

UNITED NATIONS DEVELOPMENT PROGRAMME

Project of the Government of Uruguay

Number and Title: URU/97/G31/A/1G/99 – Consolidation of the Bañados del Este Biosphere Reserve

Duration: 48 Months

ACC/UNDP Sector/Subsector:

04 Natural Resources

30 Biological Resources

Gov. Implementing Agency: PROBIDES

Executing Agency: Office of Planning and Budget

Co-operating Agencies: AECI, NGOs

Estimated Start Date: July 1997

Gov. in-kind contribution: US\$ 380,000 (in-kind)

PROJECT COST	
GEF:	\$2,500,000
AECI:	\$ 360,000
Gov. Canada:	\$ 20,000
Gov. Inputs:	\$ 620,000
<u>Total Project Costs</u>	<u>\$3,500,000</u>

The project will finalize Pilot Phase activities that are necessary for long-term sustainability of conservation efforts: for example, passage of the Protected Area Law Proposal and finalization and approval of the draft Land-Use Plan and Hydrological Plan integrated into a Comprehensive Plan; further identification or refinement of biodiversity friendly resource uses and non-traditional alternatives, building capacities of private sector and NGOs to manage protected areas and implement or facilitate biodiversity friendly land uses. As well, the proposal will ensure private stakeholder support for these initiatives through activities including the identification for approval of incentives and regulations to motivate landholders to adopt biodiversity friendly land-use practices; identification for approval of economic instruments to capitalize a Sustainable Uses Trust Fund for Biodiversity Conservation; development of specific biodiversity-related curricula for primary through University and teacher training; and the participatory development of an ecotourism strategy aimed at generating an economic and political base conducive to overall support of the goals of the Biosphere Reserve.

The project will be implemented in two phases: in Phase 1, PROBIDES will implement the activities under Objectives 1 and 2 regarding finalization and approval of the Protected Areas Law and the Comprehensive Plan. Once approval of these has been accomplished, and the legal and policy frameworks are in place, PROBIDES will proceed to Phase 2, consisting of the implementation of the remaining four Objectives.

Presented by PROBIDES:

M.V.O.T.M.A.

Intendencia M. De Rocha

Universidad de la Republica

Date

Date

Date

Approved by:

O.P.P

Date

U.N.D.P.

Date



A. CONTEXT

A.1. *The Bañados del Este*

1. The Bañados del Este Biosphere Reserve - comprising approximately 350,000 ha - contains one of the most important freshwater ecosystem complexes of the Neotropical region¹, including a mosaic of mudflats, coastal dunes and restinga habitats², estuaries, rivers, coastal wetlands, coastal lagoons (both freshwater and salty), inland marshes, palm swamps, grasslands, and riparian habitats³.

2. The diversity of habitats and the complex array of transitional areas produce excellent conditions for the existence of a very rich biological diversity measured in terms of both alpha and beta diversity. The coastal lagoons in the area differ among themselves in their morphology as a consequence of their different degrees of lacustrine evolution and the varying dynamics of ocean influences determined by the existence (or lack thereof), and size of connections to the sea. The high productivity of these water-dominated ecosystems supports large populations of wildlife, especially birds, mammals, and fish, as well as unique plant communities, such as the palm woodlands.

3. Bañados del Este is also an important stop-over area for migratory birds, including 19 species of shorebirds (Charadriidae and Scolopacidae) and 21 species of waterfowl (Anatidae). Many of these species breed in the high Arctic and depend on Bañados del Este to complete annual migrations or for overwintering (some of these species complete round-trip migrations of over 24,000 kilometres annually). For example, the area hosts 78% of the total Atlantic flyway of the Golden Plover (*Pluvialis dominica*). Other migratory species for which these habitats are critical include the Black-Bellied Plover (*Pluvialis squatarola*, 58% of the flyway); and the Ruddy Turnstone (*Arenaria interpres*, 28% of the flyway).

4. Rocky coastal habitats in Bañados del Este provide food and shelter for the migratory Magellan Penguin (*Spheniscus magellanicus*), as well as for seals and sea lions (approximately 280,000 individuals). Bañados del Este hosts the largest concentrations of the Black-necked Swans (*Cygnus melancoriphus*) in the world. The coastal area includes several

¹ Although Uruguay does not appear prominently among global conservation priorities determined from the terrestrial perspective of Dinerstein et al., recent studies of conservation priorities from a freshwater perspective increase Uruguay's importance as a global conservation priority. These studies include: Wetlands International, UNEP, USAID, and WWF (In press). An Assessment of the Wetlands of South America; and World Wildlife Fund (In preparation). Conservation Priorities of Freshwater Ecosystems in the Latin America and the Caribbean Region. This latter study is a follow-up to the Dinerstein et al. study.

² Globally outstanding ecoregions as defined by Dinerstein et al. (1995). A Conservation Assessment of the Terrestrial Ecoregions of Latin America and the Caribbean. World Wildlife Fund and The World Bank.

³ Rilla, F. 1993. Humedales del sureste del Uruguay: Situación Actual y Perspectivas. ICONA, Madrid.

globally endangered endemic communities and species such as fish species of the genus *Cynolebias*.

5. Bañados del Este includes endangered habitats of the globally outstanding restinga ecoregion - which serves as a critical roosting and feeding habitat for migratory shorebirds - including an endemic plant community containing a rare Gymnosperm (*Ephedra tweediana*) and several unique invertebrate communities; the Butiá Palm (*Butia capitata*), the basis of an endemic community extending over 70,000 ha; a Quillwort Fern (*Isoetes weberi*); and the Darwin Toad (*Melanophryniscus montevidensis*). Among species of limited distribution are the Pampas Deer (*Ozotoceros bezoarticus*); and the Saffron-Cowled Blackbird (*Agelaius flavus*).

6. The global importance of the area has been internationally recognised. Bañados del Este has been accredited as a Biosphere Reserve by UNESCO and is under consideration by the Western Hemisphere Shorebird Reserve Network (WHSRN) as a site of Hemispheric Importance for migratory shorebirds. The Biosphere Reserve status recognises the need to balance biodiversity conservation with human economic use. A WHSRN designation will recognise Bañados del Este as a crucial link in the migratory chain of sites of hemispheric importance for migratory shorebird species.

7. These noteworthy international designations are therefore a recognition of the area's importance for biodiversity. But the area covered by the Biosphere Reserve is also of high importance for the economic development of Uruguay, and hence the need to balance its conservation with economic development. More than 95% of the land is privately owned, and is the site for some of the most important economic activities for Uruguay as a whole; these include rice cultivation, plantation forestry, and cattle ranching. This reality of the area's current patterns of land ownership and usage calls for a complex conservation approach that goes beyond the simple establishment of protected areas. Bañados del Este cannot become a park from which people are excluded. Rather the challenge is how to maintain the globally significant biodiversity of the area while it undergoes an inevitable process of economic development.

8. Productive activities within the Biosphere Reserve can be divided into three groups: traditional, extensive and artesanal, and ago-industrial, the last more specifically in terms of rice production. These three types of production may be found on the same landholding, in function of its differing geomorphological characteristics. Hilly areas are used principally for extensive cattle and sheep raising. Plains not subject to flooding are used primarily for extensive cattle and sheep raising and rice cultivation. Both activities co-exist, but are as yet not functionally integrated. Temporarily or permanently flooded plains (bañados) are used for widely extensive cattle raising. This last area is also used as a source of artesanal and extractive production, of primary importance to local inhabitants. There are approximately 1,000 smallholdings, the majority of which are family owned.

9. The coastal zone is characterised by a shoreline of sandy beaches and rocky outcrops of exceptional natural beauty. This landscape attracts an important number of summer tourists, whose recreational activities are entirely unregulated. Over the last decades, the shoreline has been the site of irregular constructions which lack basic services such as

electricity, water and sanitation. Attempts have been made to promote the concept of coastal zone management and ecotourism, by raising public awareness of the value of the area to biodiversity and tourism development within a conservation framework.

10. Rice production systems are technologically advanced and highly productive over the long-term; rice is one of the most important agricultural sub-sectors and constitutes one of Uruguay's principal exports. The Laguna Merin basin possesses the largest territorial extension in the country of land with the greatest aptitude for lowland rice growing.

11. Rice cultivation is, without a doubt, the productive activity with the greatest impact on the region's ecosystems. While impacting cultivated areas directly, it indirectly affects adjacent areas, with special emphasis on the coast and coastal lagoons as well as affecting tourism. Wetlands are often drained with the aim of improving their aptitude for cultivation with others receiving drainage waters containing organic matter and biocides.

12. Rice is cultivated under a rotation system with extensive cattle raising; rice is grown for two or three years, after which time pasture is planted, or rice stubble, residues and weeds are pastured, for another four or more years. As a consequence, the total area directly affected by this system is more than three times the annual area planted to rice. Areas to be planted are worked intensively, levelled and terraced and subjected to relatively high applications of agrochemicals, especially herbicides.

13. The most important indirect impact from this system of rice cultivation occurs from the progressive and aggregate alteration of the natural hydrological system through the more or less unregulated construction of contention and distribution works. This not only affects rice-growers, but also has implications for the region's overall agricultural productivity given the risk of biocide contamination across the basin.

14. Cattle and sheep raising is the principal productive activity in the Bañados del Este, characterised, in contrast to rice cultivation, by low productivity and minimal technological development. As an extensive activity, it is based on the direct exploitation of existing natural resources with little incorporation of other inputs. The impact of this system is, in comparison to the prevailing rice cultivation systems, much more prolonged in space and time, but less dramatic. Cattle and sheep alter vegetative cover, composition and regrowth through selective grazing. This grazing prevents regeneration of selected tree and bush species, a case in point being the serious decline in regrowth of *Butia* palm shoots and seedlings.

15. The unnecessary negative impact of some of these activities has been compounded by the lack of a clear environmental regulatory framework at the national and local levels, contradictory government policies and mandates, and lack of capacity of government agencies to develop, monitor and enforce regulations or to provide adequate incentives for conservation and sustainable development.

16. In summary, the Bañados del Este are subjected to a complex set of developments resulting from a heterogeneous pattern of land-uses. This complexity is compounded because

of the habitat diversity in the area, as well as by the fact that most of the area is privately owned. Such a complex set of issues requires an equally comprehensive conservation approach. This approach must be stakeholder-driven, participatory, and holistic in space and time. Its foundation must be a master plan of land and water use that provides for biodiversity conservation within the broader context of local and national development, activities which must ultimately internalise biodiversity conservation.

A2. Host Country Strategy

17. Currently, there is no multilateral or bilateral financing being applied, requested or planned for agricultural, tourism, or infrastructural development in the Bañados del Este Biosphere Reserve. Government activities carried out in support of these sectors, through the relevant Ministries and institutions, are funded from official budgetary sources.

18. The last three national governments have taken important initiatives in the formulation of coherent environmental policies. During this process, a new Ministry of Housing, Territorial Regulation and Environment (MVOTMA) was created in 1990.

19. In 1991, the Office of Planning and Budget (OPP) prepared a National Environmental Plan (PAN), based on the National Environmental Study (EAN), with co-operation from the Interamerican Development Bank and the Organisation of American States. The PAN established the following priorities, among others: a) the establishment of a National System of Protected Areas; b) the creation of a National System of Environmental Accounts, aimed partially at supporting the Protected Areas System; and c) the review and reform of Uruguay's existing environmental legislation, in light of new international trends.

20. The Environmental Impacts Law is a first step towards a legislative framework to guarantee the country's sustainable development; this will be improved, as well, with the approval of the Protected Areas Law, currently under study by the Senate. In this sense, biodiversity conservation has been identified as an area of priority, particularly in the Bañados del Este region.

21. At the beginning of the 90s, the Government of the Department Rocha developed a Departmental Programme for Environmental Protection whose lines of action include: a) development of projects and activities for environmental protection; b) co-ordination of private and public efforts supporting the foregoing; and c) promotion of the realisation of a Departmental plan for territorial regulation. This last one includes proposals for evaluation of resource potential based on a strategy of using the private and public works associated with rice cultivation systems (canals, roads, electrification) with the aim of intensification of production through the incorporation of new technologies, e.g., the use of irrigated pastures for swine, or beef or milk production.

A3. Prior or ongoing assistance

22. In 1992, the Government of Uruguay created the *Programme for the Sustainable Development and Conservation of Biodiversity of the Bañados del Este Biosphere Reserve*

(*PROBIDES*), as a consortium of the Ministry of Housing, Territorial Regulation, and Environment; The University of the Republic; and the Government of the Department of Rocha, where the Bañados del Este Biosphere Reserve is located. *PROBIDES* is comprised of a small but highly effective multi-disciplinary team located within the project area in the capital of the Department of Rocha. *PROBIDES* received a GEF grant (URU/92/G31)⁴ in 1992 which allowed it to begin operations (pilot phase or phase one).

23. Over the past three years, *PROBIDES* gathered significant baseline information on the biodiversity, socio-economic composition, economy and policy framework of the Biosphere Reserve. This allowed it to zone the Reserve for protected areas and buffer and transition zones; develop draft land-use and hydrological management plans in consultation with local stakeholders - including the Ministry of Agriculture - as well as a draft National Protected Areas Law (currently under discussion in the Uruguayan Senate); initiate private protected areas with landholders and NGOs; identify potential alternative uses for habitat and species; and build the awareness, knowledge and capacities of a broad range of local stakeholders through innovative non-formal and formal educational activities (see Annex I).

24. Recent independent evaluations have highlighted *PROBIDES*' "significant advances toward the conservation of biodiversity" and its role as "a model for future conservation activities in Uruguay."⁵ The Final Project Evaluation points out that "*PROBIDES is at a turning point;*" With baseline products and experience of the Pilot Phase, *PROBIDES "is now poised to effectively address the key issues required for the conservation of the region's biodiversity"* (see Annex II).

25. At the same time, *PROBIDES* has successfully mobilised bilateral co-operation resources (Spain, Canada) oriented toward the conservation and sustainable use of the *Bañados del Este Biosphere Reserve*. Further cofinancing is currently under final negotiation with the European Commission (US\$ 745,000).

A4. Institutional and Policy Framework

26. While the Uruguayan Constitution does not expressly include the right to a clean, protected and ecologically balanced environment among its citizens' basic rights, it can be interpreted to do so based on national legislation and international norms incorporated into Uruguayan Law. Abundant legislation and decrees approved over the last two decades provide a formal policy framework for the State, with the result that ecological balance is a legislative goal to be pursued by the State and the country's inhabitants. Forestry laws, soil

⁴ Global Environment Facility. 1992. Uruguay: Conservation of Biodiversity in the Eastern Wetlands. GEF Project Document.

⁵ Davidson, I. 1997. GEF Project Evaluation. Conservation of Biodiversity in the Eastern Wetlands of Uruguay.

⁶ Canevari, P., T. Crisman, and R. Sales. 1995. Informe Final. Misión Internacional de Evaluación al Proyecto URU/92/G31, Programa de Conservación de la Biodiversidad en los Humedales del Este.

and water conservation laws, decrees regarding control or prohibition of hunting of endangered species all point to this goal.

27. The Water Use Code mandates environmental protection as a general principle, and the associated decree refers to the construction of the Salto de Agua dam and the protection of species and habitats considered to be national patrimony.

28. At the same time, Uruguay is Party to numerous international conventions which are reflected within national environmental policy (Ramsar, MAB, Convention on Biological Diversity, UN Framework Convention on Climate Change). Uruguay has also ratified a bilateral treaty with Brazil regarding the development of the Laguna Merin basin, which encompasses the Bañados del Este Biosphere Reserve.

29. Beyond the norms cited above, Uruguay lacks adequate internal legislation which has been both updated and harmonised to ensure concrete measures to protect the environment. The Ministry of Housing, Territorial Regulation and the Environment (MVOTMA) - created in 1990 - is mandated to formulate, execute, supervise and evaluate national environmental protection plans, as well as the instrumentation of relevant national policy.

30. The Bañados del Este are principally located in the Departments of Rocha and Treinta y Tres, whose governments have important responsibilities in territorial regulation, flood prevention, and assistance and monitoring related to environmental management. Other government agencies and institutions linked to environmental issues include: the Ministries of Agriculture and Fisheries; Defence, Industry, Energy and Mines; Public Health; Transport and Public Works; and Tourism.

B. PROJECT JUSTIFICATION

B.1 Problem to be addressed: the present situation

31. Identification of the problems to be addressed by this project is based on the accumulated experience of PROBIDES during the project's pilot phase and through a broadly participatory consultative process. In the course of this process, the principle threats to the biodiversity of the Bañados del Este Biosphere were identified and a strategy delineated to address them. The principle threats are:

- - *Rice cultivation.* Former government policies encouraged the transformation of wetlands into rice fields. As a consequence, Uruguay is the 7th largest producer of rice in the world, and rice represents the third largest source of foreign exchange. Rice expansion has resulted in the loss of original wetlands from direct dissection, as well as from changes to the hydrological regime due to irrigation. Habitat degradation resulting from pollution is an additional concern, although serious contamination seems to be localised and not widespread. Measures are needed to make rice cultivation fully compatible with the goals of the Biosphere Reserve; for example, rice growers in the Central Valley of California receive fiscal incentives to adopt land-use practices which protect habitat for migratory birds.

- - *Coastal tourism expansion.* The coast of Uruguay is endowed with some of the most attractive beaches in the world. Not surprisingly, there are several important tourist destinations, such as world famous Punta del Este, a Cancún-style coastal mega-development. The coast of the Department of Rocha within the project area (approximately 200 km) has been less affected by this type of development, although most of it is currently being affected by disorganised and in many cases illegal construction. The main consequence of this type of tourism is a 10-fold surge in population during the summer months within the area, with the corresponding contamination and increased pressure on many natural habitats. Many coastal constructions have appeared without the benefit of a regional master plan, and are affecting important breeding and resting areas for a variety of species. Future coastal development, if carried out in the absence of a regional master plan integrating land-use and biodiversity conservation, will continue to be a serious and tangible threat for the remaining coastal habitats.
- - *Extensive cattle and sheep raising.* Cattle and sheep raising represent the most important economic activity in Uruguay. Extensive cattle ranching affects the natural regenerative cycles of native plants, inducing changes that are ultimately expressed in the landscape. For example, cattle prevent the growth of juveniles of the endemic Butiá Palm, whose populations are thus diminished. Cattle exclusion zoning and other management techniques are needed to make this activity biodiversity friendly.
- - *Eucalyptus and pine plantations.* Commercial forestry plantations are spreading and can result in the loss of natural habitats, especially native grasslands and coastal restinga habitat. The size and location of plantations can be regulated according to soil conditions and biodiversity values.
- - *Projected infrastructure development.* The consolidation of the MERCOSUR free-trade agreement is expected to result in increased traffic between such important cities as Sao Paulo, Montevideo, and Buenos Aires. Although the corresponding heavy-capacity highways are expected to pass to the west of the Biosphere Reserve - following Route 8 - it may bring new, more indirect threats to its habitats from potential secondary roads and bridges. In the same vein, a proposed bridge to unite the Departments of Maldonado and Rocha could result in land speculation and damage to rare dune vegetation, unless adequate measures are taken - such as the use of Environmental Impact Assessments and the introduction of less damaging design and construction techniques - to ensure compatibility with the goals of the Biosphere Reserve,

B.2 Expected End-of-Project Situation

32. The project will comprise two clearly defined phases. At the end of the *first phase*, the project will have produced:

- A Comprehensive Land and Water Use Plan covering the Bañados del Este Biosphere Reserve and the coastal zone;

- A National Protected Areas Law, creating the National System of Protected Areas;
- A proposal for the design and institutionalisation of a National Sustainable Use Trust Fund aimed at providing seed financing for the promotion of biodiversity friendly land-use practices.

33. At the end of the second phase, the project will have produced:

- An effective private and public protected areas system supported by a geo-referenced data base with information describing habitat and species distribution and numbers, together with zoning and land-use information;
- A technical assistance system, based in PROBIDES, in support of protected area managers;
- A portfolio of technologies and/or production methods to mitigate the negative effects on biodiversity of current land-use practices;
- Identification of financial, information, institutional, technical, managerial and other barriers to the implementation of the technologies and methods of sustainable production;
- An assessment of the potential demand for eco-tourism in the Biosphere Reserve and the requirements for its development;
- A programme for the production, quality control and marketing of natural products managed by producers of the areas;
- Stronger technical capacities of NGOs, local governments and private sector partners for the management of protected areas;
- Stronger institutional capacities of the agencies charged with the execution of public policy in the agricultural, tourism and public works sectors in areas relevant to the conservation and sustainable use of biodiversity in the Biosphere Reserve;
- Education modules for integration into existing curricula of the formal and non-formal education sectors (primary, secondary and university; NGO);
- An awareness raising and information dissemination programme about the Biosphere Reserve incorporating existing media and means (Internet, TV, radio, publications).

B.3 Targeted Beneficiaries

34. The Incremental Costs Matrix in Annex III provides a breakdown of the national and global benefits of the project.

35. Direct beneficiaries of the project will include the inhabitants of the Bañados del Este region, given that the Programme will allow them to improve their living conditions through the conservation and sustainable use of its biodiversity and other natural resources under the framework of the Comprehensive Plan. These will include local communities, rural producers, artisanal fisherfolk, tourism entrepreneurs, and local governments. Other direct beneficiaries will include the scientific community and tourists visiting the area for its biodiversity and landscape values.

36. Indirect beneficiaries will include the local, national and international communities who will continue to benefit from the protection of the Bañados' biodiversity with its associated values and properties

B.4 Project Strategy

37. The project strategy is aimed at the consolidation of the fully operational Biosphere Reserve in the Bañados del Este region of Uruguay.

38. The principal barriers to achieving this goal are: a) the lack of economically viable, biodiversity friendly alternative production systems and practices, including incentives and regulatory frameworks to motivate their adoption and long-term utilisation; b) absence of a protected area system; c) lack of laws, policies and plans to guide, regulate or motivate the use of land, water and coastal resources in the Reserve which are aimed at conservation of biodiversity; d) lack of a portfolio of alternative products which increase the value of natural habitat; e) weak technical and administrative capacities to facilitate, disseminate or execute biodiversity friendly land-use alternatives; and f) low general awareness of the potential benefits to be derived from a fully operational Biosphere Reserve.

39. The project proposed here will overcome these barriers to the consolidation of the Biosphere Reserve, through: the finalization and approval of the draft Land-Use Plan and Hydrological Plan integrated into a Comprehensive Plan; assistance in the approval of the National Protected Areas Law, currently under analysis by the Uruguayan Senate; further identification or refinement of biodiversity friendly resource uses and non-traditional alternatives for use by producers in the buffer and transition zones; design of financial mechanisms to catalyse the adoption of these technologies; development of an incentive/regulatory framework to motivate adoption of these technologies; establishment of a Reserve-wide network of public and private protected areas; creation of technical capacities in the government, private sector and NGOs aimed at assisting stakeholders in adopting these technologies or in managing protected areas; assistance to local stakeholders in identifying and overcoming barriers to the development of economic activities which add value to natural habitat; and raising the awareness of a broad range of local and national stakeholders through activities aimed at the formal and non-formal education sectors, as well as through the media.

40. The project will be implemented in two phases: in Phase 1, PROBIDES will implement the activities under Objective 1 and 2 regarding finalization and approval of the

Protected Areas Law and the Comprehensive Plan. Once approval of these has been accomplished, and the legal and policy frameworks are in place, PROBIDES will proceed to Phase 2, consisting of the implementation of the remaining four Objectives. In order to pass to Phase 2 with minimal loss of momentum, preparation of activities corresponding to Objectives 3-6 will be implemented during Phase 1 (see Annex IV).

41. Activities essential to the successful completion of Phase 1 include the establishment of a broad data base regarding socio-economic, ecological, institutional and political factors relevant to the land-use in the buffer and transition zones of the Reserve; strengthening of technical and managerial capacities of the institutions and organizations charged with promoting the changes in land-use in the different sectors; stakeholder participation in the consensus-based analytical and planning process; the preparation of policy analyses and legislative proposals and their presentation to official counterparts for approval; preliminary identification of sustainable use alternatives for the buffer and transition zones and identification of financing to support implementation of these alternatives; public awareness raising with the aim of generating support over the long-term to the implementation of the proposed land-use changes.

42. During the second phase, new public protected areas will be legally established as part of the national system with plans developed for their management. At the same time, the project will support NGOs and rural producers to identify and establish private protected areas. Experimentation with alternative land-use practices and technologies will continue and barriers to their adoption by the Reserve's stakeholders will be identified along with appropriate mitigation measures.

43. Activities will include bibliographic research and the use of high-level experts to identify successful experiences under similar conditions elsewhere and identify adaptation requirements (examples may include rice rotation systems, grazing rotation systems and exclusionary devices to permit regrowth of *Butia* palm seedlings, alternative road and bridge construction practices, biodiversity friendly tourism developments, landscape enrichment with native plant species, etc.); assistance to government and NGOs in the development of small-scale demonstration or experimental projects for on-farm or in-landscape implementation, where required. As well activities will include identification of financial, informational, institutional, technical, managerial and other barriers to wide-spread implementation of sustainable production technologies or methods; proposals for measures to overcome barriers to the appropriate private and governmental bodies, including resource requirements for implementation and broad dissemination, with recommendations for next steps. The intention of these activities is to engage existing government extension services and other entities to achieve widespread adoption of the technologies and methods identified.

44. The project will work with the Ministry of Tourism, NGOs and the private sector to define more precisely the potential demand for ecotourism in the Biosphere Reserve and the potential supply of ecotourism "goods" and services. The project will assist these stakeholders to formulate a strategic plan for ecotourism development, including operational and resource requirements for its implementation.

45. At the same time, the project will continue and expand Pilot Phase activities related to wildlife breeding, honey production, and natural product certification as a means of adding economic value to natural habitats.

46. A fundamental part of this strategy is the building of technical and operational capacities of all stakeholders, together with raising the awareness of the population in general. As such, the project will strengthen the technical capacities of government, NGOs and private sector stakeholders in protected area management and in the support to, and implementation of, biodiversity friendly land-use practices in the buffer and transition zones of the Biosphere Reserve.

47. The project will build the capacities of the agencies charged with executing government policies in the areas of agriculture and tourism to execute their responsibilities within the conceptual framework of the Biosphere Reserve and the Comprehensive Plan.

48. Key private sector groups and entrepreneurs will be targeted to increase their technical capacities for planning and management of productive activities in the buffer and transition zones. The project will build the technical capacities of local NGOs to assist local stakeholders in this process.

49. The project proposed here will target those institutions charged with the development of curricula, materials and teaching methods, as well as teacher training, in the national public education system, as well as NGOs in non-formal education. The project will assist these groups to develop education modules to be integrated into existing curricula or as stand alone modules, as appropriate. These modules will differ depending on the target population and the formal or non-formal approach to be taken.

50. At the same time, the project will work with the national and regional media to build their understanding of the objectives of the Biosphere Reserve, and the activities of the project, and to assist them in preparing articles, videos and radio and TV spots. The project's World Wide Web site will be maintained and updated. At the same time, PROBIDES will develop and implement a strategy of information dissemination and workshops/briefings to raise the awareness of parliamentarians and government agencies, with special attention to the Office of Planning and Budget of the Presidency, and the Ministries of Public Works and Transportation, Finance, Agriculture and Tourism.

B.5 Institutional and implementation arrangements

51. The Programme's organisational structure can be found on the following page.

1. Steering Committee

PROBIDES' Steering Committee (comprised of representatives of MVOTMA, the Government of Rocha, and the University of the Republic) will be responsible for decision making regarding the fulfilment of goals and objectives of the Programme. It will meet at least once every four months with the participation of UNDP as observer.

2. Programme Management Group

This group is comprised of the Programme Director, Unit Chiefs, the person responsible for the Environmental Education Service, and the Administrator; it will be charged with operational co-ordination. Technical and administrative personnel will live in the Department of Rocha in order to ensure effective Programme management and optimal interaction with local stakeholders.

3. Programme Units

Wetlands Management Technical Unit
Sustainable Development Unit

4. Services

Environmental Education Service

5. Advisory Committees

Stakeholder participation will be enhanced through the establishment of a broad, representative Operations Committee. This Committee will include local representatives of NGOs, the productive and private sectors, government agencies (Ministries of Agriculture and Tourism), and PROBIDES (chair). Project implementation will receive high-level technical support through a Technical Advisory Committee comprised of representatives of international NGOs, technical institutions, UNDP and universities. This Advisory Committee will monitor project progress and suggest changes as needed. As well, open forums will be held four times a year to discuss project implementation and progress with local stakeholder groups

6. Procedures

52. Procedures for contracting of staff, procurement and awarding and extension of subcontracts will follow the norms and standards of UNDP for National Execution Projects.

53. Contracting of staff will be based on competition and awarded on merit. In regard to procurement and sub-contracting, procedures will require comparison of prices from at least three sources or competitive bidding in the case of product or service costs over US\$ 30,000.

B.6. Reasons for Assistance from UNDP/GEF

54. The Bañados del Este Biosphere Reserve contains one of the most important freshwater ecosystem complexes of the Neotropical region and is the most biologically diverse region in Uruguay. The global importance of the area has been internationally recognised. Bañados del Este has been accredited as a Biosphere Reserve by UNESCO (1976) and as a Ramsar site in 1981 for its importance to migratory water fowl. Various

species of flora and fauna in the region are protected under the Convention on International Traffic in Endangered Species (CITES). The National Environmental Study indicates that this region as the most important in Uruguay for biodiversity conservation.

55. The Bañados region is severely threatened by the expansion and intensification of rice cultivation, tourism, infrastructure projects and the unplanned exploitation of the wetland renewable resources. Wetland destruction will significantly diminish available habitat for migratory birds, for numerous species of flora and fauna, and will affect both coastal fisheries as well as the region's beach and dune ecosystems.

56. Uruguay ratified the Convention on Biological Diversity in November of 1993. The project proposed here is fully consistent and supportive of GEF *Operational Programme # 2: Coastal, Marine and Freshwater Ecosystems*. The project will ensure the conservation of globally important biodiversity by following an integrated approach within the framework of a Biosphere Reserve.

57. The project directly supports implementation of Articles 7 and 8 of the Convention on Biological Diversity and supports decisions II/6 and II/7 of the Conference of the Parties of the Biodiversity Convention held in Jakarta in 1995.

58. This project is unique within the GEF portfolio because it addresses biodiversity conservation within a productive landscape dominated by private land ownership. As such, it has immense potential for replicability.

59. The Government of Uruguay has requested technical assistance from UNDP so that, with GEF resources, the achievements of the Pilot Phase *Programme for the Sustainable Development and Conservation of Biodiversity of the Bañados del Este Biosphere Reserve (PROBIDES)* can be effectively consolidated and the biodiversity of the region conserved.

B.7 Special Considerations

60. The Programme has incorporated the active participation of women from the design stage through to plans for co-ordination and implementation. Women will be especially important for their role in the teaching profession which will benefit the long-term sustainability of the Programme. As well, professionals, scientists, social workers, artisan groups and the wives of fishermen and rural producers will also participate in the project. Given the importance of the rural family economy in the area, women will also benefit directly from social promotion and training, and the corresponding increase in family income catalysed by the project.

61. In regard to technical co-operation between developing countries, professionals and technical staff from a number of countries are expected to participate in all areas of the project. The relationship with FEPAM in Rio Grande do Sul, established in the Pilot Phase of the project, will facilitate co-ordination of activities and exchange of experiences based on their work in neighbouring wetlands and coastal ecosystems.

62. Spanish consultants will periodically assist the project in the area of coastal zone management based on an agreement with AECI, and PROBIDES' technical staff will participate in training and other activities in protected areas in Spain.

63. Local, national and international NGOs have and will have significant participation in the Programme. Project implementation will be initiated with a stakeholder workshop with the aim of designing specific participation mechanisms and modalities for the project; as well, NGOs will be incorporated into the Operations and Technical Advisory Committees.

64. Relations with the private sector will be fostered in the Sustainable Development Area of the project, particularly with rural producers, artisanal and fishing groups, and ecotourism entrepreneurs. The information system established at the Regional Station will provide necessary scientific information based on demand for solutions to problems related to conservation and sustainable use of biodiversity. As well, project staff will provide assistance in the formulation of pre-investment and investment projects, as well as facilitate contacts with appropriate agencies and financial institutions.

B.8 Co-ordination Arrangements

65. Co-ordination among the national institutions involved in conservation and development in the Bañados has been ongoing from the beginning of PROBIDES, and was consolidated during the project's Pilot Phase. PROBIDES is actively co-ordinating with the following programmes and projects: a) EcoPlata (integrated management of the coastal zone of the Rio de la Plata, financed by IDRC and UNDP); b) Strategic Action Programme for the Rio de La Plata and its Maritime Front (currently in preparation with PDF B resources) and c) the formulation of the National Biodiversity Strategy (GEF-financed).

B.9 Counterpart support capacity

66. Uruguay possesses ample capacity to achieve the objectives of the Programme effectively, especially taking into account the installed multidisciplinary capacity of PROBIDES, developed and maintained over the course of Pilot Phase implementation. The PROBIDES team has successfully concluded the Pilot Phase project and has channelled public and private resources, as well as bilateral co-operation, to conservation and sustainable use activities in the Bañados.

67. The Project's Steering Committee is comprised of:

- a. The Departmental Government of Rocha, charged with the rural and urban land-use planning; regulation of construction; designation of open space, greenways and urban parks and green areas; transport policy and management; siting of commercial and industrial developments, pollution prevention and control; and social welfare. Within the Rocha Government, the Environment and Departmental Development Unit is charged with identifying, elaborating, managing, executing and evaluation development projects; compiling, systematising and updating necessary information for the formulation and design of projects; co-ordinating with governmental and national and international non-

governmental organizations to formulate, finance, execute and monitor projects; intervening to guarantee the development of the Department in keeping with the conservation of natural resources and ecosystem protection.

- b. The Ministry of Housing, Territorial Regulation, and Environment (MVOTMA) is responsible for the formulation, execution, supervision and evaluation of national environmental plans, through the National Environment Directorate and its specialised laboratories and studies.
- c. The University of the Republic, through diverse academic departments, Centres and Schools - such as Veterinary Medicine, Sciences, Engineering, Chemistry, Agronomy - will provide first-level scientists in basic and applied sciences, as well as teaching professionals capable of training post-graduate students in environmental management.

C. DEVELOPMENT OBJECTIVE

68. The ultimate objective of the proposed project is to consolidate the effective and sustainable conservation of this globally significant mosaic of habitats and its biodiversity through the successful implementation of land-use practices that serve both ecosystem conservation and sustainable economic resource use. The goal of Uruguay's environmental policy is the achievement of permanent and generalised improvement in the population's quality of life in the context of a sound and productive environment; this is the final objective of the process of sustainable development which Uruguay aspires to achieve.

D. IMMEDIATE OBJECTIVES, OUTPUTS AND ACTIVITIES

Objective 1: *A Comprehensive Land and Water Use Plan ensuring the long-term ecological integrity of the Bañados del Este Biosphere Reserve.*

Output 1.1: Finalised Plan for Government Approval

Activities will include:

- Implementation of participatory mechanisms for final discussion and refinements of the land-use plan, with the participation of all important stakeholders including government (local and national), NGOs, and the private sector (rice growers, cattle ranchers, and the eco-tourism industry).
- Final technical refinements of the hydrological draft plan for the Department of Rocha already prepared by PROBIDES. This proposal defines, as a first priority, the closure of the Andreoni Canal which is responsible for contamination of several coastal areas, especially La Coronilla beach; closure of this unnecessary canal will help restore large historic wetland areas.
- Discussions of the technical hydrological plan by all stakeholders.

- Once both plans have been thoroughly discussed and approved by all stakeholders, integration into a comprehensive land and water use plan for final approval and implementation.
- Presentation to the relevant authorities for approval; assistance to these in discussing and advancing the approval of the Comprehensive Plan.

Objective 2: *Policy frameworks and incentive and regulatory mechanisms to enable successful implementation of the Comprehensive Plan.*

Output 2.1: Approved National Protected Areas Law

Activities will include:

- Assistance to the Senate Environment Commission, as required.

Output 2.2: Policy reforms with corresponding incentives and regulations

Activities will include:

- Comprehensive analysis of existing policies affecting land-use in the buffer and transition zones of the Biosphere Reserve and recommendations for reform, including proposals for corresponding incentives and regulations to motivate compliance.
- Presentation of the analysis and recommendations to stakeholder fora for review and endorsement; revisions, as required.
- Formal presentation of policy reform recommendations to government for official endorsement.

Output 2.3 : Design of the Trust Fund for Sustainable Land-Use, including identification and development of economic instruments for its capitalisation.

Activities will include:

- Realisation of a short high-level briefing/consultation with the Presidency's Office of Planning and the Ministries of Agriculture, Environment and Finance to define the objectives of the trust fund and the corresponding economic instruments.
- Design of the Trust Fund, including resource requirements, governing structure, legal and administrative frameworks, financial management requirements, and selective criteria for projects.
- Identification and development of economic instruments for capitalisation.

- Presentation of the Trust Fund, its operational and financial modalities, and proposed economic instruments for stakeholder review and endorsement.
- Formal presentation to government for approval.

Objective 3: *An effective system of public and private protected areas in the Bañados del Este Biosphere Reserve*

Output 3.1: Public protected areas established

Activities will include:

- Demarcation of potential protected areas on public lands in the Reserve, including enlargement of existing areas such as El Potrerillo.
- Identification of management needs and resource requirements for each area.
- Proposal to government for formal declaration as part of National System of Protected Areas, under different IUCN categories.
- With government approval, formulation of participatory management plans.

Output 3.2: Private protected areas established

Activities will include:

- Consultations with private landowners to determine interest and viability of proposed protected area status for those areas defined as critical for biodiversity protection in the Pilot Phase project.
- Realisation of workshops with interested landowners to explain and present the implications of the National Protected Areas Law, and the benefits from fiscal incentives provided by the Law, as well as the technical assistance available from PROBIDES.
- Demarcation of potential private protected areas, based on biodiversity value, the Pilot Phase zoning of the Reserve and other baseline information.
- Identification of management needs and resource requirements for each area.
- Proposal to government for formal declaration as part of National System of Protected Areas, under different IUCN categories.
- With government approval, formulation of participatory management plans.

Output 3.3: Management and Monitoring System for the Reserve network of protected areas

Activities will include:

- Assist the National Protected Areas Directorate - to be established under the National Protected Areas Law - to map potential, new and existing protected areas in the Biosphere Reserve as part of Outputs 3.1 and 3.2., and input this information into PROBIDES existing geo-referenced database.
- Assist the Directorate to standardise monitoring and reporting requirements and methods for the protected areas in the Reserve in regard to area management, wildlife status, threats, ecotourism, visitation, etc., and ensure input to database.
- Assist protected area managers in the exchange of information and expertise through a protected area newsletter, workshops, and access to the Internet through PROBIDES' Web site.
- Carry out specific targeted investigations to improve habitat and wildlife monitoring and management.
- Monitor ecotourism trends in the Reserve and propose measures to protected area managers to attract or mitigate visitation, as appropriate.

Objective 4: *Biodiversity-friendly land-use practices and activities consistent with the Comprehensive Plan, adopted by landholders, tourism entrepreneurs and other resource users.*

Output 4.1: Portfolio of alternative production practices, including resource requirements for implementation and broad dissemination, for presentation to relevant private and government institutions and subsequent on-farm demonstration/experimentation.

Activities will include:

- In collaboration with the Rice Growers Association, the National Agricultural Research Institute, and the Rocha Cattle Ranching Association, identification of relevant technologies or practices for rice cultivation and cattle and sheep raising for use in buffer and transition zones, including adaptation requirements and selection of best practices, e.g., grazing rotation systems, animal exclusion devices, rice rotation systems.
- Identification of barriers to widespread application of these alternative production practices in the Reserve, e.g., technical, managerial, financial, informational, and attitudinal barriers, and selection of most promising.

- Where appropriate, assistance to government, NGOs and private landholders for the implementation of small-scale on-farm demonstration projects or trials to facilitate dissemination, adoption, replication, and training.
- Reports with recommendations to overcome barriers presented to relevant institutions (e.g. Ministry of Agriculture), describing outputs, activities, and resource requirements for implementation and dissemination through on-farm demonstration/experimentation.

Output 4.2: Stakeholder-driven ecotourism development plan

Activities will include:

- Based on Pilot Phase experience and information, analysis of trends affecting ecotourism and its potential in the Biosphere Reserve in collaboration with ecotourism operators, public and private protected area managers, the Ministry of Tourism and other stakeholders.
- Identification of the supply of ecotourism destinations, products and services, and detailed analysis of demand.
- Development of a preliminary strategy to increase and meet demand, and identification of barriers to be overcome in meeting demand.
- Formulation of a strategic plan to increase and meet demand for ecotourism in the Biosphere Reserve, including identification of resource requirements and potential sources of investment, operational modalities and formal presentation to the Ministry of Tourism by the principal stakeholder groups, including the private sector.

Objective 5: Strengthened capacities of government, NGOs and the private sector for the effective implementation of government policies in agriculture and tourism within the conceptual framework of the Biosphere Reserve and the Comprehensive Plan.

Output 5.1: Public and private protected area managers capable of wildlife and habitat management for biodiversity conservation.

Activities will include:

- Induction workshops for new protected area managers; to cover the National Protected Areas Law and its implications, the scope and objectives of the Biosphere Reserve, management objectives, the role of PROBIDES.
- Technical workshops for protected area managers; to cover planning and management of PAs, wildlife monitoring and management, management of ecotourism and other uses.

Output 5.2: Private sector, NGOs and governmental stakeholders capable of responding to new government policies, laws and plans for the application of biodiversity-friendly land-use technologies.

Activities will include:

- Workshops for stakeholders explaining in depth the scope and intent of the new policies, laws and plans, the existence of incentives and seed funding to stimulate adoption of alternative practices, the identification of biodiversity friendly technologies, and sources of technical assistance.
- Workshops for planners, architects and engineers of the Ministry of Public Works and Transportation, as well as major private construction firms and the government of the Department of Rocha, explaining the scope, objectives and importance of the Bañados del Este Biosphere Reserve, describing measures taken in other regions and countries to avoid negative impacts from road and bridge building in vulnerable ecosystems similar to the Reserve, and providing information and basic training - where appropriate and cost-effective - in mitigative or preventive methods, practices or technologies.

Output 5.3: Private sector, NGOs and governmental stakeholders capable of initiating the development and marketing of ecotourism products and services.

Activities will include:

- Workshops with these stakeholders to analyse the National Protected Areas Law and its implications, the scope and objectives of the Biosphere Reserve, economic and conservation objectives of ecotourism, ecotourism experiences in other countries, the role of the private sector and government agencies, design and financing of ecotourism operations, sharing in the economic benefits of ecotourism at the local level.

Objective 6: *Increased awareness at the national and local levels regarding the benefits of the Bañados del Este Biosphere Reserve.*

Output 6.1: Educational institutions and NGOs empowered to educate students in a wide variety of formal and non-formal settings on the benefits of conservation and sustainable use of biodiversity.

Activities will include:

- Development of appropriate school modules, materials and teaching methods in collaboration with the Ministry of Education, for integration into existing curricula, adapting these to different target groups.
- Development of appropriate modules, materials and teaching methods in collaboration with relevant NGOs for presentation to different target groups, including the private sector and parliamentary groups.

Output 6.2: Media awareness plan

Activities will include:

- In collaboration with TV, radio and newspapers, develop a strategy for the systematic dissemination of the importance and benefits of biodiversity conservation and the role and functions of the Biosphere Reserve.

Output 6.3: Awareness programme aimed at parliamentarians and government agencies

- Workshop to explain in detail the scope, objectives, legal and policy framework - including Convention obligations - importance of the Biosphere Reserve, and programme of activities of PROBIDES to the Office of Planning and Budget of the Presidency, the Ministries of Finance, Public Works and Transportation, Agriculture and Tourism, and the relevant parliamentary commissions. Field visits, as appropriate.
- Periodic dissemination of information (e.g., newsletters, briefings) to these agencies and commissions.

Annual briefings to these agencies and commissions on the status of the project.

E. INPUTS

E.1 Government Inputs

Area: Wetlands Management Unit

National Staff: University research scientists and instructors
Technical and other staff of MVOTMA
Park guards, guides and workers of MVOTMA and the Departmental Government of Rocha

Infrastructure: Protected Area lands with the corresponding improvements to roads, trails, fences, outbuildings and housing

Area: Sustainable Development Unit

National Staff: Technical staff of the Departmental Government
Professional staff of the University of the Republic

Regional Station

40 hectares of land
PROBIDES' headquarters

Visitors' housing for five people
Laboratories

Six vehicles
Nine personal computers
Laboratory equipment
Office furniture
Tools, sampling equipment, etc.

E.2 Inputs to be provided by GEF/UNDP

Area: Wetlands Management Unit

International Consultants: Watershed management expert
Protected Areas management expert
Pesticide pollution expert

National Staff: Chief of Unit
Two senior research staff
Technical assistant
Graphic artist
Geographer
Protected Areas specialist
GIS operator
Map technician
Other consultants (part-time)

Subcontracts: Revision/adaptation of hydrological regulation proposal
Coastal geology and geomorphology studies
Ecosystem ecology studies

Training: Protected areas planning/management (travel and per diem)
Seminars, workshops and scientific meetings

Equipment: Laboratory material
Maps and satellite photos

Laboratory equipment
Computer hardware and software

One four-wheel drive vehicle

Area: Sustainable Development Unit

International Consultants: Ecotourism specialist
Specialist in marketing of "green" products

National Consultants:	Chief of Unit Social Worker Oceanographer Technical assistants (3) Other consultants (part-time)
Subcontracts:	Ecotourism market study Design of Trust Fund Socio-economic assessments of local areas Training and technical assistance Identification of barriers to production of natural products Environmental economic studies
Training:	Seminars, workshops, scientific meetings
Equipment:	Promotion material Publications Laboratory equipment Aquatic transport

Environmental Education Service

National consultants:	Head of Service Social Communications specialist Teachers Other consultants (part-time)
Training:	Group training (teacher honoraria and internal travel costs)
Equipment:	Didactic material Computer hardware and software Audio-visual equipment

Legal Assistance

Consultant in Environmental Law

Inputs common to all areas:

Administrative and support staff:

Secretaries, administrative and service assistants

National consultants:	Programme Director Administrator
Missions and travel:	Resources for necessary travel outside of Uruguay Monitoring and evaluation missions
Various:	Resources for equipment maintenance and functioning, reports and publications, miscellaneous costs National Sustainable Use Trust Fund (US\$ 50,000)

F. RISKS

69. A first-order risk relates to the capacity of the Programme to achieve the project's immediate objectives thereby contributing to the reaching of the broader development objective. This will require the intervention and action of other actors (Departmental Governments, National government, producers, local communities, etc.). The non-application of the project's recommendations for conservation and sustainable use of the region's biodiversity and/or the realisation of infrastructural investments will clearly prejudice the possibility of achieving the project's objectives. To diminish this possibility, the project will be implemented with the strategy described under B.4 of this document.

70. A second level of risk refers to the capacity of the Programme to generate long-term actions and commitments to conservation and sustainable use of the Bañados' biodiversity. This risk is partially mitigated with the achievement of the first phase objectives, especially the approval of the Protected Areas Law, in that an adequate legal framework will then exist to carry out the other activities of this project. This strategy of focusing in a first phase on achieving the legal and incentive/regulatory frameworks followed by a second phase of more direct actions is described in this document.

G. PRIOR OBLIGATIONS AND PREREQUISITES

71. Prior obligations: None

72. Prerequisites:

- a. The Government will provide the Programme with buildings and equipment indicated in Section E, Inputs to be provided by the Government.
- b. The Government will provide the Programme with technical and support staff indicated in Section E.

73. UNDP will sign the Project Document and will provide assistance only if the above prerequisites have been fulfilled to its satisfaction. If one or more of these prerequisites is not fulfilled, UNDP can, at its discretion, suspend or terminate its assistance.

H. PROJECT REVIEW, REPORTING AND EVALUATION

74. The project will be monitored and evaluated in compliance with standard UNDP norms and procedures. This will include annual tripartite reviews held by PROBIDES, UNDP and the Office of Planning and Budget of the Presidency of the Republic. At the same time, the Project Director will prepare annual reports on the progress of project implementation and a final report for review at the final evaluation meeting.
75. The project will also be subject to GEF monitoring and evaluation norms and procedures, including preparation of annual Project Implementation Review reports and a final, independent evaluation.
76. The project will undergo an in-depth independent evaluation at the end of Phase 1, to determine the impact and outcomes of the legal and policy work under Objectives 1 and 2.
77. As described above, the Advisory Committee will follow progress of the project, and recommend specific monitoring and evaluation visits by relevant experts. For example, PROBIDES may wish to follow the effects of the implementation of incentives or regulations to measure impact on the biodiversity of the Biosphere Reserve. As well, regular feedback from the main stakeholders will be achieved through meetings of the Operations Committee.
78. A monitoring and evaluation system will be established to permit the measurement of biological indicators as a way of assessing project impact.

I. LEGAL CONTEXT

79. This Project Document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement between the Government of the Republic of Uruguay and the United Nations Development Programme signed by the parties on 12 December 1985.
80. The following types of revisions may be made to this project document with the signature of the UNDP Resident Representative, provided he or she is assured that the other signatories of the project document have no objection to the proposed changes.
- a) Revisions to any of the annexes of the project document;
 - b) Revisions which do not involve significant changes in the immediate Objectives, Outputs or Activities of the project, but are caused by the rearrangement of inputs already agreed to or by cost increases due to inflation; and
 - c) Mandatory annual revisions which rephrase the delivery of agreed project inputs, or reflect increased expert or other costs due to inflation, or take into account agency expenditure flexibility.

J. BUDGET

81. The budgets which follow include: 1) the UNDP/GEF contribution to the project, together with government and bilateral contributions; 2) the in-kind contribution by the government to the project.

**PRESUPUESTO PARA EL PROYECTO QUE INCLUYE LA CONTRIBUCIÓN
EN ESPECIE DEL GOBIERNO**

(en dólares americanos)

País: URUGUAY

Título del Proyecto: Consolidación de la Reserva de Biosfera Bañados del Este

	Total	1997	1998	1999	2000	2001
Personal						
Investigadores	48.000	6.000	12.000	12.000	12.000	6.000
Técnicos MVOTMA	24.000	3.000	6.000	6.000	6.000	3.000
Guardaparques	76.000	6.000	20.000	20.000	20.000	10.000
Equipos						
No fungible	64.000	34.000	10.000	10.000	10.000	---
Locales	240.000	30.000	60.000	60.000	60.000	30.000
Varios						
Varios	48.000	6.000	12.000	12.000	12.000	6.000
TOTAL	500.000	85.000	120.000	120.000	120.000	55.000



Fuente de Fondos.....: 1G - Global Environment Trust Fund
 Agencia de Ejecución.: PROBIDES - Progr.Conserv.Biodiversidad y Des.Sustent.en Humedales Este

SBLN	Descripción	Agencia de Implement.	Total	1997	1998	1999	2000	2001
010.	PERSONAL							
011.	Consultores Internacionales							
011.51	Gestión Areas Protegidas	PROBIDES	Cont. Neta Total	6,000	10,000	20,000	10,000	
				6,000	10,000	20,000	10,000	
011.52	Agricultura Sostenible	PROBIDES	Cont. Neta Total		12,000	10,000	10,000	10,000
					12,000	10,000	10,000	10,000
011.53	Cuencas Hidrográficas	PROBIDES	Cont. Neta Total	34,000	12,000	10,000	10,000	
				8,000	12,000	10,000	4,000	
011.54	Mercado Productos Naturales	PROBIDES	Cont. Neta Total	12,000	6,000	10,000	4,000	
				6,000	6,000	10,000	4,000	
011.99	Total de Consult. Internacionales		Cont. Neta Total	134,000	40,000	40,000	24,000	10,000
				20,000	40,000	40,000	24,000	10,000
				22,000	40,000	40,000	24,000	10,000
013.	Apoyo Administrativo							
013.01	Jefe Administración y Secretaría	PROBIDES	Cont. Neta Total	48,000	12,000	12,000	12,000	6,000
				6,000	12,000	12,000	12,000	6,000
013.99	Total de Apoyo Administrativo		Cont. Neta Total	48,000	12,000	12,000	12,000	6,000
				6,000	12,000	12,000	12,000	6,000
015.	Viajes							
015.01	Viajes Internos	PROBIDES	Cont. Neta Total	57,600	14,400	14,400	14,400	7,200
				7,200	14,400	14,400	14,400	7,200
015.99	Total de Viajes		Cont. Neta Total	57,600	14,400	14,400	14,400	7,200
				7,200	14,400	14,400	14,400	7,200
016.	Costos de Misión							
016.01	Gastos de Misión	PROBIDES	Cont. Neta Total	36,000	12,000		12,000	12,000
				36,000	12,000		12,000	12,000
016.99	Total de Costos de Misión		Cont. Neta Total	36,000	12,000		12,000	12,000
				36,000	12,000		12,000	12,000
017.	Personal Nacional							
017.01	Director del Programa	PROBIDES	Cont. Neta Total	144,000	18,000	36,000	36,000	18,000
				144,000	18,000	36,000	36,000	18,000
017.02	Coordinador Admin. y Finanzas	PROBIDES	Cont. Neta Total	96,000	12,000	24,000	24,000	12,000
				96,000	12,000	24,000	24,000	12,000
017.10	Jefa Manejo Humedales	PROBIDES	Cont. Neta Total	110,400	13,800	27,600	27,600	13,800
				110,400	13,800	27,600	27,600	13,800

Fuente de Fondos.....: 1G - Global Environment Trust Fund
 Agencia de Ejecución.: PROBIDES - Progr.Conserv.Biodiversidad y Des.Sustent.en Humedales Este

SBLN	Descripción	Agencia de Implement.	Total	1997	1998	1999	2000	2001
017.10	Jefe Manejo Humedales	PROBIDES	Total 110,400	13,800	27,600	27,600	27,600	13,800
017.11	Zoólogo	PROBIDES	Cont. Neta 72,000	9,000	18,000	18,000	18,000	9,000
017.12	Botánico	PROBIDES	Total 72,000	9,000	18,000	18,000	18,000	9,000
017.13	Geógrafo	PROBIDES	Cont. Neta 72,000	9,000	18,000	18,000	18,000	9,000
017.14	Profesional Areas Protegidas	PROBIDES	Total 57,600	7,200	14,400	14,400	14,400	7,200
017.15	Jefe de Guardaparques	PROBIDES	Cont. Neta 72,000	9,000	18,000	18,000	18,000	9,000
017.16	Asistente Técnico	PROBIDES	Total 52,800	6,600	13,200	13,200	13,200	6,600
017.17	Dibujante Cartografía	PROBIDES	Cont. Neta 28,800	3,600	7,200	7,200	7,200	3,600
017.18	Operador GIS	PROBIDES	Total 22,000	4,000	6,000	6,000	6,000	3,000
017.19	Consultores Manejo Humedales	PROBIDES	Cont. Neta 24,000	3,000	6,000	6,000	6,000	3,000
017.20	Jefe Desarrollo Sustentable	PROBIDES	Total 80,000	15,000	15,000	20,000	15,000	15,000
017.21	Promotor Social	PROBIDES	Cont. Neta 110,400	13,800	27,600	27,600	27,600	13,800
017.22	Oceanógrafo	PROBIDES	Total 72,000	9,000	18,000	18,000	18,000	9,000
017.23	Asistentes Técnicos	PROBIDES	Cont. Neta 57,600	7,200	14,400	14,400	14,400	7,200
017.24	Consultores Desarrollo Sustentable	PROBIDES	Total 115,200	14,400	28,800	28,800	28,800	14,400
017.30	Responsable Educación Ambiental	PROBIDES	Cont. Neta 65,000	10,000	10,000	25,000	20,000	9,000
017.31	Comunicador Social	PROBIDES	Total 72,000	9,000	18,000	18,000	18,000	9,000
017.32	Asistentes Técnicos	PROBIDES	Cont. Neta 57,600	7,200	14,400	14,400	14,400	7,200
017.33	Consultores Educación Ambiental	PROBIDES	Total 67,200	8,400	16,800	16,800	16,800	8,400
017.99	Total de Personal Nacional		Cont. Neta 1,493,600	204,200	366,400	386,400	361,400	175,200
			Total 500	204,200	366,400	386,400	361,400	175



Fuente de Fondos.....: 1G - Global Environment Trust Fund
 Agencia de Ejecución.: PROBIDES - Progr.Conserv.Biodiversidad y Des.Sustent.en Humedales Este

SBLN	Descripción	Agencia de Implement.	Total	1997	1998	1999	2000	2001
019.	TOTAL DE PERSONAL							
		Cont. Neta	1,769,200	237,400	444,800	452,800	423,800	210,400
		Total	1,769,200	237,400	444,800	452,800	423,800	210,400
020.	SUB-CONTRATOS							
021.	Subcontratos (A)							
021.01	Desarrollo Sustentable	PROBIDES						
		Cont. Neta	124,800	29,800	45,000	30,000	20,000	
		Total	124,800	29,800	45,000	30,000	20,000	
021.99	Total de Subcontratos (A)		124,800	29,800	45,000	30,000	20,000	
022.	Subcontratos (B)							
022.01	Gerición Areas Protegidas	PROBIDES						
		Cont. Neta	65,000	15,000	20,000	20,000	10,000	
		Total	65,000	15,000	20,000	20,000	10,000	
022.99	Total de Subcontratos (B)		65,000	15,000	20,000	20,000	10,000	
023.	Subcontratos (C)							
023.01	Asesoría Legal	PROBIDES						
		Cont. Neta	50,000	15,000	15,000	10,000	10,000	
		Total	50,000	15,000	15,000	10,000	10,000	
023.99	Total de Subcontratos (C)		50,000	15,000	15,000	10,000	10,000	
024.	Subcontratos (D)							
024.01	Manejo Humedales	PROBIDES						
		Cont. Neta	100,000	40,000	60,000			
		Total	100,000	40,000	60,000			
024.99	Total de Subcontratos (D)		100,000	40,000	60,000			
025.	Subcontratos (E)							
025.01	Fondo de Fideicomiso	PROBIDES						
		Cont. Neta	62,500	12,500	50,000			
		Total	62,500	12,500	50,000			
025.99	Total de Subcontratos (E)		62,500	12,500	50,000			

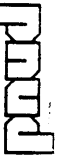
Fuente de Fondos.....: 1G - Global Environment Trust Fund
Agencia de Ejecución.: PROBIDES - Progr.Conserv.Biodiversidad y Des.Sustent.en Humedales Este

SBUN	Descripción	Agencia de Implement.	Total	1997	1998	1999	2000	2001
029.	TOTAL DE SUB-CONTRATOS							
		Cont. Neta	402,300	112,300	190,000	60,000	40,000	
		Total	402,300	112,300	190,000	60,000	40,000	
030.	CAPACITACION							
032.	Capacitación en Grupo							
032.01	Capacitación en Grupo	PROBIDES	Cont. Neta	5,000	15,000	15,000	15,000	
			Total	5,000	15,000	15,000	15,000	
032.02	Pasantías Exterior	PROBIDES	Cont. Neta	3,000	12,000	10,000	8,000	
			Total	3,000	12,000	10,000	8,000	
032.99	Total de Capacitación en Grupo		Cont. Neta	8,000	27,000	25,000	23,000	
			Total	8,000	27,000	25,000	23,000	
033.	Capacitación en Servicio							
033.01	Capacitación en Servicio	PROBIDES	Cont. Neta	20,000	40,000	40,000	40,000	20,000
			Total	20,000	40,000	40,000	40,000	20,000
033.99	Total de Capacitación en Servicio		Cont. Neta	20,000	40,000	40,000	40,000	20,000
			Total	20,000	40,000	40,000	40,000	20,000
034.	Reuniones							
034.01	Seminarios y Talleres	PROBIDES	Cont. Neta	40,000	40,000	50,000	30,000	30,000
			Total	40,000	40,000	50,000	30,000	30,000
034.99	Total de Reuniones		Cont. Neta	40,000	40,000	50,000	30,000	30,000
			Total	40,000	40,000	50,000	30,000	30,000
039.	TOTAL DE CAPACITACION		Cont. Neta	68,000	107,000	115,000	93,000	50,000
			Total	68,000	107,000	115,000	93,000	50,000
040.	EQUIPO							
045.	Compra Local de Equipo							
045.01	Equipo Fungible Laboratorio	PROBIDES	Cont. Neta	6,000	10,000	10,000	10,000	4,000
			Total	6,000	10,000	10,000	10,000	4,000
045.02	Equipo Fungible Oficina	PROBIDES	Cont. Neta	5,000	10,000	10,000	10,000	5,000
			Total	5,000	10,000	10,000	10,000	5,000
045.03	Equipo Fungible Estación Regional	PROBIDES	Cont. Neta	3,000	20,000	10,000	10,000	2,000
			Total	3,000	20,000	10,000	10,000	2,000



Fuente de Fondos.....: 1G - Global Environment Trust Fund
Agencia de Ejecución.: PROBIDES - Progr.Conserv.Biodiversidad y Des.Sustent.en Humedales Este

SBLN	Descripción	Agencia de Implement.	Total	1997	1998	1999	2000	2001
045.10	Equipo de Computación	PROBIDES	18,000	3,000	6,000	6,000	3,000	
			Total	3,000	6,000	6,000	3,000	
045.11	Equipo de Laboratorio	PROBIDES	41,000	8,000	15,000	13,000	5,000	
			Total	8,000	15,000	13,000	5,000	
045.12	Equipo Audiovisual	PROBIDES	41,000	8,000	15,000	13,000	5,000	
			Cont. Neta	5,000	10,000	15,000	15,000	
045.13	Muebles de Oficina	PROBIDES	30,000	5,000	10,000	15,000	15,000	
			Cont. Neta	3,000	7,000	12,000	12,000	6,000
045.14	Estaciones Areas Protegidas	PROBIDES	40,000	3,000	7,000	12,000	12,000	6,000
			Cont. Neta	15,000	20,000	20,000	15,000	10,000
045.99	Total de Compra Local de Equipo		80,000	15,000	20,000	20,000	15,000	10,000
			Cont. Neta	48,000	98,000	96,000	65,000	27,000
			Total	48,000	98,000	96,000	65,000	27,000
047.	Compra Internacional de Equipo		334,000					
047.10	Equipo de Computación	PROBIDES	55,000	10,000	30,000	5,000	5,000	5,000
			Total	10,000	30,000	5,000	5,000	5,000
047.11	Transporte terrestre	PROBIDES	55,000	24,000	12,000			
			Cont. Neta	24,000	12,000			
047.99	Total de Compra Intern. de Equipo		36,000	24,000	12,000			
			Cont. Neta	14,000	42,000	5,000	5,000	5,000
			Total	14,000	42,000	5,000	5,000	5,000
049.	TOTAL DE EQUIPO		91,000	34,000	42,000	5,000	5,000	5,000
			Cont. Neta	82,000	140,000	101,000	70,000	32,000
			Total	82,000	140,000	101,000	70,000	32,000
050.	MISCELANEOS		425,000					
052.	Costo de Informes	PROBIDES	170,000	20,000	40,000	40,000	40,000	30,000
052.01	Publicaciones		170,000	20,000	40,000	40,000	40,000	30,000
052.99	Total de Costo de Informes		170,000	20,000	40,000	40,000	40,000	30,000
			Cont. Neta	20,000	40,000	40,000	40,000	30,000
			Total	20,000	40,000	40,000	40,000	30,000
053.	Miscelaneos	PROBIDES	195,500	23,000	48,500	56,000	40,000	28,000
053.01	Varios		195,500	23,000	48,500	56,000	40,000	28,000
053.99	Total de Miscelaneos		195,500	23,000	48,500	56,000	40,000	28,000
			Cont. Neta	23,000	48,500	56,000	40,000	28,000
			Total	23,000	48,500	56,000	40,000	28,000



Fuente de Fondos.....: 1G - Global Environment Trust Fund
 Agencia de Ejecución.: PROBIDES - Progr.Conserv.Biodiversidad y Des.Sustent.en Humedales Este

SBLN	Descripción	Agencia de Implement.	Total	1997	1998	1999	2000	2001
054.	Costos Directos							
054.01	Costos Directos	PROBIDES						
		Cont. Neta	105,000	15,000	30,000	30,000	20,000	10,000
		Total	105,000	15,000	30,000	30,000	20,000	10,000
054.99	Total de Costos Directos							
		Cont. Neta	105,000	15,000	30,000	30,000	20,000	10,000
		Total	105,000	15,000	30,000	30,000	20,000	10,000
059.	TOTAL DE MISCELANEOS							
		Cont. Neta	470,500	58,000	118,500	126,000	100,000	68,000
		Total	470,500	58,000	118,500	126,000	100,000	68,000
099.	TOTAL DEL PRESUPUESTO							
		Cont. Neta	3,500,000	557,700	1,000,300	854,800	726,800	360,400
		Total	3,500,000	557,700	1,000,300	854,800	726,800	360,400



Fuente de Fondos.....: 1G - Global Environment Trust Fund
 Agencia de Ejecución.: PROBIDES - Progr. Conserv. Biodiversidad y Des. Sustent. en Humedales Este

SBLN	Donante	Institución Financiera	Total	1997	1998	1999	2000	2001
101.	Costos Compartidos del Gobierno							
101 01	MVOTMA	GOVT	Cont. Neta	124,000	124,000	124,000	124,000	124,000
			Total	124,000	124,000	124,000	124,000	124,000
101.99	Total de Costos Compartidos del Gob		Cont. Neta	124,000	124,000	124,000	124,000	124,000
			Total	124,000	124,000	124,000	124,000	124,000
103.	Costos Compartidos de Terceros							
103 01	OPP	AECI	Cont. Neta	80,000	80,000	80,000	80,000	80,000
			Total	80,000	80,000	80,000	80,000	80,000
103 02	EU	EU	Cont. Neta	300,000	75,000	75,000	75,000	75,000
			Total	300,000	75,000	75,000	75,000	75,000
103.99	Total de Costos Comp. de Terceros		Cont. Neta	380,000	155,000	155,000	155,000	155,000
			Total	380,000	155,000	155,000	155,000	155,000
109.	TOTAL DE COSTOS COMPARTIDOS		Cont. Neta	204,000	199,000	199,000	199,000	199,000
			Total	204,000	199,000	199,000	199,000	199,000
999.	CONTRIBUCION NETA		Cont. Neta	453,700	801,300	655,800	527,800	161,400
			Total	453,700	801,300	655,800	527,800	161,400

ANNEXES

ANNEX I	Description of Pilot Phase Accomplishments
ANNEX II	Lessons Learned from Implementation of Pilot Phase Project
ANNEX III	Incremental Costs Analysis
ANNEX IV	Workplan
ANNEX V	Terms of Reference for Project Staff
ANNEX VI	Equipment List
ANNEX VII	Schedule of Project Reviews, Reporting and Evaluation

ANNEX I Description of Pilot Phase Project Accomplishments

- Development of a **draft land-use plan** for the Bañados del Este Biosphere Reserve. This draft land-use plan is the foundation for more in-depth consultations with critical stakeholder groups, with the aim of reaching a final, stakeholder-driven land-use plan for government approval. The plan recognizes the need for the establishment of public and private protected (core) areas; buffer zones of low-impact economic activities with conservation objectives; and areas of economic activity compatible with the conservation objectives of the whole area. This land-use framework is consistent with, and supports the concept of a Biosphere Reserve, a legal obligation assumed by the Government of Uruguay when it accepted the Biosphere Reserve designation from UNESCO. Equally important, it recognizes the critical importance of private landholdings in the area. PROBIDES has successfully incorporated rice growers and the cattle industry into technical discussions for the new land-use and hydrological plans for the area, and has raised awareness about the importance of a landscape approach to biodiversity conservation and development. PROBIDES has zoned the Bañados for a range of uses, and provided the foundation for a regulated eco-tourism industry with the establishment of private reserves.

- A geomorphologic characterization of the region and an ensuing **proposal for the hydrological regulation** of the Bañados del Este basin^{16,17}. The latter document was developed with broad stakeholder participation and has been presented to the National Government for approval, where it is currently under discussion.

- Legislative proposal for the establishment of a **National System of Protected Areas**. This legislative proposal is currently under discussion in the National Senate. The proposal was developed as a response to the lack of clarity in the current legislation regarding the status of current and future protected areas, and sparked the initiation of a national dialogue about the need for this system. The impact of PROBIDES in this regard has been national in scope.

- A wealth of baseline **information** has been generated about biodiversity and economic activities in the area, including inventories of flora and fauna, ecosystem studies, research on a variety of sustainable development alternatives, and characterization of pollution types and sources.

- Numerous **courses, workshops, information sessions and seminars** on a wide range of subjects were delivered to school children, rice farmers, fishing communities, private landowners, biologists, tourist guides, and police officers. Long distance courses on environmental education were successfully delivered to more than a 1,000 individuals in Rocha, of which 18% were teachers. Excellent education materials were created and continue to be used locally and in other parts of Uruguay. These materials are well presented and contain quality information that is

¹⁶ Montaña, J.R., and J. Bossi. 1995. Geomorfología de los Humedales de la Cuenca de la Laguna Merín en el Departamento de Rocha. PROBIDES and Universidad de la Republica Oriental del Uruguay; Propuestas Sobre el Manejo de los Recursos Hídricos en el Departamento de Rocha. PROBIDES. Serie Documentos de Trabajo No. 3

¹⁷ Diaz, A. 1995. PROBIDES en Marcha: Una visión desde su interior a noviembre de 1995.

pertinent to the general lay person as well as to individuals with a knowledge and an interest in the various subjects addressed. These materials have potential for use in other regions of Latin America (eg., Fichas Didacticas #1-4).

- The establishment of a well equipped **applied research and documentation center** which has become a necessary source of reference to other researchers and NGOs. PROBIDES has become an important center of excellence in ecological research and biodiversity conservation, and is consulted periodically by a variety of users including government, NGOs, and Universities.

- The establishment of a new and highly representative **biological station** in the region (El Potrerillo). Although relatively small (715 ha.), El Potrerillo represents an important accomplishment because, for the first time, a public protected area is managed with a plan, and with the permanent presence of a reserve ranger. A reintroduction project for the Pampas Deer is underway here. As a measure of success, El Potrerillo received over 2,000 visitors in the short two months it was open to the public during its pilot phase in the summer of 1996. It has an enormous potential for environmental education, as an eco-tourism destination, and as a "nucleus" from which a larger protected area can be established.

- The creation of several **private protected areas** with an ecotourism objective. These areas were created with the technical support of PROBIDES, and received additional technical support for the elaboration of their management plans. Today, these private reserves are managed by private individuals and/or local NGOs, and are catalyzing the development of an emerging eco-tourism industry in the area. These protected areas, together with El Potrerillo under public administration, will form the core of a region-wide network of protected areas.

- A substantial amount of **co-financing** has also been leveraged thanks to the original GEF funding and the work of PROBIDES. These sources include permanent budgetary support from the Government of Uruguay (US\$ 0.34 million) and grants from the Governments of Spain (US\$ 0.36 million) and Canada (US\$ 20,000).

- Other strategically important accomplishments include: i) the establishment of a multidisciplinary cadre of **trained professionals** capable of ecosystem planning and management, as well as the development of alternatives for the sustainable development of the Bañados; ii) an increased awareness in the Bañados about the importance of integrating conservation and development; iii) a newly gained understanding at all levels about the benefits and importance of biodiversity conservation; iv) a **change in attitude within the traditional productive sectors** signaling a new willingness to discuss conservation issues openly and objectively based on high quality information; and v) a newly established sense of team work that includes NGOs, Government Agencies, and Civil Society, now working together to seek sustainable development solutions for the region.

ANNEX II Lessons Learned from Implementation of Pilot Phase Project

Project Design, Management, Implementation, Monitoring and Evaluation

A clear set of objectives with criteria for monitoring progress would have helped to guide program development and implementation more effectively. Future project development and successful implementation will depend on PROBIDES' ability to evaluate its own successes and adjust to unpredictable changes.

Collecting information on biophysical aspects of the region was over emphasized at the beginning of the Pilot Phase project. Although important to establish baseline information at the start of any project, greater emphasis should have been placed on ensuring that the results of these investigations were useful for stimulating conservation and sustainable development activities. ***This problem was rectified and a leaner and more effective operation is ensuring that studies support conservation and management needs.***

Protected areas legislation and an extensive land-use plan is an important tool for regulating activities in the region. Without protective areas legislation, PROBIDES lacks key legal instruments to effectively implement management plans or regulate land use activities to support conservation objectives.

Construction of the Regional Headquarters and placement of staff in Rocha was strategically important and a signal to the community of PROBIDES concern to establish direct links with the community. This has helped to facilitate greater cooperation and confirms PROBIDES commitment to the region.

A successful program requires a multidisciplinary approach and a strong team leader. As noted in the report of the International Mission in 1995, there was a lack of coordination between departments within PROBIDES during the initial stages of the project. This lack of an integrated approach resulted in activities which were ineffective in improving conservation of the region's wetlands. In particular, investigations were not developed with a vision to help resolve problems related to wetland management. ***This situation has been rectified and a much more focused and integrated approach is beginning to bear fruit.***

A lack of available in-country technical expertise slowed PROBIDES' progress in certain areas. Future efforts need to consider supporting training initiatives in key areas, such as physical geography, ecology, and environmental monitoring and economics.

PROBIDES has successfully demonstrated alternative economic activities can be derived through the sustainable use of wetland resources. Efforts to work with the private sector have helped to diversify economically viable activities of small landowners\ producers. The benefits derived from these activities will help to generate support for the Biosphere Reserve.

Through careful studies *in situ*, PROBIDES has been successful in promoting honey and palm fruit production, smoked fish, the use of rice grain husks for horticultural production, and other wetland derived products. Initial efforts to develop a "Natural Product Certification" for products derived

from the sustainable use of wetland resources may be an effective way of creating a market for new products.

Teachers are an important vehicle for increasing community awareness of wetland benefits and functions. PROBIDES has learned to work with teachers to effectively increase its ability to reach students throughout the region and create an environment for promoting a conservation ethic within the community. Given the apparent receptivity of teachers to PROBIDES' involvement, this has been a major achievement.

Resource Mobilization

Successful resource mobilization requires considerable time and effort. Although funds were secured for certain activities, others were reduced or cut (eg., environmental education). PROBIDES requires international support at this time to function successfully. The government has institutionalized the activities of PROBIDES by including it within its operating budget. However, these funds currently only partially cover its operating expenses. Future efforts to raise funds from government or external donors will require a concerted effort by PROBIDES staff.

Stakeholder Participation

To implement effective conservation programs and promote sustainable use of the wetlands PROBIDES learned that it would have to deal with an important land tenure issue: 95% of the land is privately owned. Participation by private landholders is critical to the development of the global land-use plan, as well as for the establishment of private protected areas..

PROBIDES recognizes that greater emphasis should be placed on activities focusing on rice production and tourism in the region. Having operated in the region for three years, PROBIDES is now in a position to strengthen its current relations with such groups as the Asociación de Cultivadores de Arroz, Sociedad Agropecuaria de Rocha and the Corporación Rochense de Turismo.

Local, National and International Support

During the initial stages, local institutions were reluctant to support the project and PROBIDES. This may be a natural reaction to any new entity whose objectives are suspect by the community. With greater emphasis on community focused programs (education, workshops, radio programs, promotions, etc), and less emphasis on investigations, PROBIDES appears to have gained substantial support within the community.

National support from government agencies and institutions is critical for successful implementation of the program in the region. For example, government approval of a law for a National System of Protected Areas, government approval of the global land-use plan and the development of policies and incentives for conservation, support from the MVOTMA for future funding resources, and assistance from the Universidad de la Republica to research specific issues.

Seeking support from institutions outside of Uruguay is recognized as an important activity for strengthening the project's effectiveness to conserve the wetlands and promote sustainable alternatives in the region.

ANNEX III Analysis of Incremental Costs

A. Project Background

This project will remove legal, policy, attitudinal, capacity and technical barriers to the consolidation of the Bañados del Este Biosphere Reserve.

Under UNESCO's Man and the Biosphere Programme, the Government of Uruguay has committed itself to establish a fully functional Biosphere Reserve in the Bañados del Este region, as a means of protecting its important biodiversity in the context of ongoing economic development.

The Government commenced fulfillment of these commitments by establishing the *Programme for the Sustainable Development and Conservation of Biodiversity of the Bañados del Este Biosphere Reserve (PROBIDES)* and initiating preparatory activities with a grant from the GEF in 1993. These activities aimed at establishing the information base, technical capacity, stakeholder consensus, and policy and legal frameworks to ensure long-term sustainability of the Biosphere Reserve's conservation programme. As the final evaluation noted, PROBIDES is now in a position to effectively remove the major barriers to consolidation of a fully functional Biosphere Reserve.

The principal barriers are a) the lack of economically viable, biodiversity friendly alternatives to current production practices, including corresponding incentives and regulations to motivate adoption and long-term compliance, b) absence of a system of protected areas, c) the lack of laws, policies and plans to guide, regulate or motivate use of land and water resources in the Reserve directed at conservation of its biodiversity, d) a portfolio of alternative products which enhance the value of natural habitat; e) lack of technical and managerial capacities to facilitate, disseminate or implement biodiversity friendly or other economic alternatives; and f) lack of generalized awareness regarding the benefits to be derived from a fully functional Biosphere Reserve.

The project proposed here will overcome these barriers to consolidation of the Biosphere Reserve by: finalizing hydrological and land use plans for the Reserve; assisting in the approval of the National Protected Areas Law, currently under review in the Uruguayan Senate; identifying biodiversity friendly land-use technologies for use by producers in the buffer and transition zones; designing funding mechanisms to catalyze adoption of biodiversity friendly land-use technologies; developing an incentive/regulatory framework to motivate adoption of these technologies; establishing a Biosphere-wide network of private and public protected areas; building the capacities of private sector, governmental and NGO organizations to assist stakeholders in adopting new technologies or managing protected areas; assisting local stakeholders in identifying and overcoming barriers to development of economic activities which add value to natural habitat; and raising the awareness of a broad range of local and national stakeholders through activities aimed at the formal and non-formal education sectors and the media.

The global benefit will be the protection of globally significant biodiversity through the Biosphere-wide network of public and private protected areas and the coordinated adoption of alternative biodiversity friendly land-use practices, principally by the private sector, to mitigate the effects of current practices on the Reserve's biodiversity.

B. INCREMENTAL COST ANALYSIS

1. Broad Development Goals

Since preparing the National Environmental Plan in 1991, the Government of Uruguay, is now considering draft legislation for a National Protected Areas System. This will provide an indicative geographical framework for sustainable land-use in Uruguay.

Current government policies and institutions support the development, for export, of rice production, and cattle and sheep raising. Tourism development is also supported by Government policy through the Ministry of Tourism.

Uruguay ratified the Convention on Biological Diversity in November 1993, and is currently developing a National Biodiversity Strategy and Action Plan with funding from the GEF.

2. Global Biodiversity Objective

The Bañados del Este has been designated a Biosphere Reserve denoting international recognition of the area's importance for biodiversity. The area serves as migratory stop-over for over 40 species of birds, shore-birds and waterfowl. The area contains endangered endemic species of the genus *Cynolebia*, and other endemic species including *Ephedra tweediana*, *Butia capitata*, *Isoetes weberi* and *Melanophryniscus montevidensis*. Among species of limited distribution are the Pampas Deer (*Ozotoceros bezoarticus*); and the Saffron-Cowled Blackbird (*Agelaius flavus*). The project area includes portions of the restinga ecoregion, an endangered ecoregion of outstanding global importance.

3. Baseline

For the purposes of the incremental cost calculation the baseline does not include the costs and activities funded by the GEF pilot phase; these activities are elaborated in section 4.

Ninety five percent of the Bañados del Este is privately owned, thus economic activity in the region is dictated by the market. Primary activities are cattle and sheep grazing (the principal economic activity in Uruguay) which impact on the growth and regeneration of the Butia Palm woodlands, covering 70,000 ha. Rice production, for domestic use and export (third largest source of foreign exchange) continues to provide pressure, through specific practices and the expansion of rice fields, on natural habitat. A similar pattern of expansion occurs in non-native eucalyptus and pine plantations. All of these activities directly affect natural habitat critical to the well-being of globally significant biodiversity.

Coastal tourism continues to expand in the region with little consideration of impacts on habitat or ecosystem integrity. The potential large-scale development of roads and bridges to the west of the Reserve - as a result of increased trade in the context of the evolution of MERCOSUR - may have indirect effects on ecosystem integrity in the Biosphere Reserve due to secondary roads and bridges; unless this secondary infrastructure is carefully planned and executed with the integrity of ecosystem processes as a guiding principle, damage may result to the Reserve's biodiversity.

These economic activities are supported, monitored and regulated by the Uruguayan government. The following support programs to the private sector in Rocha are intended to assist private producers in maximizing rentability through greater competitiveness in national and international markets.

An agricultural experiment station of the National Institute for Agricultural Research - dedicated principally to research on rice technologies to increase yields - is located in the Biosphere Reserve. As an integral part of its activities, the INIA station also provides extension services to rice growers. At the same time, the Ministry of Agriculture, Animal Husbandry, and Fisheries (MGAP) provides technical assistance and credits to producers.

MGAP's Forestry Directorate provides technical assistance to private sector investments in eucalyptus and pine plantations in the area. MGAP's Programme for Agricultural Technology assists small agricultural businesses with swine production and Butia honey production, the latter a successful activity originally identified PROBIDES during the Pilot Phase project.

The Departmental Government of Rocha also provides some technical assistance to rural producers. The Rocha Agricultural Cooperative sells inputs to its members and commercializes wool. The National Fisheries Institute provides technical support to fishing enterprises from its regional office at the port of La Paloma.

The Ministry of Housing, Territorial Regulation and the Environment monitors the coastal zone of the Department of Rocha, and the Ministry of Tourism will establish an office in Rocha in the near future to assist the Rocha Tourism Corporation - an association of tourism-related businesses - in promoting and serving local tourism.

4. The proposed Alternative

The project will build upon the outputs of the pilot phase project; these include a draft National Protected Areas Law, a draft Hydrological Plan, and a draft land-use plan aimed at preserving areas of identified global significance and utilizing their buffer and transition zones for biodiversity-friendly economic activities conserving biodiversity while maximizing benefits from land-use in the region. This law and the plans have been developed in consultation with private sector stakeholders as well as NGOs.

This project will secure the targeted global benefit by ensuring that preparatory work completed in the Pilot Phase results in a programme of activities to overcome barriers to the

protection of areas crucial to the integrity of globally significant biodiversity, and to mitigate the effects of current economic activities in the buffer and transition zones on these areas.

The draft land and water use plans will be integrated into a Comprehensive Plan, activities and costs will be identified for implementing the plan, and the plan will be presented for approval by government. This project will assist local landholders to demarcate areas to be included in the National System of Protected Areas (NSPA), and will present proposals for public protected areas for approval for inclusion in the NSPA. In surrounding buffer zones the project will identify biodiversity friendly land-use practices aimed at maintaining ecosystem integrity through research and demonstration of alternative options. To motivate landholders to adopt these practices, the project will identify regulatory and economic incentives. As well, the project will design a trust fund to finance activities to catalyze adoption of new practices (e.g., pre-feasibility studies).

As part of these objectives, the project will continue to build technical capacity in local government, private sector groups and NGOs, and to facilitate the implementation of the Comprehensive Plan and the adoption of alternative land use practices in buffer zones. The project will assist the formal and non-formal education sectors to develop materials and methods to raise awareness at a wide variety of levels; at the same time, it will work with the national and local media to develop a programme of activities to raise awareness through informal channels such as radio, newspapers and TV.

5. Scope of Analysis

The scope of analysis should include all other changes from decisions to undertake the alternative instead of the baseline both inside the boundary of the project area and outside. In this case no significant changes in land-use practices outside the Bañados del Este Biosphere Reserve are expected. However, within the boundaries of the Biosphere Reserve, the following land-use activities will be modified to integrate biodiversity conservation practices: rice cultivation, cattle and sheep raising, road and bridge planning, tourism.

6. Costs

The project is budgeted at US\$ 4.00 million; this figure includes US\$ 1.0 million in direct cash contributions by the Governments of Uruguay and Spain, US\$ 0.5 million in in-kind contributions from the Government of Uruguay and and US\$ 2.5 million in GEF financing.

The cost of finalizing the National Protected Areas Law and the draft hydrological and land-use plans - including their integration - will be project costs, as will the costs of identifying alternative land-use practices in the buffer and transition zones, and enabling their implementation. The trust fund mechanism - to be capitalized through economic instruments developed by this project - will finance key activities required to enable the adoption of alternative, biodiversity friendly technologies over the long-term.

	Baseline (B)	Alternative (A)	Increment (A-B)
Domestic Benefit	<ul style="list-style-type: none"> • cattle/ sheep ranching causing unnecessary habitat degradation and preventing regeneration • rice cultivation causing natural habitat destruction and agrochemical pollution • plantation forestry causing natural habitat destruction • unplanned tourism causing natural habitat degradation 	<ul style="list-style-type: none"> • cattle/ sheep ranching with incentives to adopt feasible alternative practices • rice cultivation with incentives to adopt feasible alternative practices • plantation forestry expansion regulated through land-use plan and incentives • tourism planned and regulated with entrepreneurs motivated to adopt new practices by incentives and economic benefits 	<ul style="list-style-type: none"> • economic activities and land-uses implemented which are compatible with the goals of the Biosphere Reserve
Global Benefit	<ul style="list-style-type: none"> • Biosphere designation with habitat degradation and loss of biodiversity from conventional land-use practices • No protected areas legally established • No land-use plan guiding conservation management and land-use planning. • Landholders with no incentives to adopt biodiversity friendly land-use practices • Biodiversity friendly economic opportunities e.g., ecotourism, undeveloped 	<p>Fully functional Biosphere Reserve i.e., core protected areas under conservation management, buffer and transitions zones under economically feasible land-use systems which do not degrade habitat</p> <p><u>Enabled by:</u></p> <ul style="list-style-type: none"> • Protected Areas Law approved, and PA management capacity established • Comprehensive Plan integrating hydrological and land-use plans approved by local stakeholders and government • biodiversity friendly land-use practices adopted by private landholders in buffer and transition zones and in implementation with motivate of regulatory incentive systems//Trust Fund established • ecotourism entrepreneurs and other stakeholders empowered with strategy and plan for development 	<ul style="list-style-type: none"> • Protection of globally significant habitats and species

	Baseline (B)	Alternative (A)	Increment (A-B)
Costs	<ul style="list-style-type: none"> existing government funded support to private sector activities - rice research, ag extension, tourism promotion (approx. US\$ 750,000/year) local NGO activities in support of conservation objectives (approx. US\$ 20,000/year) 	<ul style="list-style-type: none"> Land & Water use plan (US\$ 568,500) conservation incentive/regulatory framework (US\$ 177,900) Trust Fund established (US\$ 60,200) private/ public protected areas network established (US\$ 1.092) alternative land-use practices identified for adoption (US\$ 708,300) Ecotourism plan and related capacity building (US\$ 420,900) Greater awareness of gov't. media and education (US\$ 472,000) 	
Total Costs	b = US\$ 0.0.77 million/year or US\$ 3.08 million for life of project	b + SUS 2.86 million (includes US\$ 0.36 million from government of Spain)	SUS 2.86 million (US\$ 2.5 million GEF: US\$ 0.36 million GoS)

ANNEX V
TERMS OF REFERENCE
PROBIDES

TERMINOS DE REFERENCIA

CARGO: Director del Programa

CALIFICACIÓN: Profesional universitario con un mínimo de 10 años de experiencia y reconocida trayectoria en la que se destaquen los aspectos de creación y organización. Deberá tener antecedentes específicos y calificados en la dirección de programas y proyectos de desarrollo que incluyan la coordinación de equipos de trabajo multidisciplinario.

FUNCIONES:

1. Como Director del Programa será responsable ante la Junta Directiva del mismo y ante el PNUD del cumplimiento del Plan de Trabajo, de acuerdo a lo estipulado en el Documento de Proyecto y en concordancia con las normas y procedimientos del PNUD.
2. Dirigirá, coordinará, orientará y efectuará el seguimiento de las actividades de las distintas áreas del Programa.
3. Propondrá las medidas necesarias para mejorar la implementación del Programa incluyendo revisiones del Documento de Proyecto.

Revisará los terminos de referencia y propuestas de candidaturas y del personal del Programa y elevará las mismas al Comité de Selección en forma de una rápida provisión de los recursos humanos requeridos. Asegurará que todo el personal sea bien informado de las actividades del Programa a la llegada del mismo.
4. Asegurará la oportuna obtención de equipos y administrativos.
5. Ordenará gastos, asegurando el cumplimiento estricto de la pauta presupuestal establecida.

Preparará y presentará los informes de evaluación y rendimiento del proyecto, semestrales y de mitad de período, de acuerdo a las fechas establecidas.
6. Evaluará permanentemente el cumplimiento de los objetivos y la obtención de los resultados del Programa y proporcionará información al respecto a la Junta Directiva.
7. Asegurará la comunicación fluida del Programa con el Ministerio de Vivienda, Ordenamiento Territorial y Medio Ambiente, la Intendencia Municipal de Rocha y la Universidad de la República, así como con la oficina local del Programa de las Naciones Unidas para el Desarrollo.

Representará al Programa en los eventos de carácter técnico en que dicho Programa tome parte.
8. En general, asumirá todas las responsabilidades, actividades y gestiones que contribuyan al logro de las metas del Programa.

DURACIÓN: Desde el inicio de la implementación hasta el fin del mismo.

DEDICACIÓN: Tiempo completo

PROBIDES

TÉRMINOS DE REFERENCIA

CARGO: Coordinador del Area de Administración y Finanzas

CALIFICACIÓN: Licenciado en economía o administración con experiencia en gestión económico-financiera, administración de proyectos y evaluación de proyectos de inversión.

FUNCIONES:

1. Como Administrador del Programa será responsable, ante el Director, de la gestión económica y financiera del mismo y del estricto cumplimiento de las normas y procedimientos correspondientes.
2. Dirigir, orientar y supervisar la administración del Programa.
3. Identificar, proponer y apoyar la gestión de fuentes alternativas de financiamiento para el Programa.
4. Colaborar con la Dirección en la evaluación del Programa y en la formulación de nuevos proyectos.
5. Preparar y/o controlar las revisiones presupuestarias, de acuerdo con lo requerido, las que someterá al Director del Programa para su aprobación por las autoridades involucradas.
6. Efectuar y controlar los gastos del proyecto de acuerdo con las provisiones presupuestarias y según las normas y procedimientos del PNUD.
7. Manejar una cuenta de anticipos/caja menor y presentar balances oportunamente.
8. Conducir los procedimientos necesarios para la pronta obtención de equipos y suministros.
9. Llevar un inventario de los equipos y responsabilizarse de ellos, manteniendo los correspondientes registros.
10. Mantener un contacto fluido con el Director del Programa.
11. Mantener una coordinación permanente con los responsables de las diferentes áreas.
12. Coordinar con los responsables de cada área, la gestión económica de ellas.

DURACIÓN: Desde el inicio a la finalización del proyecto.

DEDICACIÓN: Dos días hábiles fijos por semana en Rocha y demás días en Rocha y/o Montevideo.

PROBIDES

TÉRMINOS DE REFERENCIA

CARGO: Jefe de administración y secretaría

CALIFICACIÓN: Secretaria ejecutiva.

FUNCIONES:

En comunicación fluida con el Director y el Administrador:

1. Organizar la tarea administrativa general del Programa.
2. Llevar la agenda del Director.
3. Organizar el archivo general del PROBIDES.
4. Contribuir en traducciones y correspondencia en inglés.
5. Responsabilizarse del inventario de los efectos del programa asegurando la disponibilidad de los stocks.
6. Concentrar e iniciar las gestiones de compras de PROBIDES.
7. Supervisar el trabajo de la auxiliar administrativa y el cadete.

DURACIÓN: Desde el inicio a la finalización del proyecto.

DEDICACIÓN: Tiempo completo.

PROBIDES

TÉRMINOS DE REFERENCIA

CARGO: Jefe de la Unidad de Manejo de Humedales

CALIFICACIÓN:- Profesional universitario con orientación a conservación de la biodiversidad, con énfasis en manejo de humedales y gestión de áreas protegidas.

- Preferentemente con formación de posgrado.
- Comprobada aptitud de trabajo en equipo.
- Experiencia en investigación y fortalecimiento institucional.

FUNCIONES:

1. Dirigir al personal técnico de la Unidad de Manejo de Humedales, de manera que se cumpla con las actividades y metas propuestas y que prevalezca el trabajo en equipo y una amplia y positiva coordinación con instituciones científicas, técnicas y sociales relacionadas.
2. Orientar y participar en la ejecución de la tipificación de los Humedales de la Reserva de Biosfera, que involucre aspectos geomorfológicos, fitosociológicos y faunísticos de manera de identificar las áreas con mayor valor de conservación.
3. Redactar una propuesta ajustada de zonificación para el área de Reserva de Biosfera Bañados del Este y someterla al análisis y discusión de distintos sectores sociales y productivos, ONGs ambientalistas, comunidades locales, e instituciones públicas nacionales y locales relacionadas con la conservación ambiental.
4. Orientar y participar en la redacción de Planes de Manejo y de Planes Operativos correspondientes a las áreas bajo estudio.
5. Orientar y supervisar el asesoramiento a las áreas protegidas públicas y privadas y a las actividades anexas de ecoturismo.
6. Orientar y supervisar la investigación en vida silvestre a realizarse en la Estación Biológica Potrerillo de Santa Teresa y otras que se instalen en el futuro.
7. Coordinar el funcionamiento del Sistema de Información Geográfico y los trabajos de geomorfología costera.
8. Colaborar en las actividades de educación ambiental y de divulgación técnica organizadas por PROBIDES.
9. Mantener un contacto fluido con el Director del Programa, así como tener instancias de coordinación con el Administrador y con los otros responsables de Unidades.

DURACIÓN: Desde el inicio a la finalización del proyecto.

DEDICACIÓN: Tiempo completo.

PROBIDES

TÉRMINOS DE REFERENCIA

CARGO: Profesional de Áreas Protegidas

CALIFICACIÓN:- Profesional universitario con orientación en manejo de humedales y gestión de parques y áreas protegidas.

- Comprobada aptitud de trabajo en equipo.
- Experiencia en investigación y fortalecimiento institucional.

FUNCIONES:

1. Administrar y gestionar las áreas protegidas administradas por PROBIDES incluyendo el control de su uso como áreas de recreación y turismo bajo la supervisión del Jefe de la Unidad.
2. Supervisar la administración y mantenimiento operativo de la Estación Biológica Potrerillo de Santa Teresa, y su personal (Jefe de guardaparques, guardaparques y guías de naturaleza) así como de otras áreas que comiencen a gestionarse por PROBIDES.
3. Colaborar con la elaboración de nuevas propuestas de áreas protegidas y favorecer la ejecución de las mismas.
4. Colaborar con la elaboración de planes de manejo y diagnóstico de las áreas gestionadas por PROBIDES.
5. Contribuir con las actividades de educación ambiental de PROBIDES.
6. Colaborar en otras actividades del Programa a pedido de la Dirección.

DURACIÓN: Desde el inicio a la finalización del proyecto.

DEDICACIÓN: Tiempo completo.

PROBIDES

TÉRMINOS DE REFERENCIA

CARGO: Investigador en fauna

CALIFICACIÓN: - Profesional universitario con orientación a investigación en fauna.
- Preferentemente con formación de posgrado.
- Comprobada aptitud de trabajo en equipo.
- Experiencia en investigación y fortalecimiento institucional.

FUNCIONES:

Bajo la supervisión de la Unidad Técnica de Manejo de humedales:

1. Orientar y ejecutar proyectos integrados de investigación y monitoreo en vida silvestre, orientados al conocimiento de la fauna en la Estación Biológica El Potrerillo y en las Áreas Silvestres Protegidas de Rocha.
2. Contribuir de esta forma, al estudio de los ecosistemas predominantes en dichas Áreas y colaborar en la redacción de diagnósticos y documentos técnicos y en el diseño de los planes de gestión y manejo correspondientes.
3. En particular, orientar o colaborar en el ajuste y puesta en funcionamiento en el terreno de métodos de estudio de fauna como radiotelemetría, estaciones olfativas, anillamiento de aves, etc.
4. Orientar a estudiantes de grado y/o de posgrado en trabajos y tesis de investigación.
5. Colaborar en las tareas de educación y divulgación técnica de PROBIDES.
6. Colaborar con el responsable de la Unidad en la gestión y mantenimiento de la Estación Biológica El Potrerillo, de los laboratorios de PROBIDES y de los equipos de investigación.
7. Coordinar, en forma abierta y positiva, con otros equipos científicos y técnicos del país en relación a los proyectos a su cargo.
8. Colaborar en otras actividades del Programa a pedido de la Dirección.

DURACIÓN: Desde el inicio a la finalización del proyecto.

DEDICACIÓN: Tiempo completo.

PROBIDES

TÉRMINOS DE REFERENCIA

CARGO: Investigador en flora

CALIFICACIÓN:- Profesional universitario con orientación a investigación en flora.
- Comprobada aptitud de trabajo en equipo.
- Experiencia en investigación y fortalecimiento institucional.

FUNCIONES:

Bajo la supervisión de la Unidad Técnica de Manejo de humedales

1. Colaborar en la orientación y ejecución de proyectos integrados de investigación y monitoreo en vida silvestre, orientados al conocimiento de la flora en la Estación Biológica El Potrerillo y en las Áreas Silvestres Protegidas de Rocha.
2. Orientar y ejecutar trabajos y ensayos en relación a la identificación y caracterización de las áreas de palmar y a la dispersión de frutos y la regeneración de la palma *Butia capitata*.
3. Contribuir al estudio de los ecosistemas predominantes en las Áreas Protegidas y colaborar en la redacción de diagnósticos y documentos técnicos y en el diseño de los planes de gestión y manejo correspondientes.
4. Orientar a estudiantes de grado en trabajos de investigación.
5. Colaborar en las tareas de educación y divulgación técnica de PROBIDES.
6. Colaborar con el responsable de la Unidad en la gestión de la Estación Biológica El Potrerillo, y en darle mantenimiento y continuidad al Herbario de PROBIDES.
7. Coordinar, en forma abierta y positiva, con otros equipos científicos y técnicos del país en relación a los proyectos a su cargo.
8. Colaborar en otras actividades del Programa a pedido de la Dirección.

DURACIÓN: Desde el inicio a la finalización del proyecto.

DEDICACIÓN: a convenir, preferentemente con un mínimo de tres días en Rocha.

PROBIDES

TÉRMINOS DE REFERENCIA

CARGO: Geógrafo

CALIFICACIÓN:- Profesional universitario con orientación a geomorfología y tratamiento de información geográfica.

- Preferentemente con formación de posgrado.
- Comprobada aptitud de trabajo en equipo.
- Experiencia en investigación y fortalecimiento institucional.

FUNCIONES:

Bajo la supervisión de la Unidad Técnica de Manejo de humedales

1. Actuar como contraparte de una consultoría española en el estudio de las alteraciones físicas en un tramo de la costa atlántica uruguaya y de la dinámica de las barras de las lagunas costeras.
2. Participar en dichos estudios y actuar como enlace entre PROBIDES y grupos científico-técnicos nacionales vinculados, de manera de coordinar trabajos con ellos, en forma abierta y positiva.
3. Activar y redefinir el funcionamiento del Sistema de Información Geográfica mediante:
 - a. Digitalizar e ingresar a sistemas informáticos las imágenes de Áreas de Lagunas de Rocha, Garzón y Negra, y las zonas marino costeras vinculadas a estos sistemas lagunares con sus respectivos parámetros bióticos, abióticos, sociales y económicos.
 - b. Abordar la problemática de la zonificación de la Reserva de Biosfera y la actividad arrocera, relacionando los aspectos de conservación y regulación hídrica.
 - c. Superponer las imágenes e interpretar los resultados, para los planes de manejo y gestión de las Áreas analizadas y editar los mapas correspondientes.
 - d. Interpretar cartas, fotoplanos y fotos aéreas y transferir los resultados obtenidos al Sistema de Información Geográfica para la Reserva de Biosfera "Bañados del Este".
4. Participar en la redacción de informes y documentos e integrar el equipo de trabajo abocado a la zonificación de áreas protegidas y ordenamiento territorial.
5. Colaborar en actividades de educación ambiental de PROBIDES.
6. Colaborar en otras actividades del Programa a pedido de la Dirección.

DURACIÓN: Desde el inicio a la finalización del proyecto.

DEDICACIÓN: a convenir, preferentemente con un mínimo de tres días en Rocha.

PROBIDES

TÉRMINOS DE REFERENCIA

CARGO: Jefe de Guardaparques

CALIFICACIÓN: Enseñanza media con experiencia en administración de áreas protegidas y/o cursos de guardaparques

FUNCIONES:

Bajo la supervisión de la Unidad Técnica de Manejo de humedales

1. Encargarse de la administración y mantenimiento operativo de la Estación Biológica Potrerillo de Santa Teresa y su personal (guardaparques y guías de naturaleza).
2. Apoyar la instalación de otras áreas que PROBIDES comience a desarrollar, en especial el área protegida de San Miguel.
3. Colaborar en otras actividades del Programa a pedido del Jefe de Unidad.

DURACIÓN: Desde el inicio a la finalización del proyecto.

DEDICACIÓN: completa.

PROBIDES

TÉRMINOS DE REFERENCIA

CARGO: Ayudante de campo

CALIFICACIÓN: Estudiante avanzado de Biología

FUNCIONES:

1. Estudiar la población residente de dragón (*Xantopsar flavus*) preferencias de hábitat, reproducción y corrientes migratorias.
- Realizar actividades de marcaje y anillamiento de los individuos que conforman la población reproductora de la Estación Biológica Potrerillo de Santa Teresa y monitorear el grupo durante la estadía post-nupcial.
- Realizar actividades de investigación en ornitología en otras áreas protegidas gestionadas por PROBIDES.
- Colaborar en actividades de elaboración y redacción del plan de manejo de la Estación Biológica Potrerillo de Santa Teresa.

DURACIÓN: Desde el inicio a la finalización del proyecto.

DEDICACIÓN: Tres días por semana.

PROBIDES

TÉRMINOS DE REFERENCIA

CARGO: Operador GIS

CALIFICACIÓN: Operador PC avanzado, manejo de Windows, bases de datos y GIS

FUNCIONES:

1. Digitalizar los materiales suministrados por PROBIDES.
2. Entregar a PROBIDES el material digitalizado en soporte magnético y papel a escala 1:250.000 y 1:500.000.

DURACIÓN: Desde el inicio a la finalización del proyecto.

DEDICACIÓN: Variable según tarea.

PROBIDES

TÉRMINOS DE REFERENCIA

CARGO: Dibujante en cartografía y diseño gráfico.

CALIFICACIÓN: Egresado de UTU o estudiante aventajado de la carrera de ayudante de arquitecto o idóneo que justifique su capacitación con otros estudios y/o trabajos realizados. Operador de diseño técnico (Autocad).

FUNCIONES:

1. Dibujo de mapas y planos.
2. Montaje de exposiciones de material vinculado a la actividad desarrollada por PROBDES.
3. Diseño de paneles.
4. Elaboración de maquetas.
5. Diseño de cartelería.

DURACIÓN: Desde el inicio a la finalización del proyecto.

DEDICACIÓN: Variable según tareas.

PROBIDES

TÉRMINOS DE REFERENCIA

CARGO: Jefe de la Unidad de Desarrollo Sustentable

CALIFICACIÓN: Profesional universitario con experiencia en:

- Formulación, dirección y evaluación de proyectos de desarrollo.
- Coordinación de equipos de trabajo multidisciplinario.
- Promoción de actividades productivas.
- Desarrollo Sustentable.

FUNCIONES:

1. Planificar, ejecutar, controlar y evaluar las actividades de la Unidad.
2. Consolidar un equipo de trabajo que lleve adelante una estrategia común para el logro de los objetivos específicos.
3. Definir la estrategia de desarrollo de una línea de productos naturales de la Reserva de Biosfera e implementarla en coordinación con los agentes privados.
4. Orientar las actividades del Programa en lo referente al desarrollo de experiencias de producción sustentable con especies autóctonas en coordinación con el sector privado.
5. Supervisar las actividades destinadas al sector pesquero, al sector productivo familiar y a las producciones extensivas de carne y arroz.
6. Desarrollar una propuesta de trabajo del Programa en lo referente al turismo de naturaleza e implementarla en coordinación con el resto del Programa.
7. Colaborar en las actividades de educación ambiental y de divulgación técnica organizadas por PROBIDES.
8. Mantener un contacto fluido con el Director del Programa, así como tener instancias de coordinación con el Administrador y con los otros responsables de unidades.

DURACIÓN: Desde el inicio a la finalización del proyecto.

DEDICACIÓN: Tiempo completo.

PROBIDES

TÉRMINOS DE REFERENCIA

CARGO: Promotor social

CALIFICACIÓN: Profesional de nivel terciario con experiencia en desarrollo comunitario y aptitudes para la consulta a sectores sociales y económicos en procura de lograr acuerdos en torno a propuestas de ordenamiento territorial.

FUNCIONES:

1. Participar en trabajos de organización social con pobladores rurales de las áreas protegidas, en particular las comunidades de pescadores artesanales, productores agropecuarios y grupos artesanales, con vistas al mercadeo de productos "naturales" de la Reserva de Biosfera Bañados del Este.
2. Organizar y articular el diálogo entre PROBIDES y los distintos sectores sociales y agentes económicos de la región, para el análisis, discusión y acuerdo en torno a las propuestas de zonificación de la Reserva de Biosfera Bañados del Este.
3. Colaborar en la elaboración de diagnóstico y plan de manejo para el área de las lagunas de Rocha y Garzón
4. Colaborar en otras actividades de PROBIDES a pedido del Coordinador de la Unidad.

DURACIÓN: Desde el inicio a la finalización del proyecto.

DEDICACIÓN: Tiempo completo.

PROBIDES

TÉRMINOS DE REFERENCIA

CARGO: Oceanógrafo

CALIFICACIÓN: Profesional universitario con orientación a recursos pesqueros.

- Preferentemente con formación de posgrado.
- Comprobada aptitud de trabajo en equipo.
- Experiencia en investigación y fortalecimiento institucional.

FUNCIONES:

Bajo la supervisión de la Unidad de Desarrollo Sustentable

1. Realizar actividades de investigación en los recursos marino-costeros, relacionando los ciclos biológicos con los factores que determinan los cambios de disponibilidad y abundancia en las lagunas costeras, con estrecha vinculación a los recursos ictícolas, y en particular con el camarón (*Penaeus paulensis*).
2. Elaborar propuestas que contribuyan al desarrollo de un adecuado sistema de manejo que incremente la disponibilidad de los recursos en las lagunas costeras, en beneficio de las comunidades de pescadores de la zona.
3. Colaborar en zonificación de la Reserva de Biosfera "Bañados del Este", con aportes técnicos en el manejo de las zonas marino costeras y participar en la redacción de diagnósticos y documentos para favorecer el intercambio de información entre las administraciones y agentes sociales implicados en la gestión de éstas áreas.
4. Colaborar en actividades de educación ambiental de PROBIDES.
5. Coordinar, en forma abierta y positiva, con otros grupos científicos y técnicos del país en los proyectos a su cargo.
6. Colaborar en otras actividades del Programa a pedido de la Dirección de PROBIDES.

DURACIÓN: Desde el inicio a la finalización del proyecto.

DEDICACIÓN: a convenir, preferentemente con un mínimo de tres días en Rocha.

PROBIDES

TÉRMINOS DE REFERENCIA

CARGO: Asistente Técnico de la Unidad de Desarrollo Sustentable

CALIFICACIÓN: Egresado o estudiante avanzado con orientación en el aprovechamiento integral de los recursos pesqueros

FUNCIONES:

1. Apoyar los trabajos de investigación aplicada de tecnologías simples que mejoren el aprovechamiento de los recursos pesqueros en la zona de los Humedales.
2. Capacitar a las comunidades de pescadores para el uso sustentable de los recursos.
3. Colaborar en la producción y mercadeo de productos derivados de la pesca.
4. Colaborar en actividades de educación ambiental y de divulgación técnica de PROBIDES.
5. Coordinar con el Instituto de Investigaciones Pesqueras de la Facultad de Veterinaria.
6. Colaborar en otras actividades del Programa a pedido del Jefe de la Unidad o de la Dirección.

DURACIÓN: Desde el inicio a la finalización del proyecto.

DEDICACIÓN: Tres días a la semana.

PROBIDES

TÉRMINOS DE REFERENCIA

CARGO: Asistente técnico para la Unidad de Desarrollo Sustentable

CALIFICACIÓN: Egresado o estudiante universitario avanzado con orientación a la producción agropecuaria
Capacidad para integrarse a equipo multidisciplinario.

FUNCIONES:

1. Apoyar los trabajos de investigación en predios rurales orientados a la producción de carnes naturales.
2. Apoyar las actividades orientadas a estimular una producción arrocera con tecnologías que no agredan el medio ambiente.
3. Colaborar en trabajos de investigación aplicada en especies silvestres en predios rurales.
4. Apoyo a tareas de evaluación económica de proyectos prediales y de gestión económica y financiera de empresas familiares.
5. Colaborar en programas de educación y capacitación de PROBIDES.
6. Colaborar en otras actividades del Programa a pedido del Jefe de la Unidad o de la Dirección.

DURACIÓN: Desde el inicio a la finalización del proyecto.

DEDICACIÓN: Tres días semanales.

PROBIDES

TÉRMINOS DE REFERENCIA

CARGO: Asistente técnico para la Unidad de Desarrollo Sustentable

CALIFICACIÓN: Egresado o estudiante universitario avanzado con orientación a la producción agropecuaria familiar.
Capacidad para integrarse a equipo multidisciplinario.

FUNCIONES:

1. Apoyar los trabajos de investigación aplicada en predios rurales, orientada a la obtención de productos naturales.
2. Asesorar a proyectos piloto en predios familiares.
3. Participar en tareas de divulgación técnica y capacitación para productores.
4. Apoyar tareas de evaluación económica de proyectos prediales y de gestión económica y financiera de empresas familiares.
5. Colaborar en programas de educación y capacitación de PROBIDES.
6. Colaborar en otras actividades del Programa a pedido del Jefe de la Unidad o de la Dirección.

DURACIÓN: Desde el inicio a la finalización del proyecto.

DEDICACIÓN: Tres días semanales.

PROBIDES

TÉRMINOS DE REFERENCIA

CARGO: Responsable del Servicio de Educación Ambiental

CALIFICACIÓN: Licenciado en educación o docente titulado con experiencia en:

- Programación de currícula en la educación formal.
- Coordinación de equipos de trabajo multidisciplinario.
- Experiencia en educación ambiental.

FUNCIONES:

1. Coordinar todas las actividades del Servicio de Educación Ambiental y Divulgación Técnica
2. Revisar, evaluar y ajustar las actividades de educación ambiental, de divulgación técnica y de formación de recursos para la gestión del territorio que hoy están en marcha en PROBIDES.
3. Orientar y supervisar las actividades vinculadas al sistema de educación formal: en especial:
 - Establecer encuentros con jerarcas del sistema de educación formal a nivel departamental y nacional de los tres subsistemas de ANEP. Elaborar un plan de trabajo orientado a los temas ambientales y a las áreas protegidas en el departamento de Rocha para el tratamiento de los contenidos programáticos que incluya:
 - Diseño y desarrollo de propuestas didácticas (proyectos y unidades de trabajo)
 - Elaboración de instrumentos, metodologías y materiales didácticos.
 - Propuestas de actividades de actualización docente en ciencias biológicas y ciencias sociales con énfasis en conservación ambiental y sistema de humedales.
4. Colaborar con la Dirección y con las otras áreas de PROBIDES en tareas multidisciplinarias relacionadas a los temas de educación y a la marcha general del programa.
5. Establecer contactos con instituciones, organizaciones y ámbitos oficiales y privados vinculados a los temas educativos.
6. Mantener un contacto fluido con el Director del programa.
7. Coordinar con el Administrador la gestión económica del Servicio a su cargo.

DURACIÓN: Desde el inicio a la finalización del proyecto.

DEDICACIÓN: Tres días a la semana.

PROBIDES

TÉRMINOS DE REFERENCIA

CARGO: Comunicador Social

CALIFICACIÓN: Profesional en Comunicación

FUNCIONES:

1. Programación y producción ejecutiva de las políticas de comunicación de PROBIDES. Esto implica:
 - Producción ejecutiva de las líneas editoriales del Programa.
 - Supervisión de los textos de divulgación.
 - Adaptación y redacción de textos de divulgación.
 - Secretaría de Redacción del Boletín "Baños del Este" y demás publicaciones similares.
2. Definir, supervisar y eventual realización de materiales gráficos y audiovisuales de Promoción y Mercadeo Social de PROBIDES. Coordinación ejecutiva en proyectos de coproducción.
3. Apoyo y asesoramiento comunicacional a todas las actividades y profesionales del Programa. Coordinación de Actividades de formación en Comunicación social para los técnicos del Programa.
4. Orientar y supervisar el proyecto: "Actividades de difusión a nivel comunitario y de divulgación científico técnico": en particular se deberá:
 - Continuar difundiendo las actividades de PROBIDES a través de audiciones radiales, comunicados de prensa, envío de material informativo.
 - Establecer una experiencia piloto de mediateca móvil en dos o tres centros carenciados desde el punto de vista socio-cultural, ubicados en áreas protegidas del departamento.
5. Integrar el Comité de Publicaciones de PROBIDES.
6. Colaborar en otras actividades del Área a pedido del Responsable del Servicio.

DURACIÓN: Desde el inicio a la finalización del proyecto.

DEDICACIÓN: Tiempo completo.

PROBIDES

TÉRMINOS DE REFERENCIA

CARGO: Asistente Técnico Docente para el Servicio de Educación Ambiental y Divulgación Técnica

CALIFICACIÓN: Profesor titulado o maestro con experiencia en educación ambiental

FUNCIONES:

1. Participar en la organización y programación de los cursos y seminarios de PROBIDES; en particular:
 - Cursos y talleres de apoyo al sistema educativo formal.
 - Cursos destinados a la formación de personal para la gestión de las áreas protegidas.
 - Cursos y jornadas de capacitación a los agentes de policía del departamento de Rocha, operadores turísticos, productores y en general pobladores locales de las áreas protegidas.
 - Seminarios sobre temas de interés general y sobre resultados del trabajo de PROBIDES.
2. Colaborar en propuestas y planes de trabajo orientados a la elaboración de currículas para el sistema de educación formal.
3. Organizar el funcionamiento regular de la sala de conferencias de PROBIDES, al servicio de las propuestas del programa o de temas afines a las mismas.
5. Colaborar en otras actividades de su Área a pedido del Responsable del servicio o del Director.

DURACIÓN: Desde el inicio a la finalización del proyecto.

DEDICACIÓN: tres días a la semana.

PROBIDES

TÉRMINOS DE REFERENCIA

CARGO: Asistente en Educación Ambiental y Divulgación Técnica

CALIFICACIÓN: Profesor titulado en Ciencias Biológicas o formación similar

FUNCIONES:

1. Participar en la organización y programación de los cursos y seminarios de PROBIDES: en particular:
 - Cursos, seminarios y talleres de educación ambiental.
 - Campaña educativa sobre la conservación y el uso de palmar.
 - Capacitación de personal en áreas protegidas (guardaparques y guías de naturaleza).
2. Colaborar en la redacción de material técnico y didáctico producido por PROBIDES.
3. Colaborar en propuestas de planes de trabajo orientadas a la elaboración de currículas para el sistema de educación formal.
5. Colaborar en otras actividades de su Área a pedido del Responsable del servicio o del Director.

DURACIÓN: Desde el inicio a la finalización del proyecto.

DEDICACIÓN: tres días a la semana.

ANNEX VI EQUIPMENT LIST

NECESIDADES EN MATERIA DE EQUIPO

1. Compras nacionales

1.1 Equipo de computación Software

1.1.1	Utilitarios: procesador de texto, paquetes estadísticos, base de datos, antivirus, etc.	4.500
1.1.2	Actualización anual software	4.000
1.1.3	Elaboración de programa multimedia sobre áreas protegidas	9.500
	Total	18.000

1.2 Equipo de laboratorio y muestra

1.2.1	Redes para aves	1.800
1.2.2	Trampas varias	6.000
1.2.3	Balanza electrónica	2.000
1.2.4	Balanza analítica Sartorius	3.800
1.2.5	Lavadores	1.200
1.2.6	Pipetas	1.800
1.2.7	Lámparas	1.300
1.2.8	Lupa estereoscópica	5.500
1.2.9	Mezcladores	1.600
1.2.10	Estufas de laboratorio	2.500
1.2.11	Oxímetros	3.500
1.2.12	Medidores de pH	1.500
1.2.13	Espectrómetro	5.000
1.2.14	Tanques	1.500
1.2.15	Pinzas abridoras	300
1.2.16	Marta	700
	Total	41.000

1.3 Equipo audiovisual

1.3.1	Tres cámaras de video	8.000
1.3.2	Dos TV color 21" con pantalla plana	1.500

1.3.3	Dos videos 4 cabezales	1.200
1.3.4	Un TV color 28' trinorma	1.300
1.3.5	Fotocopiadora	4.200
1.3.6	Teléfonos rurales (tres)	1.000
1.3.7	Ocho tranceptores portátiles de VHF/FM	3.200
1.3.8	Retroproyector de transparencias	500
1.3.9	Proyector de láminas opacas	1.100
1.3.10	Minisistema para audio	600
1.3.11	Fax	1.200
1.3.12	Prismáticos (ocho)	2.400
1.3.13	Cámara de video VHS	2.500
1.3.14	Audio mixer con micrófono super-unidireccional y portable stereo cassette deck	4.500
	Total	30.000

1.4 Muebles de oficina

1.4.1	Armarios metálicos (seis)	1.500
1.4.2	Escritorios (seis)	2.800
1.4.3	Muebles cerrados para biblioteca	4.000
1.4.4	Tres camas y equipo (colchón, sábanas, acolchados, etc.)	2.400
1.4.5	Sillones y sillas de escritorio (diez)	2.500
1.4.6	Sillas para sala de conferencias (40)	3.600
1.4.7	Cortinas para Estación Regional	2.500
1.4.8	Persianas para Estación Regional	3.000
1.4.9	Alfombrado Estación Regional y cabañas	5.000
1.4.10	Planeras (tres)	1.500
1.4.11	Tractor para cortar césped	3.200
1.4.12	Material de biblioteca (cuatro años)	8.000
	Total	40.000

1.5 Estaciones Áreas Protegidas

-	Alambramiento áreas protegidas (18.000 metros)	24.000
-	Caminería y arreglo accesos áreas protegidas (13.500 metros)	40.500
-	Cartelería a instalarse en áreas protegidas	8.500
-	Tractor con pastera	7.000
	Total	80.000

2. Compras internacionales

2.1 Equipo de computación

- Seis microcomputadores multimedia	27.000
- Dos notebooks multimedia	6.000
- Una impresora color laser	3.000
- Dos impresoras Hewlett Packard	1.200
- Un plotter Hewlett Packard	8.000
- Software geográfico	6.000
- Actualización software	3.800

Total	55.000

2.2 Transporte terrestre

- Vehículo doble cabina 4 x 4 diesel 2.700 cc (2)	26.000
- Vehículo sedan diesel 1.800 cc	10.000

Total	36.000

ANNEX VII: SCHEDULE OF PROJECT REVIEWS, REPORTING AND EVALUATION

Proposed Project Starting Date: **January 1998**

REPORTING ACTIVITY DESCRIPTION

- | | |
|---|----------------------|
| 1. Inception Report | March 1998 |
| 2. GEF Project Implementation Review Report (PIR) | July 1998 |
| 3. 1st Project Performance Evaluation Review (PPER) | November 1998 |
| 4. 1st Tri-Partite Review (TPR) | January 1999 |
| 5. GEF PIR | July 1999 |
| 6. 2nd Annual PPER | November 1999 |
| 7. 2nd Annual TPR | January 2000 |
| 8. Mid-Term Evaluation | May 2000 |
| 9. GEF PIR | July 2000 |
| 10. 3rd Annual PPER | November 2000 |
| 11. 3rd Annual TPR | January 2001 |
| 12. GEF PIR | July 2001 |
| 13. 4th Annual PPER | November 2001 |
| 14. 4th and Final Annual TPR | January 2002 |
| 15. Terminal Report | February 2002 |
| 16. Terminal Evaluation and Project Review | February 2002 |

