# PROJECT DEVELOPMENT FACILITY REQUEST FOR PIPELINE ENTRY AND PDF BLOCK B APPROVAL



AGENCY'S PROJECT ID: GEFSEC PROJECT ID: COUNTRY: Argentina

**PROJECT TITLE:** Argentina Sustainable

Forestry Development Project **GEF AGENCY:** World Bank

**OTHER EXECUTING AGENCY(IES):** Secretary of Agriculture, Livestock, Fisheries and Food

(SAGPYA)

**DURATION:** 5 years (2006-2010) **GEF FOCAL AREA:** Biodiversity

**GEF OPERATIONAL PROGRAM:** OP#3 (forest

ecosystems), OP#1 (arid and semi-arid

landscapes) and OP#13 (biodiversity important

to agriculture)

**GEF STRATEGIC PRIORITY:** BD-2 with

relevance to EM-1

**ESTIMATED STARTING DATE:** June 2005 **ESTIMATED WP ENTRY DATE:** May 2006

**PIPELINE ENTRY DATE:** May 2005

FINANCING PLAN (US\$)							
GEF ALLOCATION							
Project (estimated)	7,000,000						
Project Co-financing	27,000,000						
(estimated)							
PDF A*							
PDF B**	245,000						
PDF C							
Sub-Total GEF PDF	245,000						
PDF CO-FINANCING (details	provided in						
Part II, Section E – Budget)							
IBRD/IDA/IFC							
Government Contribution	95,000						
Others							
Sub-Total PDF Co-	95,000						
financing:							
Total PDF Project	340,000						
Financing:							

<sup>\*</sup> Indicate approval date of PDFA:

#### RECORD OF ENDORSEMENT ON BEHALF OF THE GOVERNMENT:

Mr. Raul Estrada Oyuela, Ambassador, Date: May 3, 2005 GEF Focal Point, Ministerio de Relaciones Exteriores, Comercio Internacional y Culto

This proposal has been prepared in accordance with GEF policies and procedures and meets the standards of the GEF Project Review Criteria for approval.

Steve Gorman Save So

GEF Executive Coordinator, World Bank

Date: 5/12/2005

Jocelyn Albert, LCR GEF Coordinator Project Contact Person

Tel. and email:jalbert@worldbank.org 202-473-3458

<sup>\*\*</sup> If supplemental, indicate amount and date of originally approved PDF:

# PART I - PROJECT CONCEPT

#### A - SUMMARY

Market forces are leading to the rapid expansion of forest plantations in Argentina, with insufficient attention being paid to the associated environmental consequences. The *Argentina Sustainable Forestry Development Project* seeks to address this concern by mainstreaming biodiversity conservation into plantation forestry practices in globally and regionally important ecosystems of Argentina. The GEF increment of this fully-blended IBRD/GEF<sup>1</sup> operation will provide global environmental benefits through:

- The integration of the goals of biodiversity conservation and sustainable use of biological resources in a growing productive sector in Argentina (and the Southern Cone region) in aspects of forest policy, legislation, planning, management, and marketing of "green" or "certified" forest products.
- Finding and promoting incentives for adoption and cost recovery by the private sector of *biodiversity-friendly* management techniques and planting, providing sustainability and replicability to these efforts for global biodiversity<sup>2</sup>.
- Development and dissemination of best management practices that improve conservation and protect biodiversity throughout the plantation sector.
- Targeted capacity building in biodiversity for a broad group of stakeholders in a productive sector outside the environment sector.

The primary geographic focus would be in the northeastern region of Argentina, east of the Parana River, including the provinces of Misiones, Corrientes, Entre Rios, and Buenos Aires. Potentially other provinces would include Salta and the Patagonia provinces of Neuquen, Chubut, and Tierra del Fuego. The ecosystems would include Humid Pampa, Mesopotamian Grasslands, Alto Parana Atlantic Forest, Humid Chaco, Patagonian Grasslands and Steppe, and potentially Magellanic Subpolar

<sup>&</sup>lt;sup>1</sup> The aim of the proposed Bank loan element of this fully-blended project is primarily capacity building for the Dirección Forestal to help them in their efforts to guide and regulate the development of the private forestry sector in ways that are environmentally and socially sustainable. The loan will finance an advanced information and extension system to promote best practices (BPs), applied research for BPs, and small-scale agro-forestry systems for small farmers. (Neither the proposed Bank loan nor the GEF will finance commercial or industrial timber plantations in Argentina)

<sup>&</sup>lt;sup>2</sup> Because forestry is fundamentally a private sector activity in Argentina, the SAGPyA, which is a regulatory body, is charged with regulating and monitoring the work of private producers and landholders (but does not undertake income-generating forestry activities itself). At present, financial returns influence practice, and market forces are driving the expansion of forest plantations in Argentina. Because of this, if environmentally friendly practices are to be adopted, GoA will need to work with private stakeholders to foster the mainstreaming of biodiversity into their business practices, so as to diminish threats in the ecosystems where they are located. In fact, this is one of the main conclusions of the GEF Roundtable on Forests (2002).

Forests. There would be significant global environmental benefits to creating a mosaic of habitats to support the restoration of Atlantic Forests, and Humid Pampas in particular. There would also be global benefits to improving management, limiting, and guiding practices in the Mesopotamian Grasslands and Patagonian ecosystems that are of regional importance or have important levels of endemic and globally endangered species.

#### **Baseline**

The baseline scenario with the investment by the Government of Argentina and the World Bank loan would address environmental concerns in plantation forestry in a non-systemic manner. Baseline efforts relative to biodiversity would be primarily programmatic, focused on mitigating immediate and direct impacts on biodiversity (such as through reduced pesticide use and respect for natural habitats as outlined in the World Bank Operational Policies). Baseline activities do not incorporate more regional or eco-regional planning processes integrated with biodiversity goals delineated in the National Biodiversity Action Plan (NBAP). Increasing biodiversity and natural habitat could actually be stimulated and future growth in plantation forestry oriented through mainstreaming of biodiversity in the productive agricultural landscapes of Argentina. In addition, native species use will be encouraged for potential integration into current forestry practices.

**Increment with the GEF.** The GEF increment seeks to attain the overall global environmental objective of "mainstreaming biodiversity into plantation forestry practices in globally important landscapes of Argentina". By integrating biodiversity considerations into forestry practices, the project will achieve several global environmental benefits by addressing systemic problems and specific issues relative to impacts of plantations on biodiversity— to be accomplished by:

- 1. Legal and regulatory measures for incorporating biodiversity planning into plantation development, and development of incentive structures for private land owners.
- 2. Spatial planning at the landscape level to identify biodiversity hotspots, corridors, and native patches/habitats that should not be impacted by plantation development. This will be coupled with the monitoring of plantation development at various scales and resolutions to assess its growth/impact relative to biodiversity concerns.
- 3. Training of public sector on mainstreaming concepts, development of conservation best practice manuals, and application at the field level (including native vegetation patches and corridors in plantations, conservation set-asides, and spatial distribution of plantations within the native vegetation matrix).
- 4. Alternative production using native species in production systems.
- 5. Possibility to establish private protected areas to ensure protection where government reserves are difficult or impossible to establish.
- 6. Environmental education for promotion of biodiversity conservation measures and techniques.

7. Strategic partnerships – outreach to forest industry to promote integration of biodiversity conservation into their operations (through means to be determined/developed by the project).

(These activities are consistent with the guidance of the Convention on Biological Diversity, in particular the guidance of the CBD COP 7 (decision VII/11) in regard to sustainable forest management under the ecosystem approach and the associated 12 principles delineated in that decision (UNEP/CBD/COP/7/21 Decision VII/11 annex II). In addition, the Convention on Biological Diversity, in its technical document "Assessment, Conservation and Sustainable Use of Forest Biodiversity (2001), highlights the potential for corridors as a "win-win" solution for biodiversity in plantation landscapes, a measure which is also contemplated in the proposed GEF increment.)

## **Background**

Argentina harbors globally important biodiversity. Of its 18 ecosystems, almost half are considered of global or regional importance for conservation. These ecosystems include species of flora and fauna that are considered threatened with extinction. At the same time, the country has a large and continually expanding productive landscape. This landscape supports agriculture, livestock ranching, and increasingly, forest plantations. At present the deforestation of native forest ecosystems is primarily caused by expansion of the agricultural frontier, in particular for soybean and cotton cultivation through mechanization.

Argentina's economy is based mainly on the production of livestock and grain products, and this over dependence on a small number of primary products has contributed to its erratic pattern of economic growth. Recognizing the dangers of a narrowly based economy, the government and the private sector have been seeking to diversify. One area which offers considerable potential is forestry. Conditions in certain parts of Argentina are very favorable to plantations, especially grassland areas outside the humid Pampa where livestock production is less profitable. In such areas plantation forestry has considerable economic potential and it can also generate significant social benefits in rural areas by creating employment.

The progression of plantation forestry was initially slow, but it has been gathering momentum. Of the total area of 1.2 million ha of plantations established, over 500 thousand ha have been created in the past 12 years. Prior to the financial crisis in 2002, over 100,000 ha were being planted annually, but this dropped to 30,000 ha per year thereafter. However, with the country's economy now recovering, annual plantings are on the rise again and, given that potential exists to plant a further 10 million ha, further increases in planting rates are expected.

Silvicultural practices and management regimes in plantations are designed mainly to maximize the production of wood fiber, while keeping costs low. In the pursuit of profits, the approaches which favor sustainable forest management, and those which recognize the multiple benefits of forestry and the importance of biodiversity are

scarce. At present, the only environmental precaution in place is an obligation to carry out an environmental impact assessment (EIA) for areas of over 100 ha to be planted. However, in practice, no mechanisms exist to ensure that biodiversity, natural ecosystems and the interdependence between agriculture, forestry and biodiversity in and around plantations are not being put at risk over the long term. To ensure that plantation development is sustainable over the long term, conservation principles need to be greatly strengthened. What is needed is a strategy which integrates and institutionalizes conservation into plantation development, and one that provides the right balance of incentives to land owners to do so.

With a likely upsurge in tree planting in the coming years, the proposed Sustainable Forestry Development Project will seek to improve sustainable plantation productivity in Argentina, to generate benefits for rural inhabitants through poverty alleviation and economic growth, and to protect globally important biodiversity. It is proposed that the project be a fully blended effort between the Government of Argentina, the World Bank and the Global Environment Facility (GEF). The Sustainable Forestry Project would aim to address issues related to efficiency gains, best practice and equity in plantation development, while the GEF would support the all important protection of global benefits. This it would do through mainstreaming of biodiversity conservation into plantation forestry sector planning, public policy, species trials, extension programs, as well as forestry activities with medium and large-scale land holders. This process would involve national, provincial, and local government agencies, universities, NGOs, and the private sector, including small holders and large plantation operations.

# **Objectives and Outputs:**

The projects Development Objective would be to reduce rural poverty and support economic growth through improved plantation productivity and management with enhanced consideration of the environmental values and services of Argentina's ecosystems.

The projects Global Objective through the GEF increment would be to mainstream biodiversity conservation into plantation forestry practices in Argentina. Plantation forestry practices have the potential to affect biodiversity of global importance of Argentina in ecosystems such as the Interior Atlantic Forest, Humid Chaco, Humid Pampas, Parana Flooded Savannas, Southern Cone Mesopotamian Savannahs, and possibly the Uruguayan Savannahs, Patagonian Grasslands and Steppe, and Magellanic Subpolar Forests. The GEF component will seek to ensure the elimination or minimization of negative impacts of forestry practices on biodiversity and ecosystems and will promote biodiversity in forestry through the following specific environmental outputs blended into the project objectives:

- (i) National, provincial and local forestry institutions are developing programs that integrate and promote biodiversity conservation in plantations,
- (ii) Development, validation, and dissemination of practices that conserve and restore biodiversity in target areas,

(iii) Small, medium, and large producers assisted in adopting best-practices for biodiversity-friendly plantation forestry.

#### **B** - COUNTRY OWNERSHIP

#### 1. COUNTRY ELIGIBILITY

Argentina signed the Convention on Biological Diversity on 12 June 1992 and was ratified by National Law 24375 on 22 November 1994.

#### 2. COUNTRY DRIVENNESS

The proposed project is a fully-blended operation with respect to the forestry project presently being prepared by SAGPyA with the World Bank. The project is consistent with national priorities in both the conservation and the forestry sectors. The proposal also builds upon successful experiences and lessons learned over the last decade in the forestry sector while complementing the various activities supported by GEF throughout Argentina.

The Government of Argentina (GoA), through the Ministry of Economy and Production has confirmed its interest in a new forestry project during the CAS discussions, which is included in the 2004 CAS (approved by the Board on 15 April 2004). The government is already funding the local preparation of this project, and has employed a full-time specialist to work on the development of the GEF concept and block B, as part of the preparation team. A GEF-funded component is included in the CAS under *The Global Financing of Environment Investments in Argentina*.

The GoA's commitment to sustainable and equitable development of plantation forestry has been demonstrated during the implementation of LN 3948 AR. Even though country conditions have been difficult, the project succeeded in improving the federal and provincial policy and legal frameworks, carrying out a national plantation inventory, generating important applied research information, creating the nucleus of a forestry extension system, improving the quality of planting seed, establishing a certified seed service, testing the viability of developing small holder agro-forestry systems, and in strengthening institutions. In addition to achieving the above, it is frequently mentioned that the project has stimulated interest in the SAGPyA in forestry related poverty alleviation initiatives and that it has laid the foundations of a solid forestry research capacity in Argentina.

The proposal is also consistent with the National Biodversity Strategy adopted in 2003 by the Secretary of Environment and Sustainable Development (Resolution 91/03). This document provides the policy framework and priority setting for biodiversity conservation in Argentina in its many possible forms under the CBD. Sections I (institutional and policy framework), II (objective 1.2 on sustainable use of biological resources) and III (biological diversity and agroecosystems) have been considered and duly incorporated in the project design.

The project seeks to integrate not only the Federal level of government and small farmers into the process of mainstreaming but also extend participation to provincial,

local and private sector companies. It is expected that these partnerships will enhance the ability to mainstream biodiversity in the forestry sector and expand the cross-section of society involved in the process, and provide models for replication in other productive sectors.

Finally, Argentina has over the years demonstrated great interest and supported the successful implementation of GEF projects such as the Argentina Biodiversity Conservation Project, the Small Grants Program and most recently having been selected for piloting a new Medium Size Project modality. Its interest in taking biodiversity into consideration in productive landscapes also has precedent in the Patagonian Coastal Zone Integrated Mangement Project recently approved.

#### C – PROGRAM AND POLICY CONFORMITY

#### 1. PROGRAM DESIGNATION AND CONFORMITY

The objectives are consistent with OP #3 (Forest Ecosystems) and OP #1 (Arid and semi-arid ecosystems). In addition, given the focus of the proposed program on mainstreaming biodiversity within areas of importance for human productive activities, it is consistent with Operational Program #13 (Conservation and sustainable use of biological diversity important to agriculture). The proposed program is within the objectives of the Strategic Priorities BD-2 (Mainstreaming biodiversity into production landscapes and sectors) and EM-1 (Integrated approach to ecosystem management). In this respect, it also seeks to incorporate recent GEF Scientific and Technical Advisory Panel (STAP) guidance with respect to mainstreaming biodiversity to maximize the impact, effectiveness, and replicability<sup>3</sup>.

The program also provides complementarities with other GEF investments in the sector and assists to fill in gaps that must be closed for a landscape and ecosystem approach to biodiversity conservation to be realized. In particular, the *Biodiversity Conservation Project* covers some of the protected areas components of ecosystems throughout Argentina. The important marine and coastal zone ecosystems are considered under the *Consolidation and Implementation of the Patagonia Coastal Zone Management Programme for Biodiversity Conservation* implemented with UNDP support.

## 2. PROJECT DESIGN

GLOBAL IMPORTANCE AND THREATS

Argentina, with its diversity of altitudes and climate zones is rich in number and types of ecosystems. Of the 18 ecorregions described for the country, eight have been classified among the highest priorities for conservation in the Neotropics<sup>4</sup>. Two of the ecorregions (the Atlantic Forest and the Valdivian Forests) have also been included among the 5 "hotspots" of South America that are the highest priorities on a global scale for conservation by Conservation International.

<sup>3</sup> Scientific and Technical Advisory Panel. (2004). Mainstreaming Biodiversity in Production Landscapes and Sectors (Interim) Report. GEF. Accessed February 2005 www.gefweb.org

<sup>&</sup>lt;sup>4</sup> Dinnerstein, E. et al. (1995). A Conservation Assessment of the Terrestrial Ecoregions of Latin America and the Caribbean. Washington, DC. WWF-World Bank.

Apart from the forest ecosystems, Argentina also harbors extensive grassland ecosystems important for the protection of resident and migratory species of global concern<sup>5</sup>. The grasslands make up almost 60% of the country, a significantly higher percentage than the average for South America of 33% <sup>6</sup>. Several of the grassland areas are considered Endemic Bird Areas which harbor globally threatened species or range-restricted species of birds. The threatened grassland birds make up 41% of endangered species of the country and Argentina is only second to Brazil in total number of threatened Neotropical grassland species <sup>7</sup>.

Argentina has one of the oldest protected areas systems in the Americas with around 5% of its territory under legal protection at a National or Provincial level. However, like most countries, the greatest percentage of its biodiversity remain outside of the protected areas system. Private landowners make up over 90% of the national territory<sup>8</sup> and a small portion of these areas are protecting biodiversity through a private reserves system that only covers some 55,000 hectares of the country<sup>9</sup>. Under this scenario, it is clear that a large portion of Argentina's globally and regionally important biodiversity is found outside of the public and private protected areas system.

Not coincidentally, the most threatened ecosystems are also associated with the greatest levels of population and agricultural development in the country. There is significant overlap of productive areas under management for livestock, agriculture and increasingly, plantation forests, with ecosystems or their remnants, that harbor important biodiversity. In the Humid Pampas for example, there are various endemic animals reportedly threatened by habitat destruction and degradation primarily from agriculture and grazing within the ecosystem (which still lacks a national protected area). While less than one half of one percent of the original native pampas remains in pristine condition, it still provides habitat to over 450 species of birds, as well as some endangered species of global importance, including the Pampas Deer (*Ozotocerus bezoarcticus celer*), two types of the Loica Pampeana (*Sturnella defilippi* and *Laterallus spilopterus*), the Hudsonian Godwit (*Limosa haemastica*), the Ruddyheaded goose (*Chloephaga rubidiceps*), and the Speckled Crake (*Coturnicops notata*)<sup>10</sup>. Given the absence of formal protection mechanisms, and the ecosystem's

<sup>&</sup>lt;sup>5</sup> Krapovickas, S. and DiGiacomo, A. (1998). Conservation of pampas and campos grasslands in Argentina. Parks Magazine. Vol. 8 No. 3. pg 47-53. IUCN.

<sup>&</sup>lt;sup>6</sup> World Resources Institute. (2003). Earth Trends. Country Profiles, Argentina. Accessed 14 February 2005 at earthtrends.wri.org.

<sup>&</sup>lt;sup>7</sup> Wege, D. and Long, A. (1995). Key Areas for Threatened Birds of the Neotropics. Cambridge, UK. Birdlife International

<sup>&</sup>lt;sup>8</sup> Moreno, D. 2000. La conservacion en tierras privadas: la alternativa del Progra ma Refugios de Vida Silvestre. In: Bertonatti, C. and Corcuera, J. (eds.) *Situacion Ambiental Argentina 2000*. Buenos Aires, Argentina. Fundacion Vida Silvestre Argentina.

<sup>&</sup>lt;sup>9</sup> www.vidasilvestre.org.ar

World Wildlife Fund. (2001). Humid Pampas (NT0803), Wild World WWF Full Report. Accessed March 2005. worldwildlife.org/wildworld/profiles/terrestrial/nt/

economic importance, measures are badly needed to mainstream conservation practices into productive activities, if biodiversity is to be protected.

The greatest expansion of human activity over natural ecosystems throughout Argentina has been agriculture and livestock grazing over the past few centuries. In recent decades however, the role of plantation forestry has been noted for its expansion in some regions and is adding new impacts to native and agricultural ecosystems. The sector has added almost half a million hectares of plantations over the past 12 years in diverse ecorregions of the country. The greatest expansion has been in the provinces of Corrientes and Misiones which represents about 85% of this expansion. There is also important growth in the Entre Rios province, Patagonia and increasingly Buenos Aires province, which has close proximity to markets and ports. These are also provinces with ecosystems and biodiversity of global importance particularly affecting the Interior Atlantic Forest, Humid Chaco, Humid Pampas, Parana Flooded Savannas, Southern Cone Mesopotamian Savannahs, and possibly some Uruguayan Savannahs <sup>11</sup>.

#### UNDERLYING CAUSES AND CONSTRAINTS

**Economic and legal incentives**: Whereas soy and other agricultural crops such as cotton support the costs of deforestation and land use change, current legal and economic conditions do not drive deforestation for plantation forest establishment. In contrast, in other areas, plantations are expanding in areas of natural grassland and wetland ecosystems, where establishment costs are low, as well as deforested areas that may be critical corridors that should be restored in forest ecosystems. One NGO estimates that 40 percent of the country's most important grasslands are threatened by plantation forestry. <sup>12</sup> The situation as perceived by several environmental NGOs, is that plantation forestry, without proper planning will lead to increasing losses of biodiversity throughout many parts of the country.

Incentives such as the certification of forestry practices are not widespread in Argentina as compared to its Southern Cone neighbors such as Brazil and Chile. Only eight certificates for a total of 131,214 hectares of plantations are listed under Forestry Stewardship Council (FSC) certification presently which means that little of the plantations (around 10% of total) are subject to standards that can improve the situation of biodiversity, lessen impacts to the environment, and minimize social impacts to communities. On a more positive note however a National Working Group with broad representation has presented for comments, the draft Standards for Management of Plantation Forests under FSC principles and criteria. Argentina is also party to the Montreal Process on criteria and indicators for SFM. This is a basis

13 www.fsc.org

<sup>11</sup> Holz; S. and placci, G. (2003) Socioeconomic Roots of Biodiversity Loss in Misiones In: Galindo-Leal, C. and De Gusmão Câmara, I (eds). *The Atlantic Forest of South America. Biodiversity Status, Threats, and Outlook*. pp 207-226. Washington, DC. Conservation International.

<sup>&</sup>lt;sup>12</sup> Bilenca, D. and Minarro, F. 2004. Identificacion de Areas Valiosas de Pastizal en las Pampas y Campos de Argentina, Uruguay y Sur de Brasil. Fundacion Vida Silvestre Argentina.

for activities under the proposed project allowing for synergistic effects towards achieving mainstreaming of biodiversity.

Environmental policy and enforcement: In Argentina, as with many developing countries, the only environmental safeguard in place is a requirement to carry out an Environmental Impact Assessment on areas to be planted which exceed 100 hectares. This, however, is largely a bureaucratic requirement which falls far short of assessing the wider and longer term impact of plantation development on the environment. Biodiversity conservation is at present not a driving force in the planning or management of forest plantations throughout Argentina. Land use planning with a broad ecosystem vision has yet to take hold in at the Federal and Provincial level.

Even though EIAs are carried out in areas of over 100 ha, they do not always pick up the wider ecological implications of large scale planting – something which can be better achieved by having a more strategic and mainstreamed approach. Such an approach could also address the problem of the high costs associated with screening smaller areas of under 100 ha.. While certification can also help to deter bad practice, its application is, as yet, running at low levels.

In contrast to this situation, plantation forests have also shown good potential as the basis for succession of natural forests in many scenarios of degraded and fragmented landscapes<sup>14</sup>. In addition, the plantations may create desireable conditions in soils, understory conditions, and other factors conducive to increasing biodiversity in impacted areas<sup>15</sup>. There are however difficulties in achieving balance and consensus among the different stakeholders (government, private sector, and civil society) to seek integration of plantation forests into the context of landscape planning, use, and restoration<sup>16</sup>.

**Suitable natural conditions for plantation forestry**: Given that the development of plantation forestry in Argentina is still in its infancy, that it has considerable economic potential, and that areas suitable for planting exceed 10 million ha, helping to conserve and improve the natural environment in and around these areas is a priority.

#### BASELINE SCENARIO

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Without additional investments to ensure global biodiversity values are incorporated, the base line scenario would mean continued loss of native ecosystems such as grasslands, wetlands, and forests from expansion of activities in areas important for conservation of biodiversity corridors, migration habitats, and reproductive grounds.

<sup>&</sup>lt;sup>14</sup> Carnus, J.M. et al. (2003). Planted Forests and Biodiversity. Presented at: UNFF Intersessional Experts Meeting on the Role of Planted Forests in Sustainable Forest Management, 24-30 March 2003, New Zealand. Accessed at <a href="https://www.maf.govt.nz">www.maf.govt.nz</a> 24 feb 2005.

<sup>&</sup>lt;sup>15</sup> Forest Stewardship Council (2004) Perspectives on Plantations. A review of issues facing plantation management. Bonn, Germany. FSC. Accessed at <a href="https://www.fsc.org">www.fsc.org</a> 22 February 2005.

<sup>&</sup>lt;sup>16</sup> Maginnis, S. and Jackson, W. (2003). The Role of Planted Forests in Forest Landscape Restoration. Presented at the UNFF Intersessional Experts Meeting on the Role of Planted Forests in Sustainable Forest Mangement. Accessed March 2005 <a href="https://www.maft.gov.nz">www.maft.gov.nz</a>.

To ensure the sustainable development of plantation forestry, environmental considerations will have to go hand-in-hand with production objectives. Expanding plantation forestry without covering the costs of providing global benefits will make it difficult to incorporate biodiversity into planning.

The Sustainable Forestry Development Project currently being prepared by SAGPyA for presentation to the World Bank aims to assist the government in its efforts to guide private sector and small-holder forestry in the direction of environmental and social sustainability. The project contains other components that demonstrate concern not only for the environmental and social impacts of plantation forestry but also seeks to extend the benefits of these long-term investments to a broader group of producers. The baseline project aims to (i) incorporate new technology in the management of plantation forests, (ii) increase efficiency in the process of primary processing of wood, (iii) increase NGO participation in project execution, (iv) improve public services and private sector access to those services supporting the forestry sector and foreign commerce of forest products.

Although baseline activities contain components that mitigate impacts to biodiversity in plantation forestry and help offset carbon emissions causing global climate change, they do not significantly advance the mainstreaming of biodiversity and the conservation of ecoregions of global importance. The sustainable management of plantations focuses mainly on information generation and dissemination, while recognizing the need to cause minimal impact on the environment. The need for increasing consideration of broader landscape goals benefiting biodiversity will need integration and ground proving into these loan components. This is the basis for the proposed incremental activities.

Private sector involvement in the baseline activities is limited primarily to its role as a factor in production and agent of foreign commerce. The potential to engage the private sector in partnership for conservation of globally important biodiversity would not be achieved solely with the baseline proposal.

#### INCREMENTAL REASONING

While the loan component would provide for the incorporation of some global benefits including analysis and promotion of potential climate change benefits and research into native forest species, the GEF component would seek to introduce and institutionalize the concept of biodiversity in the actual process of plantation forestry. The so-called mainstreaming of biodiversity would be achieved through strengthening public awareness, the development of appropriate policy and planning instruments, the promotion of targeted economic and social incentives, consensus building, and field application, including trials with native species.

The plantation forestry sector should prove to be a very appropriate setting to begin mainstreaming biodiversity and testing the interactions with human productive activities. The sector naturally has a horizon that is much more in line with the

concept of sustainability. In the case of some forms of intensive agriculture and ranching, the economics and potential short-term gains are not always conducive to properly incorporating and recuperating costs of a more benign environmental approach to investments.

The principal actors in the project will be small, medium and large landowners who own and manage plantations, with project objectives being realized through a careful balance of capacity building, incentives, and disincentives needed to reduce the threats to globally important biodiversity. The federal forestry agencies and provincial governments which promote and support the plantations will also play a prominent role in the project. Their incorporation is critical to achieving the mainstreaming and policy changes necessary. Finally, private enterprise players will also play a key role by virtue of their potential to modify large scale plantation practices and improved relations with small landholders and authorities through corporate responsibility measures

The GEF alternative will provide incremental funding, estimated at US \$7 million, as a fully blended operation to the planned Sustainable Forestry Development Project of the World Bank to attain the overall global environmental objective of "Mainstreaming Biodiversity into Plantation Forestry Practices in Globally Important Landscapes of Argentina".

The project would achieve this through the following outcomes:

- (iv) National, provincial and local public institutions, together with private forestry institutions that have developed policies, information and programs that integrate and promote biodiversity conservation,
- (v) Practices that conserve and restore biodiversity have been developed, validated, and disseminated to target areas,
- (vi) Targeted small, medium, and large producers have adopted best-practices for biodiversity-friendly plantation forestry.

In summary, it is expected that the mainstreaming of biodiversity would be achieved through the adoption by the private sector of best-practices designed and proven for this purpose with the support of public policy and economic incentives.

#### PROJECT AREA

The socioeconomic situation and the modalities of plantation forestry vary almost as much as the ecoregions of Argentina. The models in places like Misiones are smaller and medium scale plantations while the provinces of Corrientes and Entre Rios are more impacted by large-scale plantations. The GEF alternative would seek to test models at different scales and with different actors. This would allow a diversity of models to be tested and applied for later replication elsewhere and in other countries of the region.

The focus is on the provinces of Misiones, Corrientes, Entre Rios, Buenos Aires, followed by some clearly focused target activities or pilots in Patagonia.

#### TENTATIVE PROJECT COMPONENTS AND ACTIVITIES

The project would focus at the provincial and local levels with consideration of the ecoregion and needs for biodiversity at the landscape level. Efforts at the eco-regional and provincial levels would be strategic in nature and would aim to establish a framework for environmental considerations for the development of the country's forestry sector. At the local level, specific interventions would be carried out to promote and protect biodiversity conservation.

## I. Applied Research and Technology Transfer

General. The loan portion of the applied research and technology transfer component would seek to generate a body of knowledge useful to producers, based on a "demand driven" model. (Research will not be conducted under the GEF component.) The development of information on aspects such as pest management, applied genetic research on species of native and exotic trees, will be incorporated into best management practices to be extended to private sector forestry operations of all sizes. The component would promote partnerships with the private sector and provincial institutions. To get the 'best practice' message out, government certified private forestry extension services would be nurtured for large producers, with a similar system being promoted on a cost sharing basis for medium and small -scale producers. The aim would be to shift the fiscal burden for research and extension to the beneficiaries, that is, the private sector, with the state acting as regulator.

GEF co-financed activities. The component would also aim to develop and apply the basic modules that are to be extended on the ground in the plantation settings, with a target of 20,000 ha (which includes around 15,000 ha in plantations and another 5,000 in non-plantation conservation areas). It is important to develop practices which are proven to be of low/no impact to biodiversity, as well as those which may even have positive impacts. Such practices would need to be economically viable, socially acceptable and validated. This would be achieved through:

- **a. Extension and education**: This sub-component would develop extension programs linked to the present agriculture and forestry sector programs and practices, which integrate biodiversity, and work to include education on biodiversity themes. The incorporation of biodiversity as part of core curricula of both university and technical/vocational schools in the forestry sector as well as training of staff and teachers, would also permit extending and mainstreaming the issue with young professionals.
- **b. Standards and best-practices**: The development of best-practices for the sector that are proven to be of least impact to biodiversity would be developed with an emphasis on elements of the ecosystem which are most fragile or endangered. These best practices would be integrated into the present training and extension modules used in the sector.

Included in this effort would be studies to estimate the cost to land/plantation owners or agricultural firms, which own plantations, of adjusting their existing management practices to accommodate conservation needs, including group certification for small holders. In addition, the component would work with farmers, foresters and land owners to design appropriate management practices for their own holdings in order to enhance biodiversity conservation. Possible interventions would include establishment of biodiversity corridors, private protected areas, biodiversity mosaics, and the use of native species in agroforestry systems. Both direct and indirect incentives would be worked out for land/plantation owners in order to stimulate the adoption of the conservationoriented forestry practices. To further promote ecologically-sound forestry practices, species trials with native species, including nursery and establishment trials as well as investigation of species growth and species behavior in mixed stands, will be carried out. Some promising groups of species to be assessed include: Nothofagus spp., Austrocedrus chilensis (Patagonia, Magellanic Forests); Tabebuia spp., Cedrela spp., Cordia trichotoma, Balfourodendron riedelianum (Alto Parana Atlantic Forest); and *Prosopis* spp. (Humid Chaco).

The SAGPyA has already begun development of a manual of best practices that has served as input into the proposed FSC standards for Argentina. The GEF could provide a needed push for dissemination and wider adoption of best practices and the FSC standard as part of mainstreaming, together with support to its participation and compliance with the provisions of the Montreal Process. Initially the standards of best practices may be voluntarily adopted followed by certification after the practices have been "mainstreamed" themselves throughout the forestry sector.

**c. Economic incentives**: There are many incentives that can support the mainstreaming and convince landowners of the benefits to conserving biodiversity within the plantation forest landscape. Activities under this subcomponent would entail analysis and development of market-based incentives for adoption of biodiversity-friendly approach by plantation owners.

The development of these incentives would be closely tied with the analysis of legal issues and policy given that many incentives will require an adequate framework for them to be implemented transparently and monitored for their effectiveness. Further development of certification standards for use at the enterprise and group level would also be supported through this sub-component.

The potential for development of tradable rights, trust funds, and establishment of mitigation banks to compensate for expansion of the sector is another area for development. Payments for environmental services would be analyzed as a means to generate income at all levels. The evaluation of who pays (and how much) for the extra transaction costs that may come from mainstreaming initiatives are important to identify. Finding ways to share these costs adequately

are important for successful achievement of mainstreaming as opposed to mechanisms which might add a burden to the landowner.

## II. Institutional Development, Policy, and Forest Information

General. This component would address information, policy, institutional development and coordination needs that are required to catalyze and orient the plantation forestry sector toward sustainable development. Geographic Information Systems would generate useful information on the resource base, inventories, and industry information, that would be published and made widely available by means of electronic and printed media.

GEF co-financed activities. The GEF alternative components would address institutional issues of both national and local levels of government that are needed to generate improved land-use and strategic planning that incorporate biodiversity values specifically in the forest plantation sector. In addition, the potential negative or perverse incentives that exist would be addressed and the project would seek to transform or generate positive economic incentives that can support mainstreaming biodiversity.

a. Legal issues and policy development: This sub-component would look at several levels of the policy and legal framework surrounding forest plantations. It would look at issues of potential weaknesses in the law and procedures that permit planting without consideration of biodiversity. The potential reforms to the plantation's policy, EIA, and tax laws and their regulations would be considered when looking to root causes of biodiversity loss.

National and provincial policy is an important force for expanding plantations and private investment. The policy framework would be analyzed and proposals prepared under the project for modifications if necessary to push plantation in the direction of compatibility with biodiversity conservation. Strategic Environmental Assessments may also assist in the analysis of cross-sector effects of several productive activities on biodiversity.

**b.** Tools for Eco-regional and Land-Use Planning: This activity would be developed between national and local level governments through a participatory process that also involves broad sectors of civil society and private enterprise to achieve as much of a common vision respectful of biodiversity as possible.

To help provide a framework for planning plantation development at the local level, the project would undertake the preparation of detailed ecological maps through conventional mapping and GIS technology, using landscape ecology concepts. This effort would aim to identify areas vulnerable to plantation expansion and environmentally sensitive areas which, because of their ecological value, should not be subjected to planting, or that would require the incorporation

of conservation measures into plantation development needed to ensure the long-term sustainability of nearby natural habitats.

The entire spatial and attribute database would be conformed to register with the SAGPyA's national plantation inventory system to create an electronic environmental monitoring system which would be updated regularly, and placed on the internet. Links with other relevant inventories and databases would be established, including the new native forests inventory and the national parks administration's *Biodiversity Information System* and spatial information on protected areas locations and classifications.

c. **Biodiversity monitoring**: Monitoring is critical to ensuring that the impacts of the measures to be adopted are positive for biodiversity. The project would look at practical methodologies and critical species to determine if the measures are being implemented appropriately and improving the situation versus an initial baseline to be taken at the outset of the project.

The monitoring may be carried out in conjunction with government institutions such as INTA and may also involve other organizations including universities and NGOs with specific capabilities and projects. These alliances would be established specifically during the next phase of project preparation.

The system would be maintained at the local level throughout the project, and after closure, to ensure long-term monitoring, needed to assess changes on the ground.

**d. Training**: Training of public sector and other institutional players would aim to expand the understanding of mainstreaming biodiversity not only regarding its global environmental benefits but also regarding its social and economic potential. Specialized training and information on economic incentives and market-based incentives for biodiversity mainstreaming would also be developed and disseminated to key institutional personnel and decision-makers. Training on land use planning concepts and methods would be made available to professionals and technicians at the provincial and local levels in order to build the capacity needed to carry out rural planning activities.

#### **III. Small Holder Forestry**

General. This component would seek to help alleviate rural poverty and increase rural income through inclusion of small-holders in the plantation forestry sector. They would be beneficiaries of technical assistance and grants for the establishment of some 3000 to 4000 ha of new plantations and agro forestry systems for no less than 2000 small farmers. It would also aim to upgrade select harvesting operations and improve the efficiency of around 100 small plantation based sawmills. Training of beneficiaries would be carried out by extension agents, and upgraded training institutes.

Peer learning (producer-to-producer) would be encouraged at the local level. A preliminary phase would carry out site location, establish extension nodes and identify best practices for the proposed systems. Training of provincial personnel would be included to ensure sustainability after project closure. Ongoing monitoring and evaluation would help to track and demonstrate sustainability of the component's activities.

<u>GEF co-financed activities</u>. Biodiversity would be mainstreamed within the context of all the above efforts. In particular this component addresses the following alternatives with GEF funding:

a. Alternative production: Generating income from conserving biodiversity at the plantation level would require promotion of alternatives to production. This is particularly important for the small and medium size initiatives for which the sustainable use of certain portions of property may require precluding other more profitable uses in the short-term. The alternative production sub-component seeks to support the mainstreaming process by converting some of the biodiversity conservation initiatives into income generating opportunities.

Some of the activities that may be included are: yerba mate, ornamental plants, medicinal plants, honey, stevia sweetener, grazing under forest cover, palm hearts, or similar activities. These alternatives require further development and evaluations (to be generated in component II primarily) to determine their viability from a financial, environmental, and social acceptability point-of-view. An assessment of local needs will be carried out relative to alternative production possibilities, once specific target areas are selected. Farmers' perspectives and needs will be incorporated into a "demand driven" approach for alternative crops.

Potential establishment of private reserves and promotion of tourism (both local recreational and more upscale nature tourism) as a result of ecoregional planning processes and identification of critical areas would also be included among alternatives supported for those communities that are more organized and owners or companies with greater capacity for investment in these types of ventures.

**b. Monitoring low-impact planting**: The best practices developed and results for the trials conducted under other components of the project would be monitored under field conditions of each ecoregion. This would ensure that they are truly applicable within the context, rather than a generic set of guidelines established through policy analysis and literature review. This sub-component would provide the feedback to ensure local knowledge and appropriateness is incorporated into best management practices thus ensuring greater adoption by the local landowners and plantation operations involved in the program.

**c.** Environmental education and awareness: The dissemination of biodiversity values among the landowners and younger generations in the ecoregions targeted would support the long-term changes and provide the proper backdrop for the practices to be adopted.

The campaigns would be targeted and developed specifically for the ecoregions in question. Media campaigns would also be incorporated to support the conservation of ecosystems in relation to plantations and to disseminate the conservation planning visions developed in other components of the project. Potential for sustainability exists if partnerships can be developed with private sector to support the campaigns in the longer-term.

**d. Strategic partnerships**: Partnerships between large forestry corporations with producers and national/local authorities are necessary if there is truly to be mainstreaming of biodiversity in the productive sector. Both the individual landowners as well as the corporate plantations have impacts on biodiversity, thus only partial integration of one sector will lead to skewed results.

There are potential synergies to be pursued, through technology and financial resources that private sector can provide to the planning and implementation of best-practices. Demonstrations of corporate and social responsibility, that is recognized and supported (through various incentives mentioned beforehand) by the public sector, can provide quicker adoption of standards and reduce potential social conflict.

This sub-component would provide alternatives and support potential partnering. The corporations would be identified during the project preparation phase and appropriate cooperative agreements would be sought to jumpstart these alliances early in the project.

# IV. Project Implementation, Monitoring and Evaluation

Incremental costs associated with the project implementation, as well as with the monitoring and evaluation of outcomes, will be supported through this component. The SAGPyA will provide the institutional framework for implementation. The GEF increment will provide for adequate support to this structure in terms of required administrative and professional personnel and other logistic and material needs associated with the aforementioned GEF-related activities.

This component will also build upon the resources and experience of the SAGPyA in the forestry sector, with the added input of specialized programs, consultancies, and participatory processes for ongoing monitoring and evaluation needs. Institutions with specific capacity in monitoring, evaluation and systematizing information, such as INTA and the SAGPyA geoprocessing office, as well as other organizations including the academic sector and specialized

NGOs, would be incorporated into a coherent framework tied to the outcomes and to the development and global environmental objectives. The results of ongoing monitoring and evaluation will be disseminated at local, national and global levels to support the goals of sustainability and

### 3. Sustainability (including financial sustainability)

The components of the project are designed primarily with sustainability in mind since mainstreaming essentially implies the long-term adoption and routine use of measures to protect biodiversity. The focus on income generating activities, economic incentives, partnerships, and win-win situations as the primary means of mainstreaming seek to generate the greatest amount of cooperation. However, basic legal, policy, and law enforcement issues that may be root causes of biodiversity loss in the context of plantation forestry will also be analyzed and addressed.

Capacity building and awareness are an integral part of the project aimed at sustainability. The different stakeholders and communities involved will be reached through training, environmental education, and field practices that will lead to long-term adoption and mainstreaming of biodiversity.

#### 4. REPLICABILITY

One of the project outcomes would be to generate best practices for management of plantation forests with respect to conservation of globally and regionally significant biodiversity. Best practices which prove successful would be implemented and considered for replication in similar ecosystem types in Argentina, the Southern Cone (which includes Chile, Paraguay, Uruguay and Southern Brazil) and other parts of the world. Training packages developed for both the public sector and other stakeholders would be made available for wider use and distribution after the project finalizes.

Appropriate linkages would be made with Universities and other research institutions such as INTA to generate reports and results in a form that is practical and disseminable. There would also be potential to involve other international organizations such as FAO and CGIAR, who have already expressed their interest. These and other organizations with activities in the region would be instrumental in replicating successful practices and utilizing lessons-learned.

The SAGPyA has a well structured internet site that serves useful and timely information to the general public that also will be used to disseminate the project and its outcomes. The partnerships that are established with the private sector companies that have international operations may also become a portal for dissemination of best practices based on successes that come out of the proposed program.

#### 5. STAKEHOLDER INVOLVEMENT/INTENDED BENEFICIARIES

The intended beneficiaries of both the loan and the GEF project would be plantation owners with a strong emphasis toward small and medium size landowners. The primary objective would be to generate sustainable development within these diverse

ecosystems through promotion of plantation forestry and mainstreaming of biodiversity in that context. It would be necessary therefore to understand clearly the values of the communities that will be involved and incorporate their views in regard to these processes. The general population of Argentina would also benefit from the positive environmental externalities and benefits generated by conservation and lower impact production.

National level stakeholders would include public institutions involved in the development of policy and implementation of programs in the forestry sector and biodiversity including SAGPyA, INTA, and SayDS. Certain national NGOs would also have interest in the sector and its development. Local stakeholders of this process would be the landowners, provincial governments and their extension agencies, landowner or producer associations, universities, forestry companies and plantation managers among others.

The project preparation phase would incorporate several instances for participation and cooperation. The levels of interaction and involvement would include; consultations both formal and informal with stakeholders, participatory appraisals and planning workshops in all the regions to be involved in the project.

#### **D** - FINANCING

#### 1) FINANCING PLAN

Preliminary estimates indicate that **total project costs** would be around US\$ 34 million, with US\$ 7 million from a GEF Grant Contribution and government counterpart funding of US\$ 27 million. Tentatively, about 25 percent of project resources would go to Institutional Development, Policy, and Forest Information, 45 percent to Small Holder Forestry, 20 percent to Research (research conducted under the loan component only) and Technology Transfer, and 10 percent to the Project Implementation, Monitoring and Evaluation.

Other inputs and potential counterpart from the stakeholders and beneficiaries would be ascertained during project preparation.

#### 2) Co-Financing

Co-financing would be provided by a World Bank Sustainable Forestry Development Project loan presently being developed with SAGPyA in the order of \$27 Million made up of a World Bank loan contribution of \$17 Million and co-financing from the Government of Argentina of \$10 Million. Annex I includes a table providing estimated costs for the baseline and incremental components by source of funding.

#### E - INSTITUTIONAL COORDINATION AND SUPPORT

# 1) CORE COMMITMENTS AND LINKAGES

Linkage to World Bank Country Assistance Strategy (CAS)

The Ministry of Production has confirmed its interest in a new forestry project during the CAS discussions, which is included in the 2004 CAS (approved by the Board on 15 April 2004). The government is already funding the local preparation of the proposed forestry project, and has employed a full-time specialist to work on the

development of a GEF concept and block B, as part of the local preparation team. A GEF-funded component for the loan is included in the CAS under *The Global Financing of Environment Investments in Argentina*. (During the evolution of the concept, the most appropriate GEF OP category for the proposed effort has been identified as Biodiversity, rather than Sustainable Land Management, as stated in the CAS. The Strategic Priority under Biodiversity is *Mainstreaming Biodiversity into Production Landscapes and Sectors*.

GEF/WB and other WB activities with potential influence on the proposed project: The project has been designed to take advantage of lessons learned from the execution of the Forestry Development Project (loan 3948-AR). There are several areas that were been focused during this project including environmental education, agro-forestry, forest inventories, policy, and other relevant aspects that will provide useful input into the next phase of project development.

There is also consistency with the World Bank Global Overlays Program that seeks to support best practices at the country level. This fully blended project would incorporate biodiversity "overlays" into national forestry sector programs and investments supported by the Bank.

With respect to the GEF activities supported in Argentina, the proposed project would be complementary to initiatives already implemented or planned for the biodiversity sector. As mentioned in the section on Country Drivenness, the project would be consistent with several of the priorities from the National Biodiversity Strategy and Action Plan. The Patagonia Land Degradation Project funded by GEF through the UNDP, also has some relevant components in regard to alternative land uses and economic incentives that may provide interesting potential for replication within the context of forestry plantations.

Of relevance to the proposed project, is the GEF funded Biodiversity Conservation Project (BCP). The information generated by the biodiversity information component of the conservation project may be used to support the mainstreaming and planning activities for the forestry sector. Some of the policy work regarding sustainable forestry under the BCP could also generate some background that could be considered during project preparation and beyond.

The Guarani Aquifer regional project funded by GEF (OAS as EA) also contains policy components and activities that may be complementary to activities of the BCP. The soil conservation, reduced pesticide use, and alternative development components of the project should enhance protection of the aquifer in the regions of geographic overlap.

2) CONSULTATION, COORDINATION AND COLLABORATION BETWEEN AND AMONG IMPLEMENTING AGENCIES, EXECUTING AGENCIES, AND THE GEF SECRETARIAT, IF APPROPRIATE.

A series of consultations would be carried out during the project preparation phase to ensure that the many implementing agencies working within Argentina which are

stakeholders in the theme are communicating effectively with the preparation team and their perspectives are incorporated into the project design.

#### 3) IMPLEMENTATION/EXECUTION ARRANGEMENTS

The proposed project is to be a fully blended operation with respect to the Sustainable Forestry Development Project presently under preparation by the SAGPyA with support from the Bank. The lead institution for the operation and the potential GEF co-financing would be the SAGPyA that has a Project Implementation Unit within the Under-Secretary of Agriculture, Livestock, and Forestry. The Forestry Directorate of SAGPyA would be closely involved in the development and execution of the project given the objectives of long-term mainstreaming and policy work. The INTA is an important research institution with involvement in the forestry sector and would probably be involved in execution of the project.

Provincial governments, potentially through their environmental bureaus, would be engaged for the project design and execution. Non-governmental organizations of national and regional/local scope may take part in components such as environmental education, outreach, biodiversity monitoring and other aspects that may be in their specific expertise and interest. Local communities that may be potential partners or affected by the process would be identified and integrated during project preparation and programs will be developed within their cultural, environmental, and social context.

# PART II - PROJECT DEVELOPMENT PREPARATION

#### A - DESCRIPTION OF PROPOSED PDF ACTIVITIES

The PDF-B phase of preparation will entail design of the activities needed to generate the outputs set forth in the preceding sections while ensuring full blending with the loan. This requires that the work of the teams working on the loan and the GEF be coordinated.

This project design more specifically will require the following aspects:

- 1. Analysis of institutions, policy, and legal framework for achieving mainstreaming of biodiversity into the plantation forestry sector.
- 2. Defining the economic and social opportunities and barriers to mainstreaming biodiversity in the sector. This process will entail not only analysis but also will incorporate participatory processes that bring all the interested sectors to bear on the issues.
- 3. Definition of critical areas for biodiversity conservation within the ecosystems and development of guidelines and roadmaps for indicators of biodiversity and sustainability in the context of plantation forestry. This will be closely linked to the process of monitoring and evaluation to be designed.
- 4. Development of specific target sites for implementation of activities. This process must be developed in close coordination with the preparation of the loan to seek maximum efficiency, impact, and effectiveness on the ground.
- 5. Design of the capacity building, training, outreach, and environmental education components that will support the dissemination at targeted stakeholders in the process of mainstreaming.
- 6. Coordination and project preparation

A more detailed description of activities to be carried out in the next phase of project design is as follows:

- 1. Institutional, policy and legal analysis for mainstreaming biodiversity
  - 1.1. Trends analysis: This component would provide a broad picture of past history, present threats, and potential threats to biodiversity in the context of plantation forests. Much of the literature is anecdotal in regard to the impacts of plantation forests and effects of exotic species on native biodiversity. The threats analysis would develop a review of the present state-of-the-art in this regard and seek examples from Argentina specific experiences as well from the public, university and private sectors where available. This analysis would be closely tied to the ecosystem evaluation and analysis so as to properly assess the threats by ecoregion. Trends in the expansion of different activities in the productive sector would also be analyzed

- 1.2. Policy and legal analysis: This analysis would provide an in-depth evaluation of the basic policies of the plantation forestry sector with regard to planning, biodiversity conservation, environmental impacts, and decentralization of environmental management. Reviews of the positive and potential negative effects of plantation policies on expansion of the sector would be compared with the situation of ecosystems in each province of interest to the project. The legal system at both the national and provincial level would be analyzed to understand the underpinnings to planning and expansion of the plantations. Effectiveness of the law and its application would also be analyzed to generate a clear picture of root causes of biodiversity loss (if pertinent) or of the needs in regard to policy and legislation surrounding potential expansion on native ecosystems.
- 1.3. Institutional analysis: This report would provide the context for what investments must be made in terms of the institutions to achieve mainstreaming. The levels of support for biodiversity conservation, budgets, level of understanding and inclusion of public policy on biodiversity in the management of the forestry sector and productive landscape in general, would be analyzed to understand the main issues. Other aspects to be reviewed would include the levels of coordination and existing or potential links between national institutions, provincial governments, producers and other private sector stakeholders.
- 2. Economic and social opportunities and barriers: This component of project preparation would look at both the economic incentives and disincentives, existing at present and potential. It would also look at the stakeholders in depth and bring them into a participatory process to produce a series of options that can be tested and disseminated at the ground level. This would validate and extend the options presented in the project description to attain the outputs and incremental effects.
  - 2.1. Economic analysis: The underlying processes at work to both promote plantation forestry are numerous and complex but have an economic component that must be analyzed to develop adequate strategies that address: (i) root causes of elimination of biodiversity in forest plantation expansion and (ii) potential for creation of positive economic incentives that make mainstreaming more interesting from a monetary standpoint.
  - 2.2. Social opportunities and barriers assessment: This component of the proposal preparation process would identify the stakeholders at several levels and from different sectors and localities. The summarized results of analysis would be presented to these stakeholders in different settings such as workshops and focus groups to generate a list of opportunities and barriers that would orient the design of activities that would be not only technically correct but socially validated and acceptable in the many different possible locations that the project would be working in order to produce the desired outcomes.

### 3. Biodiversity information base

3.1. Ecoregions and biodiversity overlays: Although the state of knowledge of biodiversity is deficient, as with most countries of the region and the globe, there is much information that has been generated by the universities, museums,

- government institutions in Argentina and internationally. This information would be used to prepare overlays with the leadership of the SAGPyA's geoprocessing department in coordination with several other partners that will be identified during the preparation process. There would be a thorough literature review as well as coordination with important centers nationally that are generating and cataloguing biodiversity information. This would help guide the implementation of the project by providing the information base for planning as well as assist in the establishment of baselines and monitoring methods on effects for biodiversity. This process would also help identify gaps in the knowledge base that are necessary or useful to mainstreaming.
- 3.2. Baseline and changes monitoring: This component would establish, through specific consultancies and inputs from specialists nationally and internationally, the program for monitoring of biodiversity and ecoregion changes that would demonstrate the impacts of the incremental activities. It would also determine what is required to establish baselines within the context of what is reasonable from a biological and financial standpoint within the timeframe allocated for the project. It may be possible to establish a network of experts and institutions that can serve as a scientific committee for oversight and ongoing evaluation of the monitoring projects. The determination of how the information would be systematized and disseminated would also be determined in this stage of project preparation.
- 4. Target site determination: There would be a series of appraisals, both participatory and expert-based that would be prepared to locate the activities and timed adequately to achieve the quickest ground-level impacts and implementation in those areas that are better prepared, more interested, or have greatest potential benefits from the standpoint of biodiversity and social impact. The review of potential sites would initiate after the previous analyses and background information is gathered. This process would also be coordinated closely with loan design team.
- 5. Training, Capacity Building, Environmental Education, and Outreach
  - 5.1. Training and capacity building: This component would be closely linked to the institutional analysis and the stakeholder analysis as well as the regional workshops that would generate important orientation as to the types of training and capacities needed at national and local levels. Several sectors must be looked at to cover the many different actors involved in mainstreaming biodiversity in the plantation productive landscape. The needs of public sector (national and local) planners, extension agents, and supervisors as well as technicians, university students, plantation managers, small holders, and other communities would be established through participatory processes.
  - 5.2. Environmental Education and Outreach: Specific consultancies would develop programs to ensure not only the dissemination of information useful for the mainstreaming of biodiversity into the practices of plantation forestry but also to generate positive social attitudes and interest in conserving biodiversity in the context of plantations and other productive activities. The outreach component would also look at potential partnerships for dissemination of best practices in

coordination with private sector plantation companies that may be linked to the small holder plantations.

6. Project Coordination, Design and Preparation Unit: The Unit would coordinate closely with the loan design team to fully blend the project and follow similar timetables for development and finalization. It would coordinate the preparation of the technical documents, assessments, and participatory processes described previously that would serve to prepare the full project document. The Unit would be responsible as part of this process for the preparation of: (i) the log-frame matrix, (ii) design of implementation arrangements and definition of other co-financing, (iii) for the establishment of baselines and incremental costs as necessary for this type of project, and (iv) for developing the Monitoring and Evaluation Program to accompany project execution. The project document, supporting information, commitments, and other pertinent annexes would be assembled in the required format to be submitted for GEF consideration as well as the necessary Project Brief for submission to Council.

#### **B-PDF BLOCK B OUTPUTS**

The primary output of the PDF Block B phase would be the Project Brief with the necessary annexes for analysis and submission to the GEF.

Another output would be the full project document that includes the supporting analysis, logframe matrix with indicators, incremental cost analysis, monitoring and evaluation, implementation arrangements and cofunding detail, in addition to the necessary terms of reference and other supporting information for structuring and implementing the project.

Other secondary outputs include the preparation of thematic technical and sectoral analyses described previously. Mapping and biodiversity information at different levels and scales would be generated.

A network of contacts, specialists, social and entrepreneurial reference points can also be considered another significant output that includes potential beneficiaries, partners and experts at national and local levels that would facilitate insertion and implementation following approval.

#### **C-JUSTIFICATION**

The Government of Argentina has demonstrated its interest in introducing sustainability into the productive sector with this fully-blended project. In addition, it has put forth substantial resources for project preparation. Given the broad geographic focus, many stakeholders, and in-depth analysis needed to adequately design the components to attain the outputs stated, the PDF-B resources are required to support further development and cover incremental costs of this alternative design.

The information on the plantation forestry sector, its stakeholders, and globally important biodiversity affected by plantations, will help develop the vision and policy activities to integrate and mainstream biodiversity into this productive sector.

# **D** - TIMETABLE

The project PDF-B phase should begin in June 2005 with project preparation finalizing in September 2006. The fully-blended character of this project and having the necessary institutional arrangements with SAGPyA in place including a Project Preparation Unit facilitates the quick advance with the design once the approval of the PDF Block B support is obtained.

Submission to GEF Council is aimed for October 2006 with World Bank Board approval for the loan estimated December 2006. Project implementation should begin in the first semester of 2007.

Component		2005			2006										
	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Institutional, policy and legal analysis for mainstreaming biodiversity															
Trends analysis															
Policy and legal analysis															
Institutional analysis															
Economic and social opportunities and barriers															
Economic analysis															
Social opportunities and barriers assessment															
Biodiversity information base															
Ecoregions and biodiversity overlays															
Monitoring baseline and changes															
Target site determination															
Training, Capacity Building, Environmental Education, and Outreach															
Training and capacity building															
Environmental Education and Outreach:															
Project Coordination, Design and Preparation Unit															
Establishment of unit and contracting key personnel															
Development of detailed workplan															
M&E Program															
Incremental costs															
Project document preparation															
Final review and submission									_						

# E-BUDGET

Component	Cost			
	GEF	GoA	Total	
Institutional, policy and legal analysis for mainstreaming biodiversity				
Trends analysis	3,000	1,500	4,500	
Policy and legal analysis	8,000	2,500	10,500	
Institutional analysis	4,000	1,500	5,500	
Economic and social opportunities and barriers				
Economic analysis	8,000	3,000	11,000	
Social opportunities and barriers assessment	12,000	5,000	17,000	
Biodiversity information base				
Ecoregions and biodiversity overlays	15,000	4,500	19,500	
Monitoring baseline and changes	15,000	5,000	20,000	
Target site determination	14,000	8,000	22,000	
Training, Capacity Building, Environmental Education, and Outreach				
Training and capacity building	4,000	2,500	6,500	
Environmental Education and Outreach:	8,000	2,500	10,500	
Project Coordination, Design and Preparation Unit				
Preparation Team Leader	12,000	5,000	17,000	
Preparation Team Sector Coordinators	20,000	7,000	27,000	
Incremental Costs Consultancy	9,000	3,000	12,000	
Specialized intl. consultancies and quality control	75,000		75,000	
Workshops, travel and meetings	38,000	6,000	44,000	
GIS support		20,000	20,000	
Administrative and logistics		18,000	18,000	
Total Estimated Cost	245,000	95,000	340,000	

	Co-financing Sources									
Name of Co-	Classification	Type	Amount							
financier (source)			(US\$)	Status						
SAGPyA	Implementation	Mostly in-kind	95,000	Agreed in						
	Agency			principle						
Sub-Total Co-finance	eing		95,000							

# PART III – RESPONSE TO REVIEWS

#### A - CONVENTION SECRETARIAT

- 1) The Secretariat has reviewed the project (Sustainable Forest Management Argentina), and found no reference to any guidance from the Conference of the Parties. The project stakeholders are urged to take relevant guidance into consideration in further elaboration of the project.
  - Team Response: This oversight has now been addressed in Section A of the document, noting that project activities are consistent with the guidance of the Convention on Biological Diversity, in particular the guidance of the CBD COP 7 (decision VII/11) in regard to sustainable forest management under the ecosystem approach has been reviewed (UNEP/CBD/COP/7/21 Decision VII/11 Annex II, p. 203). The proposal is consistent with the 12 principles of the ecosystem approach delineated in that decision. In addition, the Convention on Biological Diversity, in its technical document "Assessment, Conservation and Sustainable Use of Forest Biodiversity (2001), highlights the potential for corridors as a "win-win" solution for biodiversity in plantation landscapes.

#### **B - OTHER IAS AND RELEVANT EXAS**

No comments have been received from other implementing agencies or executing agencies at this time.

#### C-GEF SECRETARIAT

# Summary Team Response to GEF Secretariat Comments (please see detailed responses beginning on page 34)

Market forces are leading to a rapid expansion of forest plantations in Argentina, with insufficient attention being paid to the associated environment consequences. The proposal presented to GEFSEC for review, *Argentina Sustainable Forestry Development*, seeks to address this concern by mainstreaming biodiversity conservation into plantation forestry practices. The fully-blended operation will seek to reduce poverty and increase income to small and medium-size farmers in productive landscapes while reducing threats and providing incentives to conserve and encourage biodiversity in globally and regionally important ecosystems where plantation expansion is occurring.

#### Eligibility

The project team considers this project proposal to be consistent with GEF guidelines and priorities, both in its focus and in the target ecosystems, and ask that the decision on pipeline entry and PDF funding be reconsidered. One of the primary objectives of the proposed project is to mainstream biodiversity conservation into plantation forestry practices in Argentina while enhancing the ecosystem services provided by these areas.

This goes hand in hand with the objective of reducing rural poverty and is consistent with Operational Policy 3 (forest ecosystems), Operational Policy 1 (arid and semi-arid landscapes) and Operational Policy 13 (biodiversity important to agriculture). Eligible activities relevant to this project include:

- integrating agricultural biodiversity conservation and sustainable use objectives in land use and natural resources use management plans;
- identifying and conserving components of biological diversity important for sustainable use of agroecosystems, with regard to the indicative list of Annex I of the CBD;
- incorporating components of targeted research (including diversification of crops and breeds) important for the conservation and sustainable use of agricultural biodiversity in programmatic intervention when instrumental for the achievement of GEF biodiversity program objectives in specific ecosystems and countries consistent with national priorities; natural resources management activities which emphasize integrated resource use with conservation and development, such as use of water resources and its distribution to ease grazing pressure and prevent vegetation deterioration;
- development of national data and information services that can improve the supply and exchange of agricultural biodiversity.

As the CBD itself notes in Annex II to Decision VII/11, (UNEP/CBD/COP/7/21 Decision VII/11 Annex II, p. 203) sustainable forest management can, as in the case of this project, be entirely consistent with the ecosystem approach to biodiversity conservation. This does not exclude non-native forestry, as the text itself refers to landscape restoration and demonstration and model forests.

# Relevance to Biodiversity Strategic Priority 2 - Mainstreaming Biodiversity in Production Landscapes and Sectors.

The principal objective of this SP is to "integrate biodiversity conservation in agriculture, *forestry*, fisheries, tourism and other production systems and sectors to secure national and global environmental benefits" (italics added). The text further notes that "given the broad character of mainstreaming, the operational emphasis will be flexible to allow for the development of tailored activities based on an understanding of country context, biodiversity conservation problems, opportunities and demand." As a primary objective of the *Sustainable Forestry Development Project* is to mainstream biodiversity conservation into productive small- and medium-scale forestry operations, the relevance to this SP is unquestionable.

Because forestry is fundamentally a private sector activity in Argentina, the SAGPyA, which is a regulatory body, is charged with regulating and monitoring the work of private producers and landholders (but does not undertake income-generating forestry activities itself). At present, financial returns influence practice, and market forces are driving the expansion of forest plantations in Argentina. Because of this, if environmentally friendly practices are to be adopted, GoA will need to work with private stakeholders to foster the mainstreaming of biodiversity into their business practices, so as to diminish threats in the ecosystems where they are located. In fact, this is one of the main conclusions of the GEF Roundtable on Forests (2002).

The current business-as-usual (baseline scenario) does not adequately take into account the environment, and therefore cannot be regarded as better than mainstreaming conservation into plantation activities. The Convention on Biological Diversity, in its technical document "Assessment, Conservation and Sustainable Use of Forest Biodiversity (2001), highlights the potential for corridors as a "win-win" solution for biodiversity in plantation landscapes. This is also the case for the current Argentina proposal. Mainstreaming is not a "green washing" of plantation forestry or an implied license for destruction. The proposal has highlighted current relevant research and references regarding mainstreaming in the context of plantation forestry. In addition to STAP documents on mainstreaming, several other GEF documents including the Biodiversity Program Study (2001) by the GEF Monitoring and Evaluation Unit, also support the proposal regarding partnerships with corporations and private sector as important to achieving mainstreaming. To ignore these important users of the ecosystem would be to turn a blind eye to root causes and threats within the plantation forestry sector.

# Native forests and ecosystem biodiversity

Concerning comments referring to the proposed project's failure to address the sustainable use of native ecosystems, the focus of this fully-blended operation is clearly on plantation forestry, which occurs mainly in grassland ecosystems. Hence, the issue of native forests, their use, and management does not arise. Potentially the name of the proposal "Sustainable Forest Management" (which has since been modified) may have confused the reviewer; however the intent is clearly stated within the proposal. Native forest management in Argentina falls under the aegis of the Ministry of Health and Environment, not under the SAGPyA leading the present initiative. In addition, activities regarding native forest management and protection in Argentina are already being addressed in a separate Bank Loan blended with a GEF. In conclusion, the activities of the proposed GEF will seek to ameliorate or eliminate threats to native ecosystems including forests or areas that might constitute corridors but are not presently forested (through restoration) or under protection.

# Rangelands and Agricultural Threats.

We also consider the issue of mainstreaming biodiversity into rangeland management and agriculture practices important, especially given that these land uses comprise important threats to ecosystems in Argentina. However, broad integrated approaches, in a country as large as Argentina, which has a large and diverse agricultural (and livestock) sector will likely be complex and difficult to implement. Consequently, the GoA has proposed a sectoral approach in the present case.

We believe the sectoral focus makes good sense, as the barriers in the ranching and agriculture sectors are greater and more numerous than those in the forestry sector. One of the reasons is that the shorter rotations associated with these sectors add even more hurdles to implementation. On the other hand, as a point of entry into mainstreaming, the forestry sector can help to validate approaches that are better addressed in a more limited sector, but with some of the same challenges. It will also generate important information that can be used readily by other sectors, such as the detailed ecological mapping and

planning tools. By providing clear measurable results and experience in a long-term activity, the proposed project will generate guidance useful for replication in other productive sectors and can provide depth to future GEF investments.

Finally, the ecosystem approach has been incorporated into this forest sector proposal. The guidance of the CBD COP 7 (decision VII/11) in regard to sustainable forest management and ecosystem approach has been reviewed (annex II) and the proposal is consistent with the 12 principles of the ecosystem approach delineated in that decision.

# **Detailed Team Response to GEF Secretariat Comments**

# **GEF SEC COMMENT**

# **CLIENT / BANK RESPONSE**

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Country Drivenness	
It is strongly recommended to refer also to the legal frameworks for forest resources promoted through the SAGPyA and the Secretaria de	Agreed. More detail will be provided for Work Program Entry. (Although there may be some confusion here with the framework for native forest management.)
Ambiente Desarrollo Sustentable.	
Argentina has also developed a NAP for combating desertification. It recommended to refer to this document as well since it touches also on issues related to forests and deforestation	Agreed. This can be incorporated at Work Program Entry.
Endorsement	
The letter of endorsement signed by the GEF OFP for the PDF-B is missing. Please add.	The letter of endorsement has been received and submitted.
<b>Program Designation and Conformity</b>	
The project is not consistent with the objectives of OP13 since the focus is on forest systems and not on agricultural systems and their role for biodiversity conservation.	The project team feels that the project is entirely consistent with OP 13. Paragraph 19 (i) of OP 13 (GEF Eligible Activities) includes the following: integrating agrobiodiversity conservation and sustainable use objectives in land use and natural resources use management plans (this is exactly what the project intends to do) and 20 (iv) states: natural; resources management activities which emphasize integrated resource use with conservation and development, such as water etc. Internationally, the term "natural resources" is also construed to include forests, both planted and natural.
The fit with SP2 of the BD FA is not clear. The document also refers to the OP12 SP 1 on integrated approach to ecosystem management.	The team believes the proposed project to be compliant with SP2, which states, "Objectives. The specific objective will be to integrate biodiversity conservation in agriculture, forestry, fisheries, tourism and other production systems and sectors to secure national and global environmental benefits. Given the broad character of mainstreaming, the operational emphasis

	will be flexible to allow for the development of tailored activities based on understanding of country context, biodiversity conservation problems, opportunities and demand." (GEF Business Plan 05-07). Reference to OP12 has been removed from amended version.  STAP also indicates that the objective is the "internalization of goals of biodiversity conservation and sustainable use into economic sectors and development models."
The fit with FA goals and OP objectives should be rediscussed and clarified.	Please see comments above regarding OP 13 and Biodiversity SP 2. As OP 13 notes: "The operational programs will support biodiversity conservation and sustainable use in the management of both natural and modified areas. This includes all human uses of ecosystems ranging from full protection through various forms of multiple use, with conservation easement, to full scale use - such as agriculture, forestry, aquaculture, livestock production, and urban development. Activities that involve biodiversity management within the productive sectors of the economy promote long term sustainability because they will help address the underlying causes of biodiversity loss and contribute to enhancing ecosystem structure and function." (GEF Operational Program #13 On Conservation And Sustainable Use Of Biological Diversity Important To Agriculture, page 3-4). Reference to OP#12 has been removed.
The design of the proposal suggest that the project idea is not consistent with the GEF operational strategy (see comments below).  Project Design	See above
The problem situation states that biodiversity inside and outside protected areas especially in forest and grassland ecosystems is under threat mainly due to agricultural and rangeland activities. These threats, however, are not addressed by the	Due to resource and time constraints, all threats to biodiversity in Argentina will not be addressed with this project. Rather, the main focus will be on those resulting from the expansion of plantations. However, the project does aim to provide tools that will benefit other sectors, as mentioned. Land-

project.	use planning and work with local governments will provide capacity building and other benefits that will assist in diminishing other threats. Dealing with all threats at once is not considered advisable as it will spread resources too thinly and not provide adequate in-depth coverage needed to address them adequately.
	Please see below for further details on the threat poorly-managed plantation forests represent to native biodiversity. These threats are outlined under the baseline scenario, the cause being that biodiversity conservation is not being mainstreamed.
The link to plantation forests and its impact on the ecosystems lacks logic with regards the problem statement above.	In the problem statement, plantation forestry is highlighted in the proposal, in addition to rangeland activities and agriculture, as a threat to biodiversity under current business-as-usual conditions.
	As is noted in the proposal "At present, the only environmental precaution in place is an obligation to carry out an environmental impact assessment (EIA) for areas of over 100 ha to be planted. However, in practice, no mechanisms exist to ensure that biodiversity, natural ecosystems and the interdependence between agriculture, forestry and biodiversity in and around plantations are not being put at risk over the long term."
	However, the potential for plantation forestry to contribute to biodiversity conservation is clear in the statement "There is significant overlap of productive areas under management for livestock, agriculture and increasingly, plantation forests, with ecosystems or their remnants, that harbor important biodiversity."
It is recommended to focus the problem statement and really identify what are the targeted ecosystems, the threat to their integrity and identify the effects of current unsustainable forest management practices on the ecosystem structure, functions and	The targeted ecosystems have been broadly outlined based on the <i>a priori</i> identification of important areas for both plantations and biodiversity. If more detailed information is needed, it can be provided at Work Program Entry.

Barriers to sustainable forestry
management and mainstreaming biodiversity conservation include: lack of planning at national and regional levels, lack of incentives, lack of capacities both in government and private sector, low levels of awareness, little monitoring of the effects, and lack of techniques for improved plantation establishment and
management.
These will be addressed more thoroughly during project preparation. Native forests and their management are presently the target of complimentary World Bank – GEF operation in Argentina. Plantations are cultivated landscapes similar in methods, focus, and intensity to agriculture (woody plants rather than herbaceous plants generally associated with agriculture). Disturbance of habitats associated with inadequately planned and controlled plantation forestry is an area where mainstreaming is urgently required. The sustainable management of native forests and extractive activities based on native ecosystems is very different, and is not the focus of this project.
Neither the proposed Bank loan nor the GEF will finance commercial or industrial timber plantations. The aim of the Bank loan is primarily capacity building for the Direccion Forestal to help them in their efforts to guide and regulate the development of the private forestry sector is ways that are environmentally and socially sustainable. In addition, it will finance an advanced information system, applied research for BPs, an extension system and limited scale agro-forestry systems for small farmers.  Because forestry is fundamentally a private sector activity in Argentina, the SAGPyA works with private producers and landholders (but does not undertake

If plantations threaten grassland ecosystems as habitat for biodiversity it is not logical that GEF would support the conversion of plantation into biodiversity-friendly interventions since it could become a perverse incentive for the destruction of other ecosystems. GEF funds are used to eliminate threats to the global environmental commons not to make them biodiversity-friendly.	It is essential that the GoA work with these private stakeholders in order to ensure the mainstreaming of biodiversity into their practices, so as to diminish threats in the ecosystems where they are located. STAP and several other GEF documents indicate that partnerships with corporations and private sector are important to achieving mainstreaming. To ignore these important users of the ecosystem would be to turn a blind eye to root causes and threats within the plantation forestry sector.  It is fundamentally clear that the GEF should, through mainstreaming, support the transformation of "business-as-usual" plantation practices into "biodiversity friendly plantation practices". These plantations, by increasing productivity, could actually reduce the amount of land being used for production forestry while ensuring biodiversity and ecosystem benefits within existing forestry areas. This is the win-win situation that is described in the GEF mainstreaming policy documents.
	Perverse incentives catalyze and actually promote destruction. Biodiversity-friendly interventions do not promote destruction of ecosystems by definition, as stated in the GEF review.
Again, the focus of this project is not clear. Will the project focus on mainstreaming BD concerns in the entire forest sector or will it focus on a forest plantation policy only. The latter one would not be supported by the GEF since GEF focuses on systemic changes by removing main barriers e.g. to the sustainable management of forests.	The focus of the project is to address the systemic problems and the specific issues surrounding forest plantation development.  Native forest activities – their management and protection are already being addressed in a separate, complimentary World Bank – GEF blended project. The systemic problems may overlap with native forest management. However, the focus is the productive landscape of Argentina, hence the relevance to biodiversity in agricultural systems.
The expected GEB is linked to BD in plantations. The overall detrimental effect of the ecosystems outside the plantations is not justified by the expected GEB inside	The project <i>will not</i> promote plantation expansion – this is something that is occurring on its own. It is therefore difficult to see how mainstreaming

the plantation.

Activities focusing on the plantations may in fact lead to the destruction of natural habitats in grasslands or agroecosystems by promoting plantations that have been identified as a threat to biodiversity in these ecosystems.

The proposal should discuss alternatives to the extension of forest plantations at the cost of other natural ecosystems. The proposal suggests that plantation forestry is a given, however, the project will try to make it as least damaging as possible. This approach should trigger WB safeguards and mitigation activities that would be designed as part of the baseline.

biodiversity into ongoing plantation development is going to have some negative effect outside of the ecosystem and actually lead to destruction of ecosystems. The implication is that some perverse incentive will be generated through the mainstreaming. In contrast, increased yields supported by the project may actually help prevent expansion.

The plantation sector is a fundamentally a private sector endeavor, and the role of the government is to ensure that it develops in ways that are environmentally sustainable. At present the plantation sector is expanding because of economic forces and good profits being realized by private investors, which continue to stimulate its growth. Withdrawal from the sector by the government is not an option. The proposal has included what little information there is on impacts of plantation forestry in Argentina on the native ecosystems (the FVSA document for example). The lack of information is one of the hurdles that will be analyzed to a large extent in the proposed Block B activities. Activities have been included that will help determine the extent of plantation's impacts on ecosystems.

As previously noted, the World Bank will be incorporating the safeguards and mitigation activities that are part of the baseline. (The Bank's lead ecologist is the environmental safeguard specialist for this project.) The GEF alternative however, will go further and actually look at restoration, biodiversity values, capacity building, and incentives that will foster greater adoption of practices and reduce long-term threats.

# Sustainability

The trade-off between mainstreaming biodiversity concerns into plantation forestry and the loss of biodiversity in areas where plantations will be promoted in future does not justify GEF involvement.

There is no trade off. What is aimed for, is the mainstreaming of biodiversity considerations into areas to be planted by private investors. Rather than promoting new plantation areas, the project will work to ensure that biodiversity concerns are mainstreamed into existing or planned

Conoval Comments	plantation areas. This will be a clear improvement over the baseline scenario. Plantations are expanding even without promotion in Argentina, as a result of market forces. As mentioned above, GEF is not actively promoting plantations with this proposal, rather it is seeking to improve the activity to diminish the threat and deliver global benefits by conserving biodiversity and human benefits through sustainable development.
General Comments  The project shows a major weakness in its	The project is still in its initial phase. It is
general design and approach. The presentation is not logical and the	expected that the design and approach will be fully developed during project
proposed project approach not	preparation.
consistent with the GEF operational strategy.	
The project is not supportive of sustainable forest management (needs	Sustainable forest management by definition includes forest plantations which
a more comprehensive and holistic	meet the criteria of being sustainably
approach) since it supports plantation	managed. Intensive silviculture is a form of
forestry as a form of intensive silviculture whose global benefits	land-use and human activity that is both licit and a priority for Argentina as are
would be close to nil or negative as	many other forms of production including
described in this proposal and taking into consideration that plantation	farming and ranching at different scales and intensities. The proposal has
forestry has been identified as a threat	incorporated all the guiding principles for
to other ecosystems (the project does not	mainstreaming and has included references
address this fact at all).	from the literature to support the conclusion that global benefits can be generated with the proposed interventions.
	generated with the proposed interventions.

# **Annex I** Estimated Costs

Argentina: Sustainable Forestry Developm	ent					
Investment Estimation						
				<u> </u>	l	
Component Description	Quantity	Total Costs	IBRD	GEF	Gov't	Beneficiaries
	Ligaritation	(US\$'000)	1		(US\$'000)	(US\$'000)
Small Holder Forestry		(	(,	(+)	(,,	(,
New plantation	3000-4000 ha					
- Technical Assistance		100	100			
- Vehicles (5 est.)		100	100			
- Field work		8,000			5,000	3,000
Agro-forestry	2000 farmers	Í			,	·
- Field work		4,000	)		2,800	1,200
Efficiency upgrades (100 plants)		60	60			
Training of beneficiaries		80	80			
Upgrated training institute		300	300			
Siting Studies		60	60			
Establish extension nodes		400	200		200	
Training of provincial personnel		100	100			
M&E		400	)	400		
Alternative production:						
- Training of farmers		400	)	400		
- Trial		200	)	200		
- TA		200	)	200		
- Ecoregional planning		200	)	200		
Environmental education & awareness		100	)	100		
Subtotal Costs of Component 1		14,700	1,000	1,500	8,000	4,200
Forestry Information						
Strengthening policy making						
- Consultant		200		200		
- Training of government officials		200	)	200		
Improvement of information system						
- Computer & software		2,000	2,000			
- Training of staff		500	500			
- Consultant		200	200			
- Data processing		2,000	2,000			
- System maintenance		2,000	1,600		400	
Legal issues & policy develoopment						
- Technical Assistance		200	)	200		
- Training of government officials		200	)	200		
- Studies on sector policy		200	)	200		
Tools for eco-regional & land-use planning						
- Technical Assistance		400		400		
- Training of participatory process		200	)	200		

Argentina: Sustainable Forestry Developme	nt					
Investment Estimation						
Component Description	Quantity	Total Costs	IBRD	GEF	Gov't	Beneficiaries
		(US\$'000)	(US\$'000)	(US\$'000)	(US\$'000)	(US\$'000)
- Preparation of eco-maps		1,000		1,000		
Biodiversity monitoring		500		500		
Training of institutional players		200		200		
Subtotal Costs of Component 2		10,000	6,300	3,300	400	) (
Research and Technology Transfer						
Adaptive Research Grant		8,000	8,000			
Strategic partnerships						
- Consultation workshop		200		200		
- Consultant		200		200		
Extension & education						
- Develop extension programs		200		200		
- Training		150		150		
Standards & best-practice						
- Studies of palntation costs		150		150		
- Establish Standard of best-practice		150		150		
Economic incentives						
- Analysis & development of market-based						
incentives for adoption of biodiversity		050		0.50		
tecnicques.		250		250	<b>.</b>	
- Analysis of payment for environ, services		200		200		_
Subtotal Costs of Component 3		9,500				`
Project Implementation & M&E		4,000				<b>+</b>
Subtotal Costs of Component 4		4,000	1,700	700	1,600	)
Grand Total Costs		38,200	17,000	7,000	10,000	4,200