"> <li>• Percent of financing directed to indigenous groups to reflect official demographic figures on percent indigenous population</li> <li>• A minimum of 35% of direct beneficiaries to be women; not by individual subprojects, by portfolio of subprojects.</li> <li>• A minimum of 60% of total financing directed to communities that, according to official MIPPE figures are below the poverty line (i.e., have a poverty index below 60).</li> </ul>

Financing Criteria	65%	<ul style="list-style-type: none"> <li>• Minimum co-financing for individual activities within subprojects will be               <ul style="list-style-type: none"> <li>- Infrastructure 40%</li> <li>- Productive activities 40%</li> <li>- Technical assistance and training 10%</li> <li>- Project preparation 10%</li> </ul> </li> </ul>
Bioprospection Subproject		<ul style="list-style-type: none"> <li>• Within PAMBC</li> <li>• Involving one or more local community</li> <li>• Ensuring local benefits</li> <li>• Intellectual and cultural property issues and the benefits to accrue locally predefined and preliminary agreements achieved between participants</li> <li>• Adequate training of local individuals to ensure potential for subsequent employment.</li> <li>• Feasible plan and adequate financing for at least 2 years</li> <li>• Proposal will include a feasible, transparent collection protocol to ensure that collection levels are compatible with ecosystem and species resilience and do not harm biodiversity</li> </ul>
Restrictions on Fund Use		<p>Funds may not be used for:</p> <ul style="list-style-type: none"> <li>• Practices or activities which promote resource degradation or contamination.</li> <li>• Projects requiring involuntary resettlement.</li> <li>• Subprojects whose results are to create conditions which further marginalize or overburden any component of the family or social group, in particular, women.</li> <li>• Payment of taxes (direct or indirect)</li> <li>• Rental or purchase of lands, titling or fencing.</li> <li>• Payment of debts, dividends or for capital recovery.</li> <li>• Purchase of stocks, bonds or other investment instruments.</li> <li>• Consumer goods no related explicitly specified in the project contract.</li> <li>• Activities which are inappropriate to the experience level of the client without adequate technical assistance.</li> <li>• Religious or political activities of any kind.</li> <li>• Any illicit or immoral activities.</li> <li>• Purchase of vehicles</li> <li>• Purchase of goods for personal use</li> </ul>



**Annex 3**  
**Estimated Project Costs**  
**Panama Atlantic Mesoamerican Biological Corridor Project**

<b><u>Project Component</u></b>	<b>Local</b>	<b>Foreign</b>	<b>Total</b>
	-----US\$ million-----		
<b>A. Corridor Planning and Biodiversity Monitoring</b>	<b>1.43</b>	<b>1.02</b>	<b>2.45</b>
1. National Planning and Intersectoral Coordination	0.44	0.18	0.62
2. Local & Regional Planning in Priority Areas	0.64	0.47	1.11
3. Biodiversity Monitoring	0.35	0.37	0.72
<b>B. Mesoamerican Biological Corridor Awareness and Promotion</b>	<b>0.64</b>	<b>0.46</b>	<b>1.10</b>
1. National Awareness	0.46	0.32	0.78
2. International Promotion	0.18	0.14	0.32
<b>C. Capacity Building for Conservation &amp; Sustainable Use of Biodiversity</b>	<b>1.17</b>	<b>0.73</b>	<b>1.90</b>
1. Strengthening of Stakeholder Participation	0.61	0.35	0.96
2. Training in Environmental Management	0.12	0.08	0.20
3. Modernization of NAPAS	0.44	0.30	0.74
<b>D. Investments in Priority Areas</b>	<b>4.22</b>	<b>1.57</b>	<b>5.79</b>
1. Support for Conservation and Sustainable Use of Biodiversity: Subprojects	2.42	0.69	3.11
Biodiversity: Subprojects	1.80	0.88	2.68
2. Investments in Priority Protected Areas			
<b>E. Project Management</b>	<b>0.63</b>	<b>0.42</b>	<b>1.05</b>
<b>Total</b>	<b>8.11</b>	<b>4.19</b>	<b>12.30</b>
<b><u>Total Baseline Cost</u></b>			
Physical Contingencies	<b>0.16</b>	<b>0.09</b>	<b>0.25</b>
Price Contingencies	<b>0.17</b>	<b>0.08</b>	<b>0.25</b>
<b><u>Total Project Cost</u></b>	<b>8.44</b>	<b>4.36</b>	<b>12.80</b>

## Annex 4

### Incremental Cost Analysis

#### Panama Atlantic Mesoamerican Biological Corridor Project

#### Context and Broad Development Goals

The Isthmus of Panama is the narrow terrestrial bridge that unites the continental masses of North and South America, separating the waters of the Pacific and Atlantic oceans. This, combined with biogeographic and climatic factors, provides an enabling environment for multiple habitats and microhabitats which enhance the small country's (75,517 km<sup>2</sup>) biological diversity and importance. Included in the Panamanian portion of the Mesoamerican Biological Corridor are outstanding examples of relatively intact areas of global and regional biodiversity importance.

Today, threats are increasing to this almost uninterrupted corridor which may lead to the degradation of important sites and the fragmentation of the corridor, with concomitant impacts upon the regional biodiversity. The principal threats to the conservation of the landscapes forming this corridor are: (1) the advance of the agricultural frontier and spontaneous colonization; (2) new road projects which would offer improved access into the unprotected and intact ecosystems of the Atlantic coast; (3) mining in the mountainous zones of Veraguas, Chiriquí, San Blas, and Darién and the coastal lowlands of Colón; (4) wildlife loss through habitat conversion and fragmentation associated with logging, colonization, and agriculture practices of indigenous groups in some areas; (5) contamination of coastal waters from petroleum wastes and spills in the canal and the cross-country pipeline; and (6) watershed degradation from previously mentioned factors and sloping land agriculture without appropriate soil and moisture conservation practices.

Recognizing the seriousness of these threats, the Government of Panama (GOP) has begun to consider natural resource degradation in a systematic manner with the aim of developing a coherent national strategy for the environment. One element of this strategy is to address the root causes leading to migration to the agricultural frontier and invasion of public forests and protected areas while enhancing on-site protection for areas with global biodiversity. This multi-sectoral response to the interrelated issues of rural poverty, natural resources management, and biodiversity conservation would focus one set of instruments on the poorer and more populous central and southern provinces of the Pacific to reduce the outmigration that pushes the agricultural frontier (and invasions of public forests and protected areas); and another set within the Panama Atlantic Biological Corridor, to control access to high biodiversity areas and diminish both the pull factors and *in situ* threats to biodiversity. This strategy is supported by (1) legislation creating the National Protected Area System (1994), the Environmental Education Law (1992), the Forestry Law (1994), the EIA/Environmental Framework Law (1994) and the Wildlife Law (1995); (2) adherence to international treaties (e.g., Convention on Biological Diversity, RAMSAR, CMS and CITES); and (3) several on-going conservation and sustainable development projects that directly or indirectly contribute to biodiversity conservation.

#### Baseline Scenario

In the absence of GEF assistance for addressing global biodiversity objectives, it is expected that the GOP would concentrate its resources on: (i) **rural poverty alleviation programs** that reduce the rate of loss of forests and degradation of watersheds, soils and coastal zone resources on the Pacific coast, thereby diminishing push factors (estimated cost: US\$25.6 million, largely financed by the World Bank/GOP Rural Poverty and Natural Resources Project as well as IFAD); (ii) **institutional strengthening for natural resource management** aimed at agriculture and forestry ministries (estimated cost: US\$5.3 million, financed by IFAD/ITTO); (iii) **public awareness** campaigns and environmental education programs (estimated cost: US\$0.5 million, financed by GOP); (iv) **capacity building** targeted towards indigenous communities (estimated cost: US\$3.0 million, financed by bilateral and multilateral donors including Germany, Denmark, and EU); (v) **sustainable development programs in the Atlantic coast region** that would help stabilize the Atlantic frontier as well as support protected areas management (estimated cost: US\$25.2 million; financed by

GOP/IFAD/EU/UNDP/GEF/ITTO), reduce siltation in the Panama canal watershed (estimated cost: US\$20 million; financed primarily by USA/GOP funds), and promote ecotourism development (estimated cost: US\$5 million, financed primarily with World Bank/GOP funds).

These programs would help to: (i) reduce the push factors underlying the advance of the agricultural frontier in the Atlantic; (ii) stabilize communities already in the agricultural frontier; and (iii) manage the Panama canal watershed and protected areas of high ecotourism potential, which would bring considerable national benefits. Under the Baseline Scenario, the Government would also continue implementing policy reforms to remove incentives for unsustainable use of natural resources in the Atlantic region and would undertake programs aimed at strengthening public sector capacity to implement environmentally sustainable development programs. The combined cost of the Baseline Scenario is estimated at US\$84.6 million.

Implementation of the Baseline Scenario would be extremely important for the development of Panama. Incomes of the rural poor in the Pacific region would increase, which would reduce their incentives to migrate to the frontier. Investments in frontier communities and the adoption of more environmentally friendly and sustainable land uses would help stabilize the frontier and reduce pressures on sites of key environmental importance. Investments in the Panama canal watershed and protected areas of high ecotourism potential would help limit access to these areas and protect important sites for biodiversity.

Despite these positive elements, the Baseline Scenario would not result in effective protection of biodiversity conservation in the PAMBC, because:

- Funding for biodiversity conservation and protected area management is fragmented with about 80% focused on the Panama canal watershed; about half of the protected areas included in the Panama portion of the corridor lack adequate resources, human and financial (Darién, Omar Torrijos-El Cope, and complex La Amistad/Volcan Baru and Isla Bastimentos/San San Pond Sak);
- There are no incentives for biodiversity conservation in non-protected areas included in the corridor;
- There is inadequate knowledge, and thus stakeholder commitment, in Panamanian society at large, as well as communities and local and regional governments on the importance of biological resources in the corridor and on how to use them sustainably;
- There is no overall coherent land use and natural resource conservation strategy for the Atlantic region within which conservation projects and investment programs are designed and implemented;
- There is no strategy or programs to engage the mining and forest sector in the goals of biodiversity conservation consistent with the principle of the biological corridor; and
- There is no system for constant monitoring of threats to biodiversity and for disseminating information on these threats to agencies and stakeholders in a position to deal with them.

### **Global Environmental Objectives and the GEF Alternative**

The global environment objective is to promote the long-term integrity of a biological corridor along the Atlantic slope of Panama, conserving key global biodiversity values. The ecoregions and ecosystems of the Atlantic slope of Panama have high global importance on their own merits, but in addition, they form part of a critical link in a regional biological corridor linking North America, Central America and South America. Parts of the Atlantic slope of Panama represent the most intact natural areas remaining in Central America.

With GEF assistance for addressing the global biodiversity objectives outlined above, the GOP would be able to undertake a more ambitious program that would generate both national and global benefits. The GEF Alternative would comprise: (i) rural poverty alleviation in the Pacific (Total - US\$25.6 million; same as in Baseline); (ii) institutional strengthening, including biological corridor planning and biodiversity monitoring (Total - US\$7.8 million; *GEF - US\$2.1 million*); (iii) MBC awareness and promotion at the national and international levels (Total - US\$1.7 million; *GEF - US\$1.0 million*); (iv) capacity building for conservation & sustainable use of biodiversity (Total - US\$5 million; *GEF - US\$1.2 million*); (v) investments in priority areas

of the Atlantic coast (Total - US\$56.2 million; *GEF* - US\$3.1 million); and (vi) project coordination (Total - US\$1.1 million; *GEF* - US\$1.0 million). The total cost of the GEF Alternative is US\$97.4 million.

The GEF Alternative will make possible activities and programs that would not have been possible under the Baseline Scenario, thus covering important gaps that threaten the integrity of the PAMBC. The project would help to maintain a continuous corridor of protected and non-protected areas with incentives for biodiversity conservation and sustainable use (in non-protected areas) or under protected area management, thus not only ensuring preservation of globally significant biodiversity but also maintaining natural habitat connections between key corridor areas. Implementation of the GEF Alternative would result in the following outcomes:

- minimizing threats to biodiversity by putting in place an overall land use plan and monitoring and evaluation framework for biodiversity conservation in the Atlantic which would serve as the framework within which public investment programs for the region would be designed;
- raising awareness about biodiversity resources through information dissemination, training of indigenous and non-indigenous communities, municipal and regional governments and GOP agencies and private sector on biodiversity use consistent with the land use plans;
- minimizing access and threats to important biodiversity areas by strengthening indigenous organizations and management in selected protected areas and traditional systems of resource management;
- ensuring conservation of biodiversity within the PAMBC outside of protected areas by financing the incremental costs of subprojects of communities that are consistent with biodiversity objectives and sustainable uses.

GEF funds would be critical to leveraging additional donor co-financing for this initiative, both from bilateral and multilateral sources.

### **Incremental Costs**

The difference in cost between the Baseline Scenario (US\$84.6 million) and the GEF Alternative (US\$97.4 million) is US\$12.8 million. In addition to the global biodiversity conservation benefits generated by the project, project activities would generate national benefits from information and planning, capacity building activities, investments in social and economic infrastructure, and sustainable productive activities in the Atlantic zone that would not have taken place under the Baseline Scenario. Consequently, a GEF grant of US\$8.4 million is requested at this time to cover global biodiversity benefits.

Component Sector	Cost Category	US\$ Million	Domestic Benefit	Global Benefit
<b>Rural Poverty Alleviation</b>	<b>Baseline</b>	25.6	Reduction in rate of loss/degradation of economically important forests, degradation of watersheds, soils, and fresh water and coastal zone resources; improved quality of life for rural and urban dwellers; maintenance of natural resource option values.	Enhanced protection of biodiversity resources of global significance through increased access to information on development tradeoffs.
	<b>With GEF Alternative</b>	25.6	Same.	Same.
	<b>Incremental</b>	0.0		
<b>Natural Resources Institutional Strengthening</b>	<b>Baseline</b>	5.3	Increased capacity of agricultural and forestry ministries, NGOs, communities, and private sector service providers for natural resource management. Ad hoc inclusion of biodiversity values in ongoing efforts in natural resource monitoring with major focus on the Panama Canal watersheds.	
<b>(including Corridor Planning and Biodiversity Monitoring)</b>	<b>With GEF Alternative</b>	7.8	Same as above. Also, increased knowledge of biological resources as inputs into the domestic economy.	Increased capacity for biodiversity conservation, management and protection in selected areas of global significance in the PAMBC. Increased capacity of local community and private sector interests in natural resource management in areas of biodiversity of global importance. Increased public support for biodiversity conservation and sustainable use. Biodiversity monitoring in areas of highest biodiversity value, within a coherent program with explicit biodiversity objectives. Increased access to information on development tradeoffs, particularly for mining and road building; creation of greater transparency in and public demand for biodiversity protection.
	<b>Incremental</b>	2.5		
<b>MBC Awareness and Promotion</b>	<b>Baseline</b>	0.5	Increased public awareness of environmental issues and the need for sustainable natural resource management.	
	<b>With GEF Alternative</b>	1.7		Increased public awareness at both the national and international levels of the importance of conservation of globally significant biodiversity in Panama.
	<b>Incremental</b>	1.2		

Component Sector	Cost Category	US\$ Million	Domestic Benefit	Global Benefit
<b>Capacity Building for Conservation and Sustainable Use of Biodiversity</b>	<b>Baseline (with other donors)</b>	3.0	Improvement in legal processes for securing forest and land tenure for indigenous peoples.	
	<b>With GEF Alternative</b>	5.0	Same as above plus extension of legal security and physical security over land resources to key areas of the PAMBC.	Enhance the long-term protection of biodiversity resources in the PAMBC by assisting indigenous groups to regularize their lands in key elements of the PAMBC and securing their access to lands based on principles of sustainable use of biodiversity.
	<b>Incremental</b>	2.0		
<b>Natural Resource Management</b>	<b>Baseline (with other donors)</b>	50.2	Increased capacity for sustainable natural resource mgt.; enhanced conservation/ protection of economically important natural resources; maintenance of natural resource option values. Increased protection, improved management, and enhanced income through investment in infrastructure, with emphasis on protected areas in the Canal watershed; enhanced biodiversity protection through community involvement in buffer zones.	
	<b>With GEF Alternative</b>	56.2	Same as above plus directly increase coverage to critical areas of high biodiversity value under threat and through coordination enhance targeting and impact of other donor efforts on biodiversity. Enhanced involvement of private sector in conservation.	Increase the level of protection afforded to biodiversity of global significance and obtain broad-based support to the conservation and management of the PAMBC; reduce pressures on critical, non-protected areas of the PAMBC.
	<b>Incremental</b>	6.0		
<b>Project Coordination</b>	<b>Baseline</b>	0.0		
	<b>With GEF Alternative</b>	1.1	Increased capacity to coordinate project activities.	Increased capacity to manage those elements of the project critical to the realization and protection of the PAMBC.
	<b>Incremental</b>	1.1		
<b>Total</b>	<b>Baseline</b>	84.6		
	<b>With GEF Alternative</b>	97.4		
	<b>Incremental</b>	12.8		

**Annex 5**  
**Financial Summary**  
**Panama Atlantic Mesoamerican Biological Corridor Project**

Project Years 1 to 5  
(projections in US\$ millions)

	Implementation Period				
	Year 1	Year 2	Year 3	Year 4	Year 5
<b><u>Project Costs</u></b>					
Investment Costs	2.66	4.04	2.26	1.28	1.16
Recurrent Costs	0.21	0.33	0.31	0.27	0.27
<b>Total</b>	<b>2.87</b>	<b>4.37</b>	<b>2.57</b>	<b>1.55</b>	<b>1.43</b>
<b><u>Financing Sources (US\$ millions)</u></b>					
IBRD/IDA	0.56	0.82	0.45	0.25	0.21
GEF	2.04	2.80	1.70	0.97	0.89
Co-financiers					
Government	0.14	0.37	0.16	0.16	0.17
Beneficiaries	0.13	.38	0.26	0.17	0.16
<b>Total</b>	<b>2.87</b>	<b>4.37</b>	<b>2.57</b>	<b>1.55</b>	<b>1.43</b>

## Annex 6

### Procurement and Disbursement Arrangements

#### Panama Atlantic Mesoamerican Biological Corridor Project

### Procurement

#### **Procurement Responsibilities**

A Project Coordination Unit (PCU) established within INRENARE will be responsible for carrying all "supply-based" procurement (i.e., estimated inputs required to implement the project detailed in Table 1) and providing technical assistance to local communities in carrying out their procurement responsibilities. "Demand-based" procurement is to be initiated by the communities. As in other social sector projects, the nature and quantities of inputs are to be determined during project implementation through community-initiated sub-projects.

#### **Procurement Procedures**

Procurement of works and goods financed by the Bank under the project would be carried out in accordance with the Bank's *Guidelines for Procurement under IBRD Loans and IDA Credits* (January 1995, revised in January and August 1996 and September 1997). Consultant services to provide technical assistance and training would be procured in accordance with *Guidelines for the Use of Consultants by World Bank Borrowers and the World Bank as Executing Agency* (January 1997, revised in September 1997). As applicable, International Competitive Bidding (ICB) would use the Bank-issued Standard Bidding Documents for the procurement of goods and National Competitive Bidding (NCB) would follow procedures acceptable to the Bank.

As discussed with the PCU, the Bank-issued SBD for "Works, Smaller Contracts" would be used for procurement of works, including under NCB procedures. Details of shopping procedures acceptable to the Bank, including formats for request of quotations, would be discussed and agreed during a project launch workshop. \*

Procurement under subprojects would follow National Shopping procedures for goods and procedures acceptable to the Bank for procurement of small works under lump sum, fixed price contracts awarded on the basis of three quotations. Contracts estimated to exceed US\$25,000 would be procured following NCB procedures. Goods, works and services to be financed under Grant subprojects shall be procured at a reasonable price, taking into account also other relevant factors such as time of delivery and efficiency and reliability of the goods and availability of maintenance facilities and spare parts thereof, and in case of services, of their quality and competence of the parties rendering them, and such goods and services shall be used exclusively in carrying out such subprojects. \*

#### **Procurement Methods**

##### Goods

The project would procure vehicles, motorcycles, computer equipment, office equipment, furniture, communications equipment, laboratory and field equipment. All these goods are widely available locally at reasonable prices and most foreign suppliers are well represented in Panama. Contracts for the supply of goods and equipment estimated to exceed US\$50,000 up to an aggregate of US\$650,000 shall be awarded on the basis of National Competitive Bidding (NCB) procedures. The number of NCB packages is expected to total seven. Contract packages exceeding US\$250,000 if any, should be awarded on the basis of International Competitive Bidding (ICB) procedures. However, no ICB packages are expected at this time. \*



Contracts for the supply of goods and equipment estimated to cost between US\$25,000 and US\$50,000, up to an aggregate amount equivalent to approximately US\$183,000 shall be awarded through international shopping (IS) on the basis of quotations to be obtained from a minimum of three supplies from at least two different countries, in accordance with procedures acceptable to the Bank. (See note 1 to Table 1)

Contracts for the procurement of items or groups of items costing less than US\$25,000 up to an aggregate amount equivalent to approximately US\$150,000 may be awarded following local shopping (LS) procedures, on the basis of three quotations obtained from three different eligible suppliers. (See note 1 to Table 1)



### Works

Civil works would consist of construction and rehabilitation of buildings for park guards, visitors centers and multiple use protected area infrastructure. Contracts for procurement of works estimated to cost more than US\$150,000 up to an aggregate amount of US\$1,200,000 would be awarded on the basis of NCB procedures. No ICB is expected. Small works valued at less than US\$150,000 would be procured under lump-sum, fixed price contracts awarded on the basis of quotations from at least three qualified domestic contractors.

### **Consultant Services**

Consulting, training and studies under the project would consist of consultant assignments for individuals and firms providing direct technical assistance to INRENARE, training, land titling, promotion, subprojects, establishment of community participatory structures and participatory planning, and environment and land use planning and monitoring. Technical assistance and training packages are expected to be needed for most components and are detailed in Table 4.

### **Grant Subprojects**



Prior to mid-term review all subprojects will be required to respect the financing ceilings set down in the Project Implementation Volume; based on the mid-term review ceilings may be changed. The average size (total cost, including beneficiary co-financing in cash or kind) of a community subproject is expected to be between US\$10,000 and US\$20,000. Few subprojects are expected to exceed US\$35,000. In exceptional cases, a maximum of US\$50,000 would be allowed, subject to approval by the PEU. Procurement for subprojects costing the equivalent of US\$10,000 or less and procured by local communities may be carried out by direct contracting and through Community Participation. The procurement procedures are proposed taking into consideration that: (i) contracts would be small and it would be difficult to obtain competitive proposals; (ii) the communities would contribute to the work through the donation of unskilled labor and local materials; (iii) subprojects would be selected on the basis of willingness of the beneficiary communities to contribute to and physically supervise their execution.



### **Prior Review of Procurement Decisions by the Bank**

Prior review would be required for the first goods and works contracts for each procurement type. All contracts for consulting services provided by firms of an estimated cost of US\$50,000 or more and of individuals of US\$25,000 or more would be subject to prior review. Only the TOR would be reviewed for consultant contracts estimated to cost less than US\$50,000 for firms and US\$25,000 for individuals. Any contract awarded after direct negotiations with suppliers would also be subject to Bank prior review (see Table 3, below). In the case of subprojects, the first two NCB contracts, if any, would be subject to prior review.

### **Procurement Monitoring and Reporting**

The Grant Recipient will establish procedures for monitoring procurement implementation, including monitoring contract modifications, variations, and extension of completion periods. The Grant Recipient will

maintain detailed records of procurement activities under the grant. Periodic reporting obligations would be agreed to keep the Bank informed about progress in the implementation of the procurement plan.

### **Disbursement**

The GEF grant has a 5-year disbursement period and the closing date would be June 30, 2004. There is no Standard Disbursement Profile relevant to natural resources projects in Panama. The Grant would be disbursed against eligible project expenditures at the rates of: (i) 85% for civil works; (ii) 100% for foreign supplied and 80% of locally supplied machinery, equipment, vehicles, and furniture; (iii) 100% for consultant services, training and studies; (iv) 100% of non-beneficiary financing of grants for community subprojects; and (v) incremental recurrent costs on a declining basis (90% first two years, 60% third and fourth years and 40% thereafter).

Documentation of Expenditures. Disbursements would be made on the basis of full documentation for all expenditures made under contracts requiring prior review by the Bank and amendments to contracts raising the value of such contracts above the prior review limits (Schedule B). For all other expenditures, training, grants and recurrent costs disbursements would be made against SOEs for which supporting documents would be maintained by INRENARE and would be available to the Bank for staff review. The PCU would be responsible for preparing and submitting withdrawal requests with appropriate supporting documents for expenditures under the project. The documents would include: (i) a standard withdrawal application (Form 1903) for the total amount of eligible project expenditures to be replenished into the Special Account with a copy of the monthly bank statement for that account; (ii) the SOE form, which would provide the summary of category expenditures including grants to communities; (iii) standard summary sheets (designed for each subproject and included in the disbursement letter) and supporting documentation for all expenditures above the procurement prior review thresholds; and (iv) a reconciliation statement for the SA. The use of grants by communities would be checked through auditing procedures, the monitoring systems and project and subproject supervision arrangements.

### **Project Financial Statements and Financial Reporting**

Project financial statements would include a statement of sources and uses of funds, and a register of project assets or balance sheet where appropriate. The funds flow statement would indicate sources (the Bank, GEF, as well as counterpart financing) and expenditures in accordance with main project components and disbursement categories. Project financial statements would show actual and pending payments against those budgeted. Information on sources and uses of funds would be provided monthly to the PCU. Information reported would also include the value of contracts signed, i.e. commitments, relative to actual and pending payments.

### **Accounts and Audits**

INRENARE would maintain separate records and accounts for project expenditures as well as a register of assets purchased with project funds. They would also have the responsibility for preparing the project's financial statements, including balance sheets and sources and uses of funds statements, according to internationally accepted accounting standards. INRENARE would also receive technical assistance to help establish accounting procedures acceptable to the Bank.

### **Auditing**

A process for selection of auditors, their TORs, and auditing arrangements, as described below, was agreed with INRENARE during negotiations of PPRN. The selection process includes pre-qualifying audit firms, contracting auditors for one year with a provision to extend for a further two years based on satisfactory performance, and initiation of the process for selection of auditors during project preparation with the

objectives of having auditors in place by the start of disbursements. The PCU would contract audit firms to audit the consolidated financial statements for the components of the project.

The auditors report would include audits of the Special Account (see below), an opinion on the use of statement of expenditures (SOEs), confirmation that project implementation was in accordance with provisions of the Grant Agreement and verification of procurement transactions. The auditor's TORs would also include a review of internal controls and preparation of a management letter. Audit reports would be submitted to the Bank within six months of the close of the fiscal year. The first audit reports would cover the first year's disbursement as well as disbursements under the PDF.

Technical audits would be carried out separately. Technical audits would consist of simple checks of subprojects ensuring that what is purchased is in fact there and would include participants assessments of whether resources were used efficiently or appropriately and of any technical issues.

### **Special Account**

The project will open a Special Account (SA) in dollars, in a commercial bank acceptable to IBRD. The account will be administered by INRENARE through the PEU. The authorized allocation for the special account would be US\$500,000. The Special Account can be replenished on a monthly basis allowing the grant recipient to maintain liquidity and to facilitate regular reporting of expenditures made. INRENARE and the PEU will be responsible to regularly submit accounts justifying the disbursements to the SA, supported by the appropriate documentation.

**Annex 6**  
**Procurement and Disbursement Arrangements**  
**Panama Atlantic Mesoamerican Biological Corridor Project**  
**Table 1: Procurement Plan - Goods and Services (non-consulting)**

Note: The table below shows indicative lead times calculated from project beginning estimated on September 15, 1998. Since contracts are simple and most inputs are needed during the first three years of the project, procurement could realistically be carried out according to this schedule. Contracts should specify different delivery times for few of the items which are needed over a longer period, as appropriate. All packages could be completed by mid-2000, with the exception of office supplies and materials which will be procured semi-annually throughout the project period.

Package	Value	Method	Time Required (cumulative, months)		
			Docs Ready-advertise	Bids / Quote	Sign Ctr
Vehicles	175,000	NCB	1	2	4
Motorcycles & helmets	73,000	NCB	1	2	4
Boats & motors	49,000	IS	N.A.	0.5	1-2
Field Equip.	62,165	NCB	1	2	4
Video Eq. & Projector	13,750	NS	N.A.	0.5	4
Off. Eq & Software	91,000	NCB	1	2	4
Furniture	44,850	IS	N.A.	0.5	1-2
Tel-fax & installation	7,700	NS	N.A.	0.5	1-2
GPS	17,500	NS	N.A.	0.5	1-2
Power Supply (Solar, generators)	29,000	IS	N.A.	0.5	1-2
Park Protection Equip.	55,550	NCB	1	2	4
Uniforms	118,400	NCB	1	2	4
Radio Eq. & Install.	72,000	NCB	1	2	4
Mules & Saddles	18,750	NS	N.A.	0.5	1-2
Office Supls. & Mats.; INRENARE <sup>1</sup>	15,000	NS	N.A.	0.5	1-2
Office Supls. & Mats.; Regional & Local <sup>1</sup>	25,000	NS	N.A.	0.5	1-2
Office Supls. & Mats.; PCU/PAMBC Tech. Team <sup>1</sup>	60,000 (total)	IS/NS	N.A.	0.5	1-2

<sup>(1)</sup> Procurement of office supplies and materials will be done periodically in small packages (e.g., bi-annually) due to need for flexibility as well as concerns for adequate storage and control.

**Annex 6**  
**Procurement and Disbursement Arrangements**  
**Panama Atlantic Mesoamerican Biological Corridor Project**  
**Table 2: Procurement Plan - Works**

Note: Lead time are indicatives and are calculate from project beginning.

Package	Value	Method	Docs Ready- advertise	Bids or Quot	Sign Ctr	Completion
Joint Vigilance Indigenous Lands	185,000	NCB <sup>1</sup>	4	6	8	1st Q 2001
Visitor Center	250,000	NCB	4	6	8	1st Q 2001
Miscellaneous Works & Repairs, Protected Areas	570,000	NCB	4	6	8	1st Q 2001
Land Demarcation	195,000	NCB	4	6	8	Before end of project <sup>2</sup>
Repair Works to PCU Office	15,000	3 quotations	1	1	2	First Quarter 99

<sup>(1)</sup> If smaller packages (less than US\$150,000) will be desirable due to size and/or dispersed nature of the works, procurement will be on the basis of at least three quotations.

<sup>(2)</sup> Depending on resolution of legal issues.

**Annex 6**  
**Procurement and Disbursement Arrangements**  
**Panama Atlantic Mesoamerican Biological Corridor Project**  
**Table 3: Prior Review Thresholds (US\$ Thousands)**

Category	Contract Value	Procurement Method	Prior Review Limit
Civil Works	> 150 < 150	NCB <sup>1</sup> Three quotations	First contract None
Goods (not vehicles)	> 250 50 to 250 25 to 50 < 25	ICB NCB IS LS	First contract First contract First contract First contract
Consulting Service by Firms	> 50 < 50	Selection according to Consultants Guidelines “	All Review of TOR only <sup>2</sup>
Individuals	> 25 < 25	Selection according to Consultants Guidelines “	All Review of TOR only <sup>2</sup>
<b><u>Investment In Priority Area Subprojects</u></b>	> 25	NCB	First two contracts
Goods and Civil Works	< 25	NS/Community procurement	None
Technical Assistance	< 10 < 25	Direct contracting Community procurement/NS	None TOR only

<sup>(1)</sup> No ICB is expected. However, contracts in excess of US\$1 million would be awarded following ICB procedures.

<sup>(2)</sup> Does not apply to contracts below the threshold in cases of single source selection of firms, assignments of a critical nature, and amendments to contracts raising the original contract value above the thresholds.