

UKRAINE
Azov Black Sea Corridor Biodiversity Conservation

Project Appraisal Document

Europe and Central Asia Region
ECSSD

Date: October 22, 2001 Country Manager/Director: Luca Barbone Project ID: P048790 Focal Area: B - Biodiversity	Team Leader: Phillip Brylski Sector Manager/Director: Marjory-Anne Bromhead Sector(s): VM - Natural Resources Management Theme(s): Poverty Targeted Intervention: N
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Program Financing Data

Loan Credit Grant Guarantee Other:

For Loans/Credits/Others:

Amount (US\$m):

Financing Plan (US\$m):	Source	Local	Foreign	Total
BORROWER/RECIPIENT		1.70	0.00	1.70
DENMARK: DANISH INTL. DEV. ASSISTANCE (DANIDA)		0.15	0.45	0.60
EC: TECH ASSISTANCE FOR CIS - TACIS		0.50	1.50	2.00
GLOBAL ENVIRONMENT - ASSOCIATED IBRD FUND		14.50	1.50	16.00
GLOBAL ENVIRONMENT FACILITY		5.44	1.46	6.90
NETHERLANDS, GOV. OF THE (EXCEPT FOR MOFA/MIN.OF DEV.COOP.)		0.15	0.35	0.50
US, GOV. OF		0.10	0.10	0.20
LOCAL GOVTS. (PROV., DISTRICT, CITY) OF BORROWING COUNTRY		0.40	0.00	0.40
LOCAL SOURCES OF BORROWING COUNTRY		0.30	0.00	0.30
UK: UNITED KINGDOM KNOW HOW FUND		0.10	0.30	0.40
WORLD WILDLIFE FUND		1.50	2.00	3.50
Total:		24.84	7.66	32.50

Borrower/Recipient: GOVERNMENT OF UKRAINE

Responsible agency: MINISTRY OF ENVIRONMENT AND NATURAL RESOURCES

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Estimated disbursements (Bank FY/US\$m):

FY	2002	2003	2004	2005	2006			
Annual	0.75	1.60	2.00	1.55	1.00			
Cumulative	0.75	2.35	4.35	5.90	6.90			

Project implementation period: 5 years; Note: Estimated Disbursements are for GEF financing only

A. Project Development Objective

1. Project development objective: (see Annex 1)

Project development objective: The project objective is to conserve coastal biodiversity within the Azov Black Sea coastal corridor by strengthening the protected area network, mainstreaming biodiversity conservation into the agricultural landscapes which connect them, and by building support at the national and international levels for sustainable development of the region's unique biological landscape.

Global development objective: The global objective is to support in situ conservation of biodiversity and threatened wetland ecosystems through protected area planning and reduction of agricultural impacts on Ramsar sites. The Project would implement recommendations of the Black Sea Environment Program, help remove institutional, financial and knowledge barriers which serve as disincentives to the adoption of environmentally sustainable agricultural practices, and develop Ukraine's leadership in international agreements such as the Bonn Convention on Migratory Species.

2. Key performance indicators: (see Annex 1)

The key indicators of project success are:

- Ramsar coastal wetlands and associated upland steppe communities on the Azov Black Sea coast under full protection, with management plans under implementation, increased by 250,000 hectares, through establishment of new protected areas and improved management of existing ones;
- Increased support for biodiversity conservation, marked by increased participation of local communities in protected area management and conservation activities;
- Land use plans that integrate new and existing Protected Areas and sites of other high biodiversity value prepared in six coastal rayons;
- Farm management plans to reduce nutrient runoff under implementation on 10,000 hectares of coastal farmland;
- Improved nutrient reduction and erosion control measures under implementation in at least one raion of each coastal oblast;
- 5,000 hectares of forest belts under sustainable use, with defined roles of farms in their management.

B. Strategic Context

1. Sector-related Country Assistance Strategy (CAS) goal supported by the project: (see Annex 1)

Document number: 20723-UA

Date of latest CAS discussion: 08/16/00

The CAS seeks to assist Government and civil society in implementing a broad-based poverty reduction strategy, with a focus on institution building and environmentally sustainable development. The CAS states that despite ecological problems, Ukraine has conserved a number of typical and unique ecosystems which have been lost in other countries in Europe and elsewhere. The GEF biodiversity project is included in the CAS, which states that the Bank will help Government to: (i) improve the environmental regulatory framework; (ii) improve the capacity of the Ministry of Environment and Natural Resources; and (iii)

prepare and implement investment projects in the protection of biodiversity, and improvement of land, water, and solid waste management.

1a. Global Operational strategy/Program objective addressed by the project:

The Ukrainian coasts of the Black and Azov seas contain large and biologically diverse wetland complexes, some of which are the best or only remaining examples of these wetland types in Europe. 650,000 hectares of the most important of these have been designated Ramsar sites, including 250,000 hectares of the unique saline lagoons and mudflats in the Sivash ecosystem of northern Crimea. These wetlands and the adjoining upland steppe habitats along the northwestern border of the Black Sea function as the Azov Black Sea Ecological Corridor, are critical spawning grounds for numerous fish species, some of which are threatened, and wintering and feeding habitat for millions of geese, ducks and waders that overwinter there or utilize the wetlands for feeding and resting on their annual migration between northern Europe and Siberia and Africa. Fifteen of the 27 European threatened bird species stopover or breed in these wetlands, including the majority of the world's populations of the white pelican and the red-breasted goose and 60% of the world population of the broad billed sandpiper.

The Ecological Corridor also contains undisturbed steppe, Ukraine's most endangered habitat. The Ukrainian steppe areas in the project region are the main surviving European representatives of *Stipa* steppes which range over the Eurasian plains from China to Ukraine. These species-rich communities, dominated by grasses (*Stipa* spp., *Festuca* spp.) and shrubs (*Artemisia* spp.), support many threatened plant and animal species. Together, the marine, wetland, and adjoining steppe communities support more than 100 species found in the Red Data Book of Ukraine and the IUCN Red List. Most of the steppe was converted to farmland, leaving remnant steppe areas mostly within existing protected areas and on former military reservations.

Currently, only about 80,000 hectares of the Ramsar sites in the corridor are under adequate protection and management. The project would extend this to an additional 250,000 hectares and implement needed related improvements in public education for wetlands conservation and reductions in direct agricultural impacts to key Ramsar sites. The project would extend protection to 40% of the highest priority Ramsar sites, including unique wetland communities of the Sivash which are largely unprotected. All of these proposed investments were identified as priorities under the Bank/UNDP-managed Black Sea Environment Program (BSEP) completed in 1998.

The project falls under the GEF operational program for biodiversity conservation, especially OP2 on Coastal, Marine, and Freshwater Ecosystems. It is also consistent with the GEF "Integrated Land and Water Multiple Focal Area Operational Program." The project also achieves two of the four cross-cutting benefits that define OP12 - Integrated Ecosystem Management - which was adopted after the project's upstream approval by the GEF Secretariat in 1998. The project will support *in-situ* conservation and sustainable uses through extending protected areas along the Black Sea coast and by promoting on-farm land use practices for biodiversity conservation objectives. It will contribute to global biodiversity goals, strengthen protection of migratory species by protecting important feeding grounds along the Eurasian-African migratory flyway. It will also support conservation and sustainable use of waterbodies along the coastal zone. The project responds to COP3, COP4 and COP5 guidance by promoting capacity building, especially for NGOs; promoting conservation and sustainable use through adaptive management of agricultural landscapes; and promoting conservation through comprehensive ecosystem management interventions. The project meets the objectives of other international conventions, especially the Bonn Convention on Migratory Species.

The project is also consistent with the Black Sea Danube Strategic Partnership - World Bank-GEF Nutrient Reduction Investment Fund (NRIF), which would co-finance eligible individual country based projects for controlling nutrient flows into the Black Sea. In particular, the proposed investments in sustainable agriculture under the Azov Black Sea Corridor Biodiversity Project, which would improve protection of high biodiversity Ramsar sites, are potentially also eligible for financing under a proposed Nutrient Reduction Investment Fund. However, co-financing for this project is not being sought from Nutrient Reduction Investment Fund (NRIF). The Azov Black Sea Corridor Biodiversity Project was included in the GEF work program in 1998, before the NRIF was envisioned. The project was, and remains, linked primarily to the Biodiversity operational program (Coastal, Marine, and Freshwater Ecosystems), secondarily to the International Waters operational program (Integrated Land and Water Multiple Focal Area), and most recently, to the Integrated Ecosystem Management operational program.

The project leverages national and international efforts for Ukraine's highest biodiversity conservation priority, and is part of a broad program that includes the following:

- The Ukraine Rural Land Titling Project (FY02) is a \$60 M IBRD loan, which will issue land ownership titles to farmers and other rural land owners and help educate farmers about their land rights. The Rural Land Titling Project and the Azov Black Sea Corridor Project would collaborate under the land use planning activity to map environmentally important areas (small rivers, forests, wetlands) around key Ramsar sites in the corridor, educate farmers and local governments about sustainable uses of these, and build consensus on ownership and use of nonagricultural and marginally productive agricultural lands within the collective boundaries. The land titling project will also provide technical assistance to farmers, communities, and government agencies in improved environmental management, including soil conservation and management of on-farm wetlands and forests.
- The Ukraine Programmatic Adjustment Loan (PAL) is a \$250 M IBRD adjustment loan covering the main sectors, including environment. The environment component will improve the use of Ukraine's environmental fund as an economic instrument for environmental management, and will pilot an integrated program of environmental audits, pollution compliance monitoring, and improved use of the environmental fund for effecting better pollution control in the corridor. These activities financed through the PAL will improve the protection of Ramsar sites in the Sivash and Donetsk coastal areas, where industrial hotspots and other sources of pollution are found.
- The project would be implemented with technical assistance from two international NGOs experienced in wetlands conservation and protected areas management: Wetlands International (financed by the Government of the Netherlands) and Flora and Fauna International (financed by the U.K. Department for International Development).
- Two wetlands conservation projects in Odessa oblast, the western-most oblast in the coastal corridor (the project region):
 - The WWF International Partnership for Wetlands Project, a \$3.5 million project on wetlands restoration in Odessa oblast. This project is part of WWF's Green Danube program, the objective of which is to improve the interest and commitment to wetland protection and restoration in all countries of the Danube region. The project is financing development of a plan for wetlands restoration in Odessa oblast and piloting this in Stenzovsko-Zhebrianski plavni and Sassyk liman, and related training for oblast government official and technical specialists.
 - The \$2 million TACIS Lower Danube Lakes project is preparing an environmental rehabilitation

plan for the Lower Danube Lakes region, focusing on water resources and protection and management of aquatic habitats. The project is financing monitoring of lake ecology and fish populations, public education and awareness, improved management of fisheries, support to environmentally appropriate small businesses, and training in water resources management and fisheries.

2. Main sector issues and Government strategy:

The coastal landscape and natural habitats of the project region have been degraded over the last 50 years as a result of three main factors: large scale conversion of wetlands and steppe communities to farmland and other land uses; pollution and associated eutrophication; and poor land use planning and integration of environmental issues into regional development. However, coastal ecosystems that are unique to Europe are still found on the Ukrainian coasts of the Black and Azov seas.

The overarching environmental sector issue is how to ensure the sustainable use and biological integrity of these coastal ecosystems under economic and social pressures. Twenty five percent of Ukraine's population of 50 million people live in the six southern territories (oblasts) that border the Black Sea and the Sea of Azov (from west to east, Odessa, Mykolaiv, Kherson, the Autonomous Republic of Crimea, Zaporizhia, and Donetsk), and 7 million of these live in the immediate coastal zone. Agriculture is the dominant land use in the coastal zone, with major industrial development (mainly iron and coal) in Donetsk oblast. Approximately 350,000 people live in the rural communities in the project region in Kherson, Zaporizhia, and Donetsk oblasts and Crimea, most of which make use of the region's natural resources (through farming, grazing, fisheries, and hunting) for income and subsistence.

Government is working to reverse the degradation of the Black Sea in accordance with its responsibilities under the Bucharest Convention and as an executing agency of the Black Sea Environment Program. Ukraine's activities are coordinated by the Ministry of Environment and Natural Resources (MENR), which was created in 1991 to administer environmental programs and policies throughout Ukraine. Through MENR, the Government is coordinating national, regional, and local efforts in the Black Sea region related to natural resource management, coastal protection and integrated coastline management, air and water pollution, environmental monitoring and environmental impact assessments, capacity building and public awareness. Government is addressing the following issues in the project region:

Conversion of wetlands to farmland and other land uses. During the Soviet era, large areas of wetlands and nearly all of the native steppe on the coast of the Black and Azov Sea coast were converted to farmland. Since then, Government has: (i) adopted a regulatory framework to implement the Convention on Biological Diversity; (ii) built greater support within government, especially among oblast governments, for environmental protection; (iii) established partnerships on environmental issues with governmental and nongovernmental organizations elsewhere in Europe; and (iv) expanded the area of natural ecosystems under protection to nearly 4% of the country and drafted a protected area plan for the project region. The proposed improvements to the protected area plan includes priority Ramsar sites covered under the project.

Pollution and eutrophication of the Black Sea. Pollution from point sources (e.g., from municipal wastewater, industry, and shipping) and non-point sources (e.g., agricultural runoff) contribute to the degradation of coastal ecosystems in the project region. The Transboundary Diagnostic Analysis completed under the Black Sea Environment Program (BSEP) concluded that high levels of phosphates, nitrates, and other nutrients in the rivers flowing into the Black Sea are a main cause of eutrophication. Agricultural run-off accounts for up to one-half of nitrogen loads in these rivers. The MENR has been

working since 1996 to improve its regulatory framework for pollution monitoring and control. The first step was to simplify its system of environmental standards and bring them closer to those in use in the EU. The second was a Local Environmental Management Program in Donetsk Oblast in the Black Sea region, a pilot activity which introduced modern regulatory approaches and training in air and water quality and waste management to Donetsk, one of Ukraine's most polluted regions. These two activities, which were implemented with the assistance of Bank-financed Institutional Development Fund, laid a foundation for lending operations in pollution control.

Government has prepared two projects that address the pollution and eutrophication problems:

- The Bank-financed \$250 million Programmatic Adjustment Loan (PAL, FY02) includes an environment component to improve economic and regulatory mechanisms for reducing pollution. It will implement an effective "polluter pays" program through adoption of an integrated pollution permitting and monitoring system which: (i) increases revenues; (ii) introduces new incentives to the private sector to introduce best available pollution control technologies; and (iii) improves the success and transparency of the public sector's programs for pollution abatement and energy/resource efficiency in the industrial sector; and
- The Bank-financed \$60 million Ukraine Rural Land Titling project will assist the Government of Ukraine in the next steps of farm privatization by providing cadastre and title registration services, as well as technical assistance in the environmental management of farmland.

The GEF-World Bank Nutrient Reduction Fund is part of an overall Strategic Partnership for Nutrient Reduction of the Black Sea and Danube involving other GEF Implementing Agencies and regional partners. This project would co-finance eligible investment projects in wetlands rehabilitation, wastewater or point source pollution controls, and improved agricultural practices to address non-point sources of nutrient runoff. The first tranche of \$20 million is financing projects on a 'first-come, first-served' basis, starting with projects in Bulgaria (wetlands restoration), Russia (wastewater pollution control) and Romania (agricultural runoff abatement). Ukraine has not yet requested a project under the Nutrient Reduction Fund, but is currently developing preliminary proposals that would be discussed with the Bank and GEF in the coming year.

Weak financing for environmental protection. The economic downturn since Ukraine's independence in 1991 has restricted both state and private sector financing for environmental protection. The MENR's regional inspectorates collect pollution fines which the MENR and regional governments use for environmental investments. The MENR's strategy is to improve the management and impact of these investments for reducing pollution. To achieve this, Government has included an environmental protection component in the Bank-financed \$250 million Programmatic Adjustment Loan (PAL), as described in the previous paragraph.

Mainstreaming biodiversity conservation into regional development. Government has taken important steps toward improved environmental management in recent years, giving broad powers to the MENR to facilitate implementation of Ukraine's obligations under the Convention on Biological Diversity (1996), the Convention on the Protection of the Black Sea Against Pollution (1994), and the Ramsar and Bern Conventions (1996), producing environmental strategies and investment plans for biodiversity conservation, sustainable development of the Black Sea region, and phasing out of chlorofluorocarbons and other ozone-depleting substances. Ukraine is also active in the Council of Europe and is implementing the Pan-European Biological and Landscape Diversity Strategy. Government has worked to mainstream biodiversity conservation objectives in its development agenda by building capacity in its staff to update

and implement its: (i) environmental regulatory framework, and (ii) make better use of limited government financing. These include the following:

- The Strategy for Conservation of Biological Diversity in Ukraine, approved by the Cabinet of Ministers in 1997. The strategy identifies four main objectives: (i) conservation of natural ecosystems, landscape components, and habitats of some species; (ii) promoting sustainable use of natural resources; (iii) strengthening public awareness and the involvement of local communities in conservation activities; and (iv) strengthening responsibility for biodiversity conservation, especially the responsibilities of institutions, organizations, land users, companies, and individuals.
- The program for Protection and Rehabilitation of the Environment of the Azov and Black Sea, adopted by the Cabinet of Ministers in 1998, to obtain financing for pollution monitoring and regulation, protection of natural habitats, and facilitation of coastal zone management.
- The Law on the Program of Forming the National Ecological Network for 2000-2015 was adopted in 2000, which provides financial and political support for the creation of new protected areas and for ecological corridors connecting these.
- The Danube Delta Biodiversity Project, which was satisfactorily completed in 1999, and which provided many useful lessons regarding management of wetland ecosystems and involvement of local communities in the design of this operation.

3. Sector issues to be addressed by the project and strategic choices:

Conversion of wetland habitats to agricultural and other land uses. During preparation, a draft coastal protected area plan for the project region was prepared which identified the highest priority sites of global biodiversity significance to be protected against further conversions. Extensive consultations were held with local communities and resource users on designating the highest priority areas of this plan as regional landscape parks (under oblast management) or national parks (under national management), to be financed under the project. The Project will work with the Rural Land Titling project to clarify ownership and management responsibilities lands having high conservation value, and to provide assistance in implementing environmentally appropriate farm practices.

Pollution and eutrophication of the Black Sea. The Project would demonstrate best farming practices which reduce off-site impacts from erosion and pollution and protect on-farm biodiversity values, and replicate the lessons learned in other farms in the project region. The Project would be assisted in this activity by technical studies, consultations with farmers and local communities, and on-farm environmental management practices to be implemented in the project region under the Rural Land Titling project (US\$60 million IBRD project). The Project's linkage with the Programmatic Adjustment Loan will contribute to improved pollution control and monitoring practices in the project region.

Weak financing for environmental protection. Technical assistance in income earning activities and the design and implementation of transparent financial management systems would be coordinated with the activities to reform environmental permitting, monitoring, and financing under the Programmatic Adjustment Loan (PAL). The project would also assist the protected areas in promoting tourism and other income generating activities that would be used to co-finance the protected areas' recurrent operating costs.

Mainstreaming biodiversity conservation into regional development. The Project would empower local and regional authorities, farmers, and other stakeholders in promoting biodiversity conservation through: (i) participatory management of natural resources within the project's protected areas, (ii) promoting multiple resource use in protected areas management, with technical assistance to user groups on sustainable uses of natural resources; (iii) assisting farmers to implement best practices in sustainable agriculture; and (iv) assisting raion and oblast authorities to prepare and implement land use plans which integrate environmental objectives.

C. Project Description Summary

1. Project components (see Annex 2 for a detailed description and Annex 3 for a detailed cost breakdown):

The project region spans the coastal corridor bordering the Black Sea and Sea of Azov in the steppe zone of southern Ukraine. This region possesses flat terrain and fertile chernozem soils, and natural complexes of wetlands and upland habitats of local and global importance. The coastal zone is predominantly (80%) agricultural in land use and the population of about 7 million people live largely in municipalities. Urban and rural development is spread more or less evenly between the main municipalities of Odessa and Donetsk, a distance of about 700 km. Approximately 350,000 people live around the project's existing and proposed protected areas in Kherson, Zaporizhia, and Donetsk oblasts and Crimea. Nearly one-half of those surveyed for the Social Assessment depend on natural resources (e.g., farming, grazing, and fisheries) for income and subsistence and for 28%, agriculture is the primary source of household income. The rural population are primary users of land and water resources, are aware of the problems of environmental degradation in the region, and are supportive of environmental initiatives which do not interfere significantly with their livelihoods.

The project would support an integrated program of protected areas management, sustainable agriculture, land use planning, and public education to promote biodiversity conservation in the corridor. The investments of the Azov Black Sea Corridor Biodiversity Conservation project would be concentrated in the central part of the corridor around three protected areas under the management of national Government: (i) the proposed Sivash National Park in Crimea, part of a 250,000 hectare (ha) lagoon complex along the Azov Sea; (ii) Chornormorsky Biosphere Reserve in Kherson oblast, an 89,000 ha protected area of brackish wetlands and steppe; and (iii) the proposed Preazovsky National Park, a 63,000 ha area of limans and steppe in Zaporizhia oblast. The project would also support biodiversity conservation in two regional landscape parks, which are under the management of oblast government. The investments of the WWF-financed Partners for Wetlands Project (\$3.5 million) and the TACIS Lower Danube Lakes project (\$2 million) are concentrated in Odessa oblast, the western-most oblast of the corridor.

The Ministry of Environment and Natural Resources would be the Executing Agency. The oblast offices of the MENR would facilitate project implementation at the local level and would supervise investments in protected areas (to be implemented by MENR, Academy of Sciences, and oblast governments as agencies responsible for protected areas), sustainable agriculture (to be implemented mainly by farmers through NGO-run small grants program), and public education (to be implemented by NGOs and local schools and universities).

Component	Sector	Indicative Costs (US\$M)	% of Total	Bank financing (US\$M)	% of Bank financing	GEF financing (US\$M)	% of GEF financing
1. Support Protected Areas Management		7.91	24.3	0.50	3.1	3.31	48.0

2. Support Protected Area and Corridor Planning	6.04	18.6	4.00	25.0	0.61	8.8
3. Build Capacity and Support for Biodiversity Conservation	7.15	22.0	4.00	25.0	1.27	18.4
4. Demonstrate Biodiversity Friendly Agriculture Practices	9.28	28.6	7.50	46.9	0.84	12.2
5. Project Management and Information Dissemination	2.12	6.5	0.00	0.0	0.87	12.6
Total Project Costs	32.50	100.0	16.00	100.0	6.90	100.0
	0.00	0.0	0.00	0.0	0.00	0.0
Total Financing Required	32.50	100.0	16.00	100.0	6.90	100.0

(Note: Bank financing under Components 1-4 includes US\$16 million in associated IBRD funds; Components 1-5 include \$9.6 million in financing from other sources.)

The project activities would be implemented within the coastal corridor of Ukraine on the Azov and Black seas as follows:

Component 1. Support Protected Areas Management. The Project would implement improved management measures at priority marine and terrestrial protected areas in the corridor through: (i) creation or expansion of protected areas at the proposed Sivash (priority parts of its 200,000 hectares of open water, mudflats and saltmarshes) and Preazovsky (100,000 hectares of bays and coastal wetlands) national parks; (ii) preparation and implementation of management plans for these protected areas and three existing protected area (Chornormorsky Biosphere Reserve; 89,000 hectares; and Granite Steppe Pobuzhia and Meotida regional landscape parks); and (iii) professional development for park staff in protected areas administration and management planning, wetland and waterbird ecology and management, warden skills, and visitor management.

Wetlands International (financed by the Government of the Netherlands) and Flora and Fauna International (financed by the U.K. Know How Fund) will provide technical assistance for management plan preparation, and related technical and social inputs to the management planning process. The WWF Partners for Wetlands project, supported by the Government of the Netherlands, is supporting wetlands restoration in Odessa oblast, including within existing protected areas such as the Ukraine Danube Delta Biosphere Reserve, and areas not included in the protected area network but of high biodiversity value, such as Sasyk liman. The Programmatic Adjustment Loan (PAL) will reform the management of the environment fund, an important source of discretionary funding for Ukraine's environmental priorities, including biodiversity conservation and protected areas management.

Component 2. Support Protected Area and Corridor Planning. The project would develop and implement a corridor conservation strategy for maintaining the corridor's ecological function, based on the following activities: (i) identify and prioritize key natural areas and ecological functions and their management requirements, through remote-sensing assisted inventories of natural habitats; (ii) establish a monitoring system of biodiversity in the corridor, focusing on indicators of ecosystem health such as migratory waterbird numbers as indicators of flyway function; (iii) finalize the coastal protected area plan, expanding the protected area plan developed under project preparation to expand areas under local (oblast) management and identifying the roles of protected areas in local economies and financing needs for their long-term operation that emphasizes cost recovery mechanisms; and (iv) prepare land use plans

in selected raions to identify natural areas which contribute significantly to the corridor's ecological function the protection of which should be ensured by regional authorities, and to identify needs to mainstream biodiversity conservation objectives into regional development plans. The implementation of the recommendations under these planning activities would be evaluated for implementation under the small grants program under component 3 of the project.

The Ukraine Rural Land Titling Project and the Azov Black Sea Corridor Project would map environmentally important areas (small rivers, forests, wetlands) around key Ramsar sites in the corridor, educate farmers and local governments about sustainable uses of these, and build consensus on ownership and use of nonagricultural and marginally productive agricultural lands within the now-privatized farm collectives. The WWF Partner for Wetlands project is working with local and regional governments to develop a wetlands policy plan, to be incorporated into land use plans in Odessa oblast, and will collaborate with the Azov Black Sea corridor, Rural Land Titling, and TACIS Lower Danube Lakes projects in developing options for sustainable land uses around protected areas and Ramsar sites in Odessa oblast.

Component 3. Build Capacity and Support for Biodiversity Conservation. The Project would build awareness of and support for wetlands conservation through an environmental education program and implement a competitive small grants program to support the implementation of practical conservation measures by local communities, NGOs, and individuals. This component would also support regional and international cooperation in wetlands conservation and waterfowl flyway management through regional exchange programs and by two regional conferences on wetland and waterbird conservation. The Programmatic Adjustment Loan will build capacity for improved pollution monitoring and permitting systems in the project region, which will benefit natural habitats affected by industrial pollution, particularly in the Donetsk region.

Component 4. Demonstrate biodiversity friendly agriculture practices. The Azov Black Sea Corridor project and the Rural Land Titling Project will work together to assess the environmental management needs of lands within the former collective farm, including soils conservation and management of on-farm wetlands. The projects will also evaluate the feasibility of developing conservation easements, with favorable tax incentives, for environmentally sensitive, marginal agricultural lands. Ukrainian agricultural, land management, and environmental institutes will carry out these assessments for each former collective, and incorporate the results into the land titling outputs. The corridor project will also implement sustainable agriculture practices at the farm and landscape levels, working through a competitive small grants programs for improved on-farm management practices which have direct biodiversity conservation benefits for the priority protected areas in the corridor. The Project would fund: (i) works, goods and services to improve management and protection of riparian areas and other natural habitats, and improved management of soils, livestock and livestock waste in buffer zones around the Project Ramsar sites; and (ii) technical or other services by agricultural institutes, farmers/farmer associations, and NGOs to provide training or to disseminate the techniques and lessons learned.

The WWF Partners for Wetlands and the TACIS Lower Danube Lakes project will assist with the development of organic agriculture in Odessa oblast, and promote the establishment of European markets for agricultural products.

Component 5. Project Management and Information Dissemination. The project would finance the operating costs of a Project Implementation Unit (PIU) which reports to the Ministry of Environment and Natural Resources. The PIU will be responsible for contracting for the delivery of goods, works, and consultant services to implement the project. It would also develop a communications support system to

serve individuals and organizations engaged in Project implementation and other stakeholders interested in project activities, and would monitor and evaluate project implementation. The communications and information dissemination activities will be co-financed by the Government of Denmark, through its development assistance organization Danida.

2. Key policy and institutional reforms supported by the project:

Although coastal areas in Ukraine enjoy nominal support by conservation regulations, land use zoning and protection are still in the formative stages. Prior to independence, land use planning was carried out by central institutes in Kiev, and implemented by oblast and rayon governments. Since independence, land use planning has stalled as a result of low budgets and uncertain land tenure and governance issues. Oblast governments are seen as capable of filling this gap in public sector assistance in land use planning, and there is a growing need for progress on this issue as land privatization leads to problems with incompatible land uses. The project would facilitate a consultative process for land use planning and support decentralized decision making by local and regional governments.

3. Benefits and target population:

The target populations include stakeholders broadly responsible for sustainable development in the project region, including, farmers, hunters and fishermen, NGOs, and government staff of national, regional and local governments responsible for nature conservation. The benefits include:

Environmental: The project would promote improved protection and sustainable use of over 250,000 hectares of wetlands on the Black and Azov Sea coasts, reduce soil and nutrient runoff from farms to adjoining Ramsar sites, and build capacity of NGOs, local communities and Government to improve environmental protection programs. The project would have a positive global benefit by protecting coastal and marine landscapes, numerous threatened endemic species, and conserving and enhancing the region's function as a globally important feeding ground for migratory waterbirds and other species.

Social: The project will empower local communities to participate in the protection and sustainable use of resources within the project region, especially in protected areas.

Institutional: The project will improve the performance and transparency of the Ministry of Environment and Natural Resources and other governmental organizations engaged in the management of coastal natural resources (mainly land and water bioresources), and promote regional cooperation among governmental and nongovernmental institutions engaged in management of flyway resources. It will also build capacity in local institutions in land use planning.

4. Institutional and implementation arrangements:

Institutional Arrangements

Executing Agency, central project management: The Executing Agency would be the Ministry of Environment and Natural Resources (MENR). The MENR would have overall responsibility for project coordination, contracting a Project Implementation Unit (PIU), and supervising project progress. The MENR would facilitate collaboration and cooperation with other ministries, institutions and agencies, and its environment departments in the corridor would be responsible for integrating project activities at the oblast level.

Regional project management. Each oblast Department of Environment and Natural Resources participating in the project would designate one part-time staff member to manage the land use planning

activities under component 1, provide assistance on the protected areas planning activities and agricultural activities under components 1 and 3, respectively, and facilitate communication among other departments at oblast level and cooperation with other oblasts. The oblast managers would also develop local networking arrangements to ensure that all local stakeholders including local communities and NGOs are involved in project implementation.

Advisory functions. The MENR will maintain a Project Steering Committee (PSC) to review project progress, advise and assist in resolving obstacles to project implementation, and assist in maintaining cooperation among the stakeholders at the national and local levels. The PSC would be comprised of the MENR's project manager, and representatives from the following: Central Board for Nature Conservation within MENR, Crimea State Committee for Environmental Protection, oblast governments, and Scientific Advisory Committee. A Scientific Advisory Committee (SAC) would review and endorse activities related to the project's scientific program, including the TORs, workplans, and outputs for management plans, territorial organization documents, and applied research. The SAC would be comprised of representatives of the MENR, Academy of Sciences, Agrarian Academy, and Land Resources Committee, representatives of oblasts (Department of Environment and Natural Resources or other qualified and authorized representative) and the director of the PIU.

Local advisory committees (LAC) would advise the MENR and protected areas administration on protected areas and agriculture activities, to improve the usefulness of the investments and to ensure that local stakeholder opinions and concerns are heard in management planning process. The LACs would include representatives of local resource user groups, farmers, agricultural departments of the rayon and oblast governments, local agricultural research and training institutions oblast and rayon government, local communities, ethnic groups and NGOs. The LAC would (i) review and endorse project planning documents (terms of reference for protected area management plans, farm plans, small grants guidelines); (ii) review implementation progress of the protected areas and sustainable agriculture components, and advise the main stakeholders on adaptive changes in the program based on the results.

Central and regional project implementation assistance. A central PIU located in Kiev and acting under contract to the MENR would be responsible for procurement, accounting, financial reporting and auditing. The PIU is currently Interecocentre, a nonprofit NGO with extensive experience administering Bank projects. The PIU will be responsible for (i) procurement of goods and services; (ii) assisting the protected areas and oblast staff to prepare annual work programs and budgets, and (iii) coordinating the delivery of technical assistance. The PIU would establish small regional offices in Melitopol, Kherson, and Simferopol (AR Crimea) and provide training and oversight to these on procurement and financial management. The regional PIU offices would be responsible for procurement of goods, works, and services at the local level, under the management of the central PIU. The Project Implementation Plan further describes the responsibilities of the individual regional PIUs.

Implementation arrangements for sustainable agriculture activities. The implementation arrangements for the sustainable agriculture component areas follows:

- The training program in sustainable agriculture would be the responsibility of the Kherson Agricultural Institute, which provides extension services. The PIU would provide additional technical assistance to the farms through consultancies on specific topics. Prior to their implementation, the training program would be reviewed and endorsed by an advisory group with representatives from the PIU, MENR and oblast government offices.
- The competitive small grants program would be managed by an NGO selected through a competitive

process. The guidelines would be reviewed and endorsed by the Local Advisory Committees.

Project Phasing

The project would be implemented over five years, starting with a coordinated implementation of activities within two focal areas: Chornomorsky and Sivash. Within these two areas, the project would develop and assess sustainable agriculture activities, support protected area management planning, and develop coastal land use plans, and integrate these land use plans into a strategic management framework for these regions. Based on the results and lessons learned from the project's experience in the focal areas, the project would be extended to the other parts of the corridor.

Financial Management

Financial Management Assessment: Responsibility for the financial management of the project will be that of InterecoCentre PIU. The Bank conducted a financial management assessment of the PIU and confirmed that it does not satisfy the Bank's/IBRD's minimum financial management requirements. In particular, the following areas need to be addressed prior to Board presentation: (i) preparation of a draft accounting manual; (ii) development of a revised spreadsheet system to enable the PIU to prepare Project Management Reports (PMRs) 1A (Source and Uses of Funds), 1B (Uses of Funds by Project Activity) and 1E (Special Account Statement); (iii) selection of the bank in which the Special Accounts will be housed and thus the finalization of the project's flow of funds; (iv) finalization of the audit terms of reference; and (v) presentation to the Bank of a short-list of auditors acceptable to the Bank. In addition, the PIU does not have in place an adequate project financial management system that can provide, with reasonable assurance, accurate and timely information on the status of the project (PMRs) as required by the Bank for PMR-based disbursements. During project negotiations, the recipient will confirm if it wishes to consider a move to PMR-based disbursements and if so, agreement will be reached on an action plan to enable PMR-based disbursements.

Project Management Reports (PMRs): Project management-oriented PMRs will be used for project monitoring and supervision. The formats of the PMRs have been drafted and will be confirmed during Negotiations. The PIU will produce a full set of PMRs for every calendar quarter throughout the life of the project beginning with the period ending 18 months after Board presentation. However, the financial PMRs 1A, 1B and 1E, as well as the four procurement PMRs, 3A, 3B, 3C and 3D, will be produced from project effectiveness.

Disbursements: Project funds will be initially disbursed under the Bank's/IBRD's established procedures, including Statements of Expenditure (SOEs). As discussed above, during project negotiations, the recipient will confirm if it wishes to consider a move to PMR-based disbursements and if so, agreement will be reached on an action plan to enable PMR-based disbursements. Additionally, a move to PMR-based disbursements will be made at the mutual agreement of the recipient and the Bank and will be considered once the PIU is familiar with the project's monitoring aspects and is considered able to produce sufficiently timely and reliable project management information.

Audit Arrangements: Audits by independent auditors on terms of reference acceptable to the Bank will be conducted throughout project implementation of: the project financial statements; Statements of Expenditures (SOEs), or PMRs if used as the basis of disbursement; Special Accounts; and the InterecoCentre. As discussed above, finalization of the audit terms of reference and presentation to the Bank of a short-list of auditors acceptable to the Bank are conditions of Board presentation. The audits will be procured by the PIU through Least-Cost Selection. Selection of the project's auditors is a

condition of project effectiveness. The audited financial statements / reports together with the auditor's reports and opinions will be presented to the Bank no later than six months after the end of each fiscal year and also at the closing of the project. The contract for the audit will be extended from year-to-year with the same auditor, subject to satisfactory performance. The cost of the audit will be financed from the proceeds of the GEF Grant as an incremental operating cost.

Monitoring and evaluation arrangements:

Project monitoring would be the responsibility of the PIU and the MENR. The PIU and MENR would furnish the Bank with reports on a regular basis including: (a) quarterly progress and project financial management reports; (b) interim unaudited statements of project accounts; and (c) additional information that the Bank may request from time to time.

Performance monitoring and evaluation would be undertaken by the MENR to ensure close monitoring of the achievements of project objectives during implementation. Key performance indicators proposed for monitoring can be found in Annex 1. A mid-term evaluation would be prepared during year three of the project. Lessons learned from implementation and the activities financed under the project would be captured in a synthesis report prepared by the borrower with the assistance of the Bank.

D. Project Rationale

1. Project alternatives considered and reasons for rejection:

The project's activities are based on the Black Sea Strategic Action Plan, developed under the GEF-funded Black Sea Environment Program, which was completed in 1996. The project concept was initiated in several workshops by the MENR, Academy of Sciences, and NGOs, and later developed with other stakeholders. During preparation, the main alternative considered was to focus the project on protected areas only. This alternative was rejected because by focusing only on Protected Areas, the project would lose an opportunity to address unsustainable agricultural practices on farms surrounding the high biodiversity Ramsar wetlands and upland steppe communities in the corridor. Because impacts from agriculture are one of the greatest threats to biodiversity in the project region, it was essential that the project be able to assist farms to reduce agricultural impacts to these sites and to incorporate biodiversity-friendly practices into farming practices.

2. Major related projects financed by the Bank and/or other development agencies (completed, ongoing and planned).

Sector Issue	Project	Latest Supervision (PSR) Ratings (Bank-financed projects only)	
		Implementation Progress (IP)	Development Objective (DO)
Bank-financed Environmental regulation reform	Strengthening Local Environmental Management in Donetsk Oblast (IDF; completed)		
Environmental policy and financing reform	Environmental Policy Development (IDF; completed) Programmatic Adjustment Lending (PAL) project (under		

Biodiversity conservation	preparation)		
	Danube Delta Biodiversity Project (GEF/Bank, completed)	S	S
	Transcarpathian Biodiversity Protection Project (completed)	S	S
	Regional Black Sea Environment Program (GEF/Bank/UNDP, completed)	S	S
Sustainable agriculture and rural environmental protection	National Biodiversity Strategy/Action Plan		
	Poland Rural Environmental Protection Project	S	S
Other development agencies			
Danish Environmental Protection Agency	Water Supply and Wastewater Treatment Rehabilitation in Crimea and Sevastopol		
TACIS	Environmental Program for the Danubian River Basin		
USAID	Biodiversity Support Program (completed)		

IP/DO Ratings: HS (Highly Satisfactory), S (Satisfactory), U (Unsatisfactory), HU (Highly Unsatisfactory)

3. Lessons learned and reflected in the project design:

The lessons learned from other GEF-financed activities, including the Danube Delta Biodiversity project and the Black Sea Environment Program, and from other environmental projects in the region, include the need to: (i) obtain support for policy and regulatory interventions at a high enough level to pave the way for the project activities, the majority of which occur at the local level; (ii) maintain support for building capacity in the MENR, but emphasize its regional offices; (iii) increase the involvement of NGOs; (iv) build on the experience of existing PIUs to take advantage of their knowledge and networking; (v) improve the linkage between conservation and socio-economic development; and (vi) build ownership of the project locally through public awareness and involvement in project design and implementation.

The project has been designed with the above lessons in mind. The MENR, which gives full support to this project, has been strengthened in recent years, in part through GEF-funded activities, resulting in improvements in environmental management. The project would further strengthen the MENR and the Crimean State Committee for Environment and Natural Resources by building capacity for improved environmental and conservation management. The project will also strengthen NGO involvement in conservation management. NGOs will be contracted to develop and manage the environmental education component and will be eligible to receive support for conservation activities through the small grants program. The PIU that will manage the project is an environmental NGO and has previous experience managing GEF projects in the country. The project will build ownership and support for the project objectives by involving local stakeholders in development and finalization of the protected area management plans and oblast land use plans. During preparation, local resource users asked that sustainable development rather than strict protection be emphasized under the project. In response, protected areas supported under the project will be zoned for both protection and multiple-use.

Additionally, the project will encourage sustainable resource use in and around the protected areas, including support for improved agricultural practices at farms that border critical protected areas and wetland sites.

The principal recommendations from the STAP review have been incorporated into the project design as follows:

- i) Develop a clear definition of the role of NGOs in the project, and one that is linked operationally to the role and outputs of the MENR and other governmental participants. The Project Implementation Unit would be run by national NGO. The project would engage NGOs in environmental education, biodiversity monitoring, and in technical surveys and studies, which would be used by the MENR and the Ministry of Education.
- ii) Address more fully the problems and opportunities of land ownership changes for biodiversity conservation. The farms in Ukraine have been privatized, with the exception of those under the management of state agricultural institutes. Most privatized farms are managed as joint stock companies, with each owner holding shares in the enterprise. A minority of privatized farms are owned and operated by individual farmers. The project would engage both types of privatized farms and appropriate agricultural institutes in integrating biodiversity conservation into farm management. Land privatization is also occurring for non-farm areas. The project would identify natural areas which, due to their ecological importance, should receive some form of protection irrespective of their ownership. The Project would also collaborate with the proposed Rural Land Titling Project (IBRD) under the land use planning activity to map environmentally important areas (small rivers, forests, wetlands) around key Ramsar sites in the corridor, educate farmers and local governments about sustainable uses of these, and build consensus on ownership and use of non-agricultural and marginally productive agricultural lands within the collective boundaries.
- iii) Fully consider the opportunity for project activities on military lands that are now being considered for conversion to civilian purposes. Public uses of military lands in the project region are constrained by problems such as buried ordinance and chemicals. The review of corridor assets under component 2 would include a review of the opportunities and advantages for wildlife, and the problems, of converting military lands to non-military purposes. The use of such areas as protected areas may require that visitor use be prohibited or greatly restricted. This issue, and associated questions of environmental liability, would be explored under the project.
- iv) Select model municipalities to initiate implementation of the project, to be followed by implementation in other areas based on lessons learned. The project would be implemented first in two focal areas: Chornomorsky and Sivash. Within these two areas, the project would develop and assess sustainable agriculture activities, support protected area management planning, and develop coastal land use plans, and integrate these land use plans into a strategic management framework for these regions. Based on the results and lessons learned from the project's experience in the focal areas, the project would be extended to the other parts of the corridor; and
- v) Focus quickly on moving beyond planning to achievement of practical results. The project would achieve practical results in the two focal areas early in project implementation.

4. Indications of borrower and recipient commitment and ownership:

Ukraine has been working within its financial constraints to address issues related to environmental management of the Black Sea, especially with regards to pollution control, biodiversity conservation and coastal zone management. Ukraine ratified and is implementing the Bucharest Convention on the Protection of the Black Sea Against Pollution, the Bonn, Bern and Ramsar Conventions, and the Agreement on the Conservation of African-Eurasian Migratory Waterbirds. Ukraine's commitment and ownership of the Project and its issues are indicated by the following:

- In 1998 the Cabinet of Ministers of Ukraine approved a program for the Protection and Rehabilitation of the Environment of the Azov and Black Sea, the objectives of which are to: (i) reduce pollutant discharges to coastal waters; (ii) improve the protection of natural habitats and biodiversity; (iii) adopt improved environmental monitoring and EIA procedures for coastal developments; (iv) facilitate preparation of integrated coastal zone management plans; and (v) involve the public in the protection and rehabilitation of coastal ecosystems.
- During Project preparation, the Law on the State Program of Formation of the National Ecological Network for 2000-2015 of Ukraine was adopted. This law identifies the new protected areas to be created under the Project and the ecological corridors that connect them, and secures additional state co-financing for their creation and operation.
- The Government has agreed to include provide co-financing under the proposed \$60M Rural Land Titling Project (IBRD) to protect environmentally important areas (small rivers, forests, wetlands) in agricultural lands surrounding key Ramsar sites in the corridor. The Government has also included an environmental protection component in the Bank-financed \$250 million Programmatic Adjustment Loan (PAL) -- a reform program for promoting sustained economic growth, reducing poverty, and improving environmental protection. A key theme of the PAL reform program is to develop an environmental permit system which: (i) improves incentives to reduce pollution and adopt sustainable natural resource management practices, and (ii) is integrated with an environmental financing system that seeks full payment for pollution (the "polluter pays" principle).
- All levels of Government (national, regional, and local) participated in the project design and implementation arrangements.
- Two Project sites are Regional Landscape Parks, which are created and managed by oblast government. For both, oblast governments have financed creation of the parks and are co-financing their operation.
- Ukraine's successful completion of several GEF-financed activities also indicate its commitment to the project. These include the National Biodiversity Strategy/Action Plan (1998), Transcarpathian Biodiversity Protection Project (US\$0.5M, 1998), and Danube Delta Biodiversity Protection Project (US\$1.5M, 1999).

5. Value added of Bank and Global support in this project:

GEF support is warranted because of the global significance of the Azov-Black Sea coastal zone and the need for incremental financing for its long-term protection. Without GEF support it would not be possible to implement the conservation actions needed for this globally significant area. The GEF adds value through its global experience on the design, implementation, and financing of biodiversity conservation

projects. GEF support is justified by the global significance of the biodiversity of the Azov-Black Sea coastal region, the existing threats to ecosystem integrity and species survival, and the commitment of the government to implementing the project. GEF-supported initiatives have helped to foster greater collaboration between government agencies and NGOs in project preparation.

The Bank adds value to the project through its experience in Ukraine and the region, and the ability to link the project with two other Bank-managed projects: (i) the Rural Land Titling Project, which will provide land titles to the former collective (now privatized) farms and (ii) the Programmatic Adjustment Loan, which will focus on the policy and financial framework for pollution reduction. The Bank has been an active partner with Ukraine on environmental initiatives since its independence. This experience includes assistance with preparation of a review of environmental problems and priorities (Suggested Environmental Priorities, 1993), the Ukraine National Biodiversity Strategy/Action Plan, institutional strengthening in environmental regulatory policy (through two Institutional Development Fund grants), protected areas management (through the Danube Delta and Transcarpathian Biodiversity Protection GEF projects), and development of investment proposals to implement the Black Sea Environment Program. The Bank's experience in Ukraine will help ensure cooperation between regional and national programs. Value added of Bank support includes technical support for preparation, supervision capacity, development of linkages with other sources of expertise and funding.

E. Summary Project Analysis (Detailed assessments are in the project file, see Annex 8)

1. Economic (see Annex 4):

- Cost benefit NPV=US\$ million; ERR = % (see Annex 4)
- Cost effectiveness
- Incremental Cost
- Other (specify)

Incremental costs are estimated to cover project expenditure on components that have global benefits. Project activities that will yield global benefits are eligible for GEF financing. The incremental costs represent those activities that achieve global environmental benefits by (i) strengthening protected areas management; (ii) supporting protected area and corridor planning, including land-use planning and monitoring; (iii) building capacity and awareness in biodiversity conservation through environmental education and public awareness programs; and (iv) demonstrating biodiversity friendly agriculture practices. National and oblast governments are committed to financing US\$1.7 million and US\$0.4 million, respectively, for the GEF alternative, and counterpart financing requirements for the small grants program and contributions from private donors would provide an additional US\$0.3 million for the GEF alternative. The U.S. Government, UK Know How Fund, Dutch Government, Danish Government, EC TACIS program and World Wide Fund for Nature (WWF) are providing a total of US\$7.2 million to complement GEF funding. Additionally, GEF funds are leveraging US\$16.0 million in associated IBRD funds, under the Programmatic Adjustment Loan and the Land Privatization Project. The GEF grant contribution toward the GEF alternative would be US\$6.9 million.

2. Financial (see Annex 4 and Annex 5):

NPV=US\$ million; FRR = % (see Annex 4)
Not applicable

Fiscal Impact:

The creation of new protected areas involve infrastructure and staffing costs above the current baseline. The staff of national parks are financed by the state budget and operating costs and other investments,

including counterpart financing under the project, may be financed through the MENR's environmental fund. Regional Landscape Parks (RLPs) are financed by oblast governments and potential "corporate" sponsors. The project promotes the use of RLPs to achieve the project's conservation objective because they are decentralized; they have strong ownership from oblast (regional) authorities; and because they reduce the project's dependence on state budget.

The Government financial contribution to the project would be US\$1.7 million, including US\$1.01 million for taxes and US\$0.66 million for incremental staff and recurrent costs for the two new national parks. Oblast governments would contribute US\$0.4 million for staff and recurrent costs of the two Regional Landscape Parks to receive support under the project. Spread over five years of the project, the fiscal impact of the Government's incremental contribution would be minimal.

3. Technical:

The sustainable agriculture component would introduce improved technologies and approaches to farm management. This would include the use of equipment (e.g., conservation tillage plows) and remote-sensing and economic applications to farm management which are not in wide use in Ukraine today. The farms and agriculture institute which participated in project preparation were familiar with and supportive of these tools, but lacked practical experience in their use. The project would provide the training and technical support for farmers and extension specialists to use these tools approaches, and co-finance equipment purchases.

The project will promote creativity and innovation in the use of information technologies for inventory and monitoring environmental trends, solving ecological problems, and developing analyses and tools to be used by local stakeholders to promote sustainable resource use. The capacity and facilities for this work has been developed in the Ukrainian Land and Resource Management Center (ULRMC) through a US\$5 million grant from USAID to ULRMC for using information technologies in environmental management and public health (e.g., imagery analysis, GIS, and landscape modeling on flood emergencies, oil spills, and health epidemics). The Project would build on the technical capacity developed under the USAID project.

4. Institutional:

4.1 Executing agencies:

The Executing Agency would be the Ministry of Environment and Natural Resources (MENR). The MENR's Department of Protection, Use and Restoration of Natural Resources would have overall responsibility for project coordination and supervision of project progress. The MENR has sufficient capacity to implement the project, as evidenced by its successful completion of three GEF-financed activities: the Transcarpathian and Danube Delta biodiversity protection projects and the National Biodiversity Strategy/Action Plan.

4.2 Project management:

The MENR would contract a small nonprofit Ukrainian NGO (Intereccentre) as the Project Implementation Unit (PIU). The PIU is staffed by a director, procurement specialist, and accountant, and is experienced in managing Bank projects. InterEcoCentre served as the PIU to the MENR in the three GEF-financed activities referenced in section 4.1, and has assisted bilateral donors in implementing additional projects. The three small regional PIU offices would assist with project implementation at the local levels will require training in Bank procedures when they are established early in project implementation.

4.3 Procurement issues:

An assessment of the PIU's capacity to implement the project's procurement plan was carried out in September, 2000. The review addressed legal aspects, procurement cycle management, organizations and functions, support and control systems, record keeping, staffing, general procurement environment and made a general risk assessment of the PIU. The review rated the project's risk with regard to procurement as high. The following actions would be implemented to mitigate this risk: (i) project funds would be allocated to provide training for the PIU procurement staff in Bank procurement and English language; (ii) a consultant would be contracted under the project for one year to prepare procurement documents and train the PIU procurement staff; (iii) supervision missions would include a accredited procurement specialist to post review and resolve pending issues, including a minimum review of ten contracts representing different procurement methods; (iv) the Grant Agreement would allow for procurement through IAPSO as an alternative to the International Shopping procedure; (v) a book including all the standard bidding documents for relevant procurement methods would be provided to the PIU prior to project launch; and (vi) the project launch workshop would include a comprehensive seminar on procurement and financial management, including preparation of bidding documents for each type of procurement method proposed in the Grant Agreement.

4.4 Financial management issues:

The financial management accountability framework of Ukraine has not been the subject of a detailed review by the Bank/IBRD. However, primarily because of other implementation considerations, any weaknesses that may exist in that framework has been mitigated for this project by (a) the appointment of the Interecencentre (PIU) as the project implementing agency, an agency with considerable experience of implementing similar projects, and (b) by requiring the Bank's no-objection to both the auditors and the terms of reference for the audit required under the project. Weaknesses in the Ukraine banking sector will be mitigated by the use of a bank deemed eligible by the Bank to house the project's Special Accounts. These weaknesses neither compromise the fiduciary responsibilities of the recipient nor of the Bank.

5. Environmental: Environmental Category: B (Partial Assessment)

5.1 Summarize the steps undertaken for environmental assessment and EMP preparation (including consultation and disclosure) and the significant issues and their treatment emerging from this analysis.

The project's environmental impact will be positive. The environmental impacts and mitigations summarized here were presented and discussed with local stakeholders (governmental and non-governmental) at two workshops in the project region during project preparation. An Environmental Management Plan prepared during project preparation will be implemented to ensure there are no unexpected impacts. The EMP adequately addresses the four environmental issues of the project, none of which are significant:

1. The areas included either as expansions of protected areas or newly created protected areas are natural habitats currently used for grazing and fishing. These land and resource uses are not expected to change under the project, although improved natural resource use measures are expected to reduce the intensity of uses in high conservation value areas.
2. The project would finance small-scale construction and/or renovation of protected area infrastructure in and around existing infrastructure to minimize impacts to natural habitats.
3. The project protected areas are expected to attract recreational tourists, who must be managed to minimize disturbance to wildlife and natural communities. The project's national parks and regional landscape parks are relatively large areas which include sites already dedicated to recreational use. The park administration will be responsible for ensuring that existing and future recreational uses are consistent

with both local livelihoods and the biodiversity conservation objectives of the park. The sites contain sensitive bird nesting and foraging sites where recreation is now prohibited or restricted. These will be maintained under the project, and reflected in the protected area management plans prepared under the project. The management plans will include a chapter on visitor management, which will summarize measures taken to protect sensitive sites of high biodiversity value.

4. The agriculture component would finance measures to improve crop and soil management (e.g., through conservation tillage and manure management) and in landscape and habitat management (e.g., by reducing or eliminating grazing pressure on unplowed steppe and creating tree/shrub buffers along water courses). Each of these activities will have positive environmental benefits through reductions in soil erosion and nutrient runoff. The criteria identified in the operational manual, which will be used to select individual investments, will exclude investments with adverse environmental impacts.

5.2 What are the main features of the EMP and are they adequate?

Mitigation measures provided for in the EMP are adequate and include:

1. Changes in land and resource use. No mitigations are required.
2. Small-scale construction and/or renovation of park buildings: (i) The facilities chapter of the protected area management plan will identify infrastructural improvements to buildings and other small scale infrastructure of the protected area, and how environmental impacts will be mitigated, based as needed on inventories of flora and fauna; (ii) the Ministry of Environment and Natural Resources will supervise preparation of site specific environmental plans before issuing permits for construction activities, in accordance with the Ukrainian environmental assessment and coastal protection laws, and (iii) local communities will be represented on the Local Advisory Committees which collaborate with park administrations on all aspects of protected area planning and implementation.
3. Increased visitor use: (i) the management plans will include a chapter on visitor management, which will summarize measures taken to protect sensitive sites of high biodiversity value; and (ii) sensitive sites of high biodiversity value where recreation is now prohibited or restricted will be maintained under the project, and reflected in the protected area management plans. Both steps have included in the EMP.
4. Sustainable agriculture. The criteria identified in the operational manual, which will be used to select individual investments, will exclude investments with adverse environmental impacts. This has been included in the EMP.

5.3 For Category A and B projects, timeline and status of EA:

Date of receipt of final draft:

5.4 How have stakeholders been consulted at the stage of (a) environmental screening and (b) draft EA report on the environmental impacts and proposed environment management plan? Describe mechanisms of consultation that were used and which groups were consulted?

The environmental impacts and mitigations were presented and discussed with local stakeholders (governmental and non-governmental) at two workshops in the project region during project preparation.

5.5 What mechanisms have been established to monitor and evaluate the impact of the project on the environment? Do the indicators reflect the objectives and results of the EMP?

Implementation of the EMP is included in the Grant Agreement as the Recipient's responsibility. Its implementation will be monitored as part of the Bank's supervision of the project.

6. Social:

6.1 Summarize key social issues relevant to the project objectives, and specify the project's social development outcomes.

The project design incorporates the findings of the Social Assessment (SA), the preparation activities of key stakeholders, and workshop consultations with local stakeholders around the three proposed protected areas (Preazovski in Zaporizhe oblast, Meotida in Donetsk oblast, and Sivash in Crimea). The results of the SA are summarized in Annex 11.

A key social issue in relation to the project objective is the need to preserve local communities' access to natural resources. The key stakeholders in this issue are resource user groups (fishermen, farmers, and hunters), the public sector managers (mainly the Ministry of Environment and Natural Resources and oblast and rayon governments), and individuals and NGOs active in environmental issues. The three new protected areas to be financed under the project are two national parks (Preazovski and Sivash) and a regional landscape park (Meotida), where access to resources would be maintained and the project technical assistance would emphasize sustainable uses.

The key social development outcome is increased participation of local communities in the management of the project protected areas.

6.2 Participatory Approach: How are key stakeholders participating in the project?

The project approaches the key social issue identified in paragraph 6.1 by: (i) ensuring the participation of local communities and user groups in governance and implementation activities; and (ii) financing protected areas which maintain access to resources and promote sustainable use. With regard to (i), the resources user groups and local governments would be included in the local advisory committee for each project protected area, and would be beneficiaries of investments to improve natural resources management and agricultural practices.

6.3 How does the project involve consultations or collaboration with NGOs or other civil society organizations?

The project was developed in collaboration with national and international NGOs. National NGOs would be involved in project management, technical studies, education and awareness activities, and would participate in the small grants program.

6.4 What institutional arrangements have been provided to ensure the project achieves its social development outcomes?

The inclusion of local communities and user groups into the protected areas management activities was initiated during preparation through collaborative workshops which defined the objectives and activities for the project protected areas. These objectives and activities have been incorporated into the project design. The same stakeholders will participate in local advisory committees for individual protected areas to guide the implementation of these plans. Also, the small grants program would finance conservation activities by local communities, organizations, and individuals outside of the three project protected areas.

6.5 How will the project monitor performance in terms of social development outcomes?

Socioeconomic surveys would continue under implementation to monitor the attitudes and needs of local stakeholders and communities and provide feedback on project results .

7. Safeguard Policies:

7.1 Do any of the following safeguard policies apply to the project?

Policy	Applicability
Environmental Assessment (OP 4.01, BP 4.01, GP 4.01)	<input checked="" type="radio"/> Yes <input type="radio"/> No

Natural Habitats (OP 4.04, BP 4.04, GP 4.04)	<input type="radio"/> Yes <input checked="" type="radio"/> No
Forestry (OP 4.36, GP 4.36)	<input type="radio"/> Yes <input checked="" type="radio"/> No
Pest Management (OP 4.09)	<input type="radio"/> Yes <input checked="" type="radio"/> No
Cultural Property (OPN 11.03)	<input type="radio"/> Yes <input checked="" type="radio"/> No
Indigenous Peoples (OD 4.20)	<input type="radio"/> Yes <input checked="" type="radio"/> No
Involuntary Resettlement (OD 4.30)	<input type="radio"/> Yes <input checked="" type="radio"/> No
Safety of Dams (OP 4.37, BP 4.37)	<input type="radio"/> Yes <input checked="" type="radio"/> No
Projects in International Waters (OP 7.50, BP 7.50, GP 7.50)	<input type="radio"/> Yes <input checked="" type="radio"/> No
Projects in Disputed Areas (OP 7.60, BP 7.60, GP 7.60)*	<input type="radio"/> Yes <input checked="" type="radio"/> No

7.2 Describe provisions made by the project to ensure compliance with applicable safeguard policies.

With regard to the Environmental Assessment OP (4.01), the Project is rated Environmental Category "B". An Environmental Management Plan (EMP) prepared during project preparation was discussed with local stakeholders (governmental and non-governmental). The EMP will be implemented under the project, the progress for which will be part of project supervision (see also Section 5 above).

With regard to the Natural Habitats OP (4.04), the project would not support the conversion of natural habitats, would not construct linear features that would cut through natural habitats, would not affect the water supply to or drainage from natural habitats, and would not result in the resettlement or migrations of people that might adversely impact natural habitats. Rather, the project would help to protect and manage fragile ecosystems.

With regard to the Forestry OP (4.36), the project would provide technical assistance for improved management of shelterbelt forests in the agricultural landscape. The project would not directly or indirectly result in the loss of forests of high ecological value and would not finance commercial logging operations.

F. Sustainability and Risks

1. Sustainability:

The Project is designed to support sustainability in four areas: social, institutional, ecological, and financial. With regard to social sustainability, the project's investments in participatory protected areas management and agriculture were developed in collaboration with local communities, farmers, and user groups. The project's investments in public education and biodiversity protection and use regimes which balance strict protection with sustainable uses (mainly fishing, grazing, and hunting) will promote better informed involvement of local communities and user groups, and contribute to social sustainability. Training and other investments in institutional strengthening, and income generation through small scale tourism and user fees will promote institutional and financial sustainability. The issue of ecological sustainability of the protected areas is being addressed along two main lines. First, the proposed Sivash and Preazovsky National Parks and other improvements to the protected area network were identified during project preparation based on gaps in the protected area network with respect to ecological representativeness and area, and on threats to the highest biodiversity sites. Second, the corridor planning and sustainable agriculture activities which are to be implemented through the small grants programs will address habitat linkages within the corridor and the need for improved agricultural practices in the buffer zones of Ramsar sites.

2. Critical Risks (reflecting the failure of critical assumptions found in the fourth column of Annex 1):

Risk	Risk Rating	Risk Mitigation Measure
<p>From Outputs to Objective Economic conditions will weaken government support for environmental initiatives, slow project implementation, and prevent project objectives from being achieved</p>	M	Project would be implemented by existing institutions which have long term support from Ukrainian government. The project would improve the cost-effectiveness of the regulatory framework. GoU's counterpart funding requirements are incorporated into the legal agreement, and budgetary appropriations for part of these requirements have been adopted through Presidential Decree.
<p>Lack of public support for biodiversity conservation and protected areas</p>	M	Stakeholder groups that participated in project preparation, including representatives of hunting and fishing organizations and villages, indicated their support for the project. The project design takes into account their concerns and provide opportunities for their involvement in implementation.
<p>From Components to Outputs Insufficient institutional capacity to implement the project in a manner that achieves most or all of the objectives and outputs.</p>	M	The project will build capacity the local and regional staff of the MENR and oblast government; NGOs; and the technical specialists through training programs, study tours and provision of equipment.
Overall Risk Rating	M	

Risk Rating - H (High Risk), S (Substantial Risk), M (Modest Risk), N (Negligible or Low Risk)

3. Possible Controversial Aspects:

None

G. Main Conditions

1. Effectiveness Condition

Condition of effectiveness:

Prior to effectiveness, a project auditor, acceptable to the Bank, must be selected.

Condition of disbursement:

Prior to disbursement for Small Grants under Components 2 and 4, the Recipient has adopted Small Grants Guidelines that are satisfactory to the Bank.

2. Other [classify according to covenant types used in the Legal Agreements.]

Management:

The Recipient will maintain a Project Implementation Unit under terms of reference and qualifications satisfactory to the Bank.

The Recipient will maintain a financial management system acceptable to the Bank and have the financial records, accounts and financial statements for each fiscal year audited and submit a certified audit report to the Bank within six months after the end of each fiscal year and also at the closing of the project.

Project Implementation:

The Recipient will provide the funds, facilities, services, and other resources needed for the Project.

The Recipient will submit its annual work plans and project budgets for each year of project implementation not later than November 30 of each year for review by the Bank.

The Recipient will furnish to the Bank, on or about June 30, 2004, a report on the progress of the project (incorporating the results of monitoring and evaluation activities) and sets out measures for achievement of project objectives for rest of Project.

Monitoring, Review and Reporting

The Recipient will maintain policies and procedures adequate to monitor and evaluate on an ongoing basis, in accordance with indicators satisfactory to the Bank, the carrying out of the project and the achievement of the project's objectives.

The Recipient will prepare, on the basis of guidelines acceptable to the Bank, and furnish to the Bank not later than six (6) months after the Closing Date or such later date as may be agreed for this purpose between the Recipient and the Bank, a plan for the future operation of the Project.

H. Readiness for Implementation

- 1. a) The engineering design documents for the first year's activities are complete and ready for the start of project implementation.
- 1. b) Not applicable.
- 2. The procurement documents for the first year's activities are complete and ready for the start of project implementation.
- 3. The Project Implementation Plan has been appraised and found to be realistic and of satisfactory quality.
- 4. The following items are lacking and are discussed under loan conditions (Section G):

I. Compliance with Bank Policies

- 1. This project complies with all applicable Bank policies.
- 2. The following exceptions to Bank policies are recommended for approval. The project complies with

all other applicable Bank policies.

Phillip Brylski
Team Leader

Marjory-Anne Bromhead
Sector Manager/Director

Luca Barbone
Country Manager/Director

Annex 1: Project Design Summary

UKRAINE: Azov Black Sea Corridor Biodiversity Conservation

Hierarchy of Objectives	Key Performance Indicators	Monitoring & Evaluation	Critical Assumptions
<p>Sector-related CAS Goal: CAS Objective (08/16/00): Environmentally sustainable development</p>	<p>Sector Indicators: No significant loss of biodiversity or degradation in Azov-Black sea wetland corridor. Development of nature based tourism.</p>	<p>Sector/ country reports: External country and sector reports</p>	<p>(from Goal to Bank Mission) Improved environmental management builds the economy and alleviates poverty</p>
<p>GEF Operational Program: GEF Operational Program: Support in-situ conservation, sustainable use, and capacity building</p>	<p>Creation of protected areas Increased capacity for sustainable management of protected areas</p>	<p>Official gazette Project corridor monitoring system</p>	

Hierarchy of Objectives	Key Performance Indicators	Monitoring & Evaluation	Critical Assumptions
<p>Global Objective:</p> <p>Conserve coastal biodiversity within the Azov-Black Sea coastal corridor by strengthening the protected area network and mainstreaming biodiversity conservation into the agricultural landscapes that connect them, and by building support at the national and international levels for sustainable development of the region's unique biological landscape.</p>	<p>Outcome / Impact Indicators:</p> <p>Improved protection and sustainable use of biodiversity in 250,000 hectares of high priority gazetted coastal wetlands and associated upland sites;</p> <p>Increased support for biodiversity conservation, marked by increased participation of local communities in protected area management and conservation activities;</p> <p>Land use plans adopted that integrate new and existing Protected Areas and other environmental issues prepared in six participating oblasts;</p> <p>Farm management plans to reduce nutrient runoff under implementation on 10,000 hectares of coastal farmland;</p> <p>Improved nutrient reduction and erosion control measures under implementation in all participating coastal rayons;</p> <p>5,000 hectares of forest belts under sustainable use, with defined roles of farms in their management.</p>	<p>Project reports:</p> <p>Official gazette</p> <p>Project corridor monitoring system</p> <p>Project implementation reports</p> <p>Surveys of key species</p> <p>Protected Area Management Plans</p>	<p>(from Objective to Goal)</p> <p>Economic and political conditions allow government to continue support for environmental initiatives</p>

Hierarchy of Objectives	Key Performance Indicators	Monitoring & Evaluation	Critical Assumptions
<p>Output from each Component: Support Protected Areas Management</p> <p>Output 1. Studies / consultations to establish protected areas completed</p> <p>Output 2. Capacity for managing protected areas strengthened</p> <p>Protected Area and Corridor Planning</p> <p>Output 1. Key natural areas identifies and conservation targets established.</p> <p>Output 2. Landscape level monitoring program established</p> <p>Output 3. Coastal Protected Area Plan finalized</p>	<p>Output Indicators:</p> <p>Preazovsky and Sivash protected areas created by end of 4th year.</p> <p>Management and monitoring plans prepared and under implementation for 3 or more protected areas by 3rd year.</p> <p>25% of the agreed infrastructure & equipment in place by the end Year 3; 40% by the end of Year 4; 65% by the 5th year.</p> <p>30% of park staff have taken at least one training course by 3rd year; 50% of wardens have taken training course by 5th year.</p> <p>GIS inventory, confirmed by ground truthing, by end of 1st year.</p> <p>Results of inventory and conservation targets endorsed at workshop in 2nd year.</p> <p>Information database and annual reports available by 2nd year</p> <p>At least 2 publications in peer-reviewed journals each year on monitoring results</p> <p>Migratory annual bird counts</p> <p>Natural Corridor Plan adopted by government by end of 2nd year.</p> <p>Draft land use plans in</p>	<p>Project reports:</p> <p>Presidential Decree for approval and gazetting protected areas</p> <p>Territorial plan for zoning and management</p> <p>For all Outputs: PIU reports, supervision mission reports, PA gazettements</p> <p>Report on workshop results/findings and agreements reached</p> <p>GIS corridor maps</p> <p>Government decree</p> <p>Gazette of oblast Government</p>	<p>(from Outputs to Objective)</p> <p>Government assigns and maintains protected area staff and provides adequate financial support for maintaining newly established protected areas.</p> <p>Support of local and central government and local communities</p> <p>National legislation incorporates essential elements of corridor plan</p> <p>Support from rayon</p>

<p>Output 4. Land use plans for the coastal corridor prepared that take into consideration biodiversity conservation concerns</p>	<p>Kherson and Crimea (around proposed Sivash NP) completed by end of 2nd year.</p> <p>Draft land use plans in Odessa, Mykolaiv, Zaporizhia, Donetsk coastal zones completed by end of 3rd year.</p> <p>Plan of land organization of buffer of Sivash NNP approved by rayon administrations by 5th year.</p>	<p>decisions</p>	<p>government and land owners</p> <p>Rayons support role of oblast government in regional land use planning</p>
<p>Build Capacity and Support for Biodiversity Conservation</p>			
<p>Output 1. Increased capacity and awareness of target groups regarding biodiversity conservation</p>	<p>For primary and secondary schools: Environmental education program for school teachers implemented at 1 or more teachers' colleges by end of 2nd year</p> <p>Publication of education materials and delivery of short courses at target schools by end of 2nd year.</p> <p>For waterfowl hunters: waterfowl and wetlands conservation manual for hunters published by end of 2nd year</p> <p>For environmental NGOs: small grants program 20% disbursed by end of 2nd year, 50% disbursed by end of 3rd year.</p> <p>NGO conservation projects</p>	<p>Books, guides and other publications</p> <p>Small grants guidelines</p>	<p>Increased awareness influences actions.</p> <p>Teachers willing to take on additional teaching responsibilities.</p>
<p>Output 2. Increased regional cooperation in corridor resource management</p>	<p>Two regional workshops hosted on implementation of African Eurasian Waterbird Agreement, one by end of 2nd year.</p> <p>MOU on cooperation in</p>	<p>Workshop results (publication)</p> <p>Memorandum of</p>	<p>Neighboring countries maintain interest in cooperation</p>

	management of migratory waterbirds and wetlands signed by three or more European countries in the flyway by end of 4th year	Understanding	
Demonstrate biodiversity friendly agriculture practices			
Output 1. Biodiversity-friendly agricultural practices, through improved on-farm management of soil and runoff, and improved shelterbelt forest management demonstrated on pilot farms and replicated on additional farms through small grants program.	Small grants program disbursing funds by end of 2nd year At least 25 farms participating in small grants program by beginning of 4th year	Small grants operational manual; disbursement reports	Agreement of land owners to changes in the structure of farm land use.
Output 2. Farmers trained in biodiversity friendly agricultural practices	Training conducted for farmers and extension institutes by end 2nd year	Agriculture training manuals	
Output 3. Dissemination of best practices and lessons learned from pilot farms	Brochures on the agricultural activities and results, including economic analysis, disseminated by 4th year Publications in local press, presentations on radio.	Media dissemination material	
Project Management and Information Dissemination			
Project communication support program established.	Email communication among managers and coordinators operational by 1st year	Web sites/email addresses Project progress reports	Project managers and implementing agencies can access electronic mail and actively contributing to communication program
Project Management Reports (PMRs) produced	Information and data, including monitoring data, on project progress results available in electronic and paper form by end of 1st year. Project web-site operational by end of 2nd year. PMRs produced annually		

Hierarchy of Objectives	Key Performance Indicators	Monitoring & Evaluation	Critical Assumptions
Project Components / Sub-components: 1. Support Protected Areas Management 2. Support Protected Area and Corridor Planning 3. Build Capacity and Support for Biodiversity Conservation 4. Demonstrate biodiversity friendly agricultural practices 5. Project Management and Information Dissemination	Inputs: (budget for each component) US\$4.78 million* US\$0.77 million* US\$1.65 million* US\$1.08 million* US\$1.02 million*	Project reports: For all components: Progress reports; Disbursement reports; Supervision reports; Site visits; PMRs;	(from Components to Outputs) Protected Areas legally established Adequate and timely counterpart funding Local communities and NGOs interested in participating in awareness programs Farms interested in participating in project

* Note: Costs do not include the US\$16.0 million in associated IBRD funds or the US\$7.2 million in parallel financing that are listed on the financing page.

Annex 2: Detailed Project Description

UKRAINE: Azov Black Sea Corridor Biodiversity Conservation

Introduction

Ukrainian territory covers 37% of the Black and Azov Sea coasts and includes the most diverse and extensive coastal wetland and nearshore marine habitats in the Black Sea region. The coastal region contains a mosaic of globally and internationally significant wetland and marine communities, agricultural lands, factories, and major population centers, with an estimated 7 million inhabitants. These wetland and marine ecosystems are threatened by habitat loss and degradation.

The shallow fresh and salt water communities and mudflats wetlands on the Ukrainian coasts of the Black and Azov seas comprise one of the largest wetland complexes in Europe. Natural communities unique to Europe there have survived the large scale development policies for agriculture. The most important of these total more than 650,000 hectares, including 250,000 hectares of interconnected shallow saline lagoons and mudflats in the Sivash ecosystem of northern Crimea, have been designated Ramsar sites at 16 locations. The wetland and adjoining upland steppe habitats function as the Azov-Black Sea Ecological Corridor along the northwestern border of the Black Sea and which provide critical wintering and feeding habitat for millions of geese, ducks and waders that overwinter there or utilize the wetlands for feeding and resting on their annual migration between northern Europe and Siberia and Africa. Fifteen of the 27 European threatened bird species stopover or breed in these wetlands, including the majority of the world's populations of the white pelican and the red-breasted goose and 60% of the world population of the broad billed sandpiper.

The region also contains undisturbed steppe, Ukraine's most endangered habitat. These species-rich steppe communities support a large number of endemic plant and animal species. Together, the marine, wetland, and adjoining steppe communities support more than 100 species found in the Red Data Book of Ukraine and the IUCN Red List. The terrestrial and marine biota of the project region have been impacted by human activities. Steppe habitat in the project region has been largely converted to developed or cultivated uses and some wetlands have been converted to fish ponds and other agricultural uses (e.g., rice farms). Pollution from point sources (e.g., from municipal wastewater, industry, and shipping) and non-point sources (e.g., agricultural runoff), as well as fresh water intrusion, has degraded aquatic communities and reduced their value as foraging habitat for migratory birds. Overharvesting has greatly reduced the *Phyllophora* algal fields which support abundant and diverse benthic and fish communities.

The root causes of the degradation of the Black Sea ecosystems are: (i) large scale conversion of wetlands and steppe communities on the coast of the Black and Azov Sea coast to farmland; (ii) pollution from point sources (e.g., from municipal wastewater, industry, and shipping) and non-point sources (e.g., agricultural runoff) which contribute to eutrophication; and (iii) poor land use planning. These have resulted in drainage of wetlands, destruction of fish spawning grounds, pollution from domestic, municipal, and industrial wastes and agricultural runoff, and unsustainable resource and land use practices.

The project objective is to conserve coastal biodiversity within the Azov-Black Sea coastal corridor by strengthening the protected area network and to mainstreaming biodiversity conservation into the agricultural landscapes which connect them. The project would implement the recommendations of the GEF-financed (and now completed) Black Sea Environmental Program (BSEP), which produced the Strategic Action Plan and a national report on coastal zone management, and the Biodiversity Enabling

Activity which produced the biodiversity strategy/action plan and national report. The project would implement key activities in the 1996 Strategic Action Plan for the Rehabilitation and Protection of the Black Sea that was prepared and ratified by all six littoral states of the Black Sea under the BSEP. These activities will focus on the wetland and upland communities and agricultural lands along the northwest shelf of the Black Sea in coastal Ukraine.

The government of Ukraine is committed to changing the practices that have contributed to the degradation of the region and to address the policies that have supported these practices. Ukraine ratified the Convention on Biodiversity in February 7, 1995 and is a signatory of the 1992 Bucharest Convention on the Protection of the Black Sea Against Pollution, the Bonn and Bern Conventions, and the Agreement on the Conservation of African-Eurasian Migratory Waterbirds. Ukraine is also a signatory of the Odessa Ministerial Declaration (1993) and of the Strategic Action Plan for the Rehabilitation and Protection of the Black Sea (1996). In 1998, the Cabinet of Ministers approved an ordinance on the Protection and Recovery of the Environment of the Azov and Black Seas that specifically supports efforts in biodiversity conservation, sustainable use of land and marine resources, and integrated coastal zone management.

By Component:

Project Component 1 - US\$7.91 million

Support Protected Areas Management (US\$3.31 GEF, 0.5 IBRD, 4.1 other)

Component Objectives. The objective of the protected areas component is to support biodiversity conservation in a short list of highest priority sites within the corridor. This list currently includes existing protected areas (Chornomorsky Reserve, Meotida Regional Landscape Park, and Granite Pobuzhia Regional Landscape Park) and proposed protected areas (Sivash and Preazovsky National Park). The WWF Partners for Wetlands Project will finance existing protected areas in Odessa oblast, including the Danube Delta Biosphere Reserve as a follow-on investment to the GEF-financed Danube Delta biodiversity project (now completed).

Expected Results. The protected areas management activities would improve the protection and sustainable use of biodiversity at critical sites in the corridor by strengthening public sector management and improving participation of local communities and NGOs.

The project would strengthen the network of marine and terrestrial protected areas in the corridor through the creation or expansion of protected areas at priority sites identified in the draft Coastal Protected Area Plan, and through the preparation and implementation of management plans for these sites. The sites and activities are summarized in the table below. These activities would be implemented in partnership with Flora and Fauna International (financed through the U.K. Department of International Development) and Wetlands International (financed through the Government of the Netherlands).

Implementation of the draft Coastal Protected Areas Plan that was developed during preparation has begun, financed by national and regional governments: (i) Chornomorsky Biosphere Reserve was expanded (from 52,000 to 87,000 ha) through the addition of key marine areas and upland steppe sites; (ii) Meotida Regional Landscape Park was created; (iii) technical studies for the creation of Sivash National Nature Park were initiated, and Kalinovsky Regional Landscape Park (12,000 ha) was created to improve protection of its wetland and upland sites, and as a first step in creation of the park (which will include the regional landscape park); and (iv) technical studies for the creation of Preazovsky National Nature Park were completed.

Proposed Protected Areas Activities			
Protected Area	Status	Project Activity	Partnerships
<i>Jurisdiction of National Government</i>			
Chornomorsky Biosphere Reserve	Existing Biosphere Reserve	Preparation & implementation of management plan	GEF, GoU
Sivash National Nature Park	Proposed; Proposal drafted during preparation	Creation of National Nature Park; Preparation & implementation of management plan	GEF, GoU (Crimea), Wetlands International U.K. DFID/EKHF
Preazovsky National Nature Park	Proposed	"	GEF, GoU, U.K. DFID/EKHF Wetlands International
<i>Jurisdiction of Oblast Governments</i>			
Meotida Regional Landscape Park	Established in 2000	"	GEF, GoU (Donetsk oblast), U.K. DFID/EKHF
Granite Steppe Pobuzhya Regional Landscape Park	Designated by oblast authorities in early stages of implementing meaningful protection	Preparation & implementation of management plan	GEF, GoU (Mykolaiv Oblast)

Activity 1.1: Studies and consultations for the creation/expansion of protected areas

The project would finance the consultation processes and studies needed to finalize the creation or expansion of protected areas. This will include: (i) workshops with local land and resource users and landowners, governmental agencies at all levels, and non-governmental organizations; (ii) technical studies on sustainable use of land and water resources, hunting, and fishing in areas zoned for such uses, and justification of the protection regime, and gazettelement of boundaries; and (iii) preparation of necessary legal documents.

Activity 1.2: Strengthen protected areas management at priority sites

Management plans would be prepared for the five sites identified in the table above. The management plans would cover the protected area and its buffer zone, which includes land in private and cooperative ownership. These management plans would be brief and targeted, focusing on priority management needs. The plans would identify the mix of appropriate land uses and activities, and the requirements to support and maintain these areas (e.g., warden patrolling needs). Management plans for upland sites,

based on partnership agreements with the owners, would focus on natural means of habitat restoration through changes in agricultural and grazing practices. Resource management plans for fisheries and grazing would be implemented with the assistance of local users groups.

The protected areas would be divided into zones appropriate for the levels of protection and management required, including zones for strict protection and sustainable use within the protected area and a surrounding buffer zone outside of the protected area. Management plans would be prepared with a 5 to 10 year time horizon, focusing on the zones within the protected area and the following main activities, in consultation or collaboration with local communities:

- i) rapid biological assessment and monitoring. The first stage of the management planning process would be to update information on the status and threats to biodiversity within the protected area and buffer zone, which would provide inputs to park and landscape management planning options. Each management plan would provide for monitoring of specific biological parameters to fill major gaps in the existing information on the biodiversity of the protected area, to inform park zoning and management and to evaluate the results of management actions. Local communities in the park planning process and the preparation of the management plan.
- ii) protected area and wildlife management. The management plan would identify habitat and resource management activities, including grazing practices, to effect the restoration of threatened steppe habitats and improve protection for the most sensitive sites (e.g., sand spits with native vegetation and nesting birds), through improved education and control of illegal activities.
- iii) environmental education. An environmental communication program would be developed for each protected area to raise the level of environmental awareness through preparation of interpretive materials for visitors of the protected areas, teacher education seminars, and ecological education camps for school children. These education activities would target the local communities in the buffer zone of the protected areas whereas the environmental education activities described under component one would target schools and institutions in the corridor but outside of the protected area buffer zones.
- iv) infrastructure and equipment. The project would finance limited infrastructure and equipment to support the basic management needs of the protected areas. The infrastructure would include establishment of the park and reserve boundaries, renovation of existing buildings for park management, and small infrastructure needed to accommodate visitor use, such as hiking trails, observation towers for birdwatching, and information centers for tourists. The protected areas administration will be provided with essential equipment such as computers, vehicles, boats, and office and field equipment.

Activity 1.3: Support Professional Development in Protected Areas Management and Administration, Wetlands Conservation and Management

The project would finance the expansion of the professional development and training program currently being offered through U.K. EKH/DFID to include protected areas outside of the Donetsk region. The training activities would focus in the following areas:

- i) *Protected areas administration and management planning.* The project would provide training in public administration, enabling appropriate private sector development, natural resources management, and participatory planning and management. The component would be

implemented in two phases: (1) building capacity in park administration for the developing and implementing business plans for enterprises; community relations, financial management, and national/international fund raising; and (2) technical training of scientific staff in management plan preparation/implementation .

ii) *Wetland and waterbird ecology and management and Monitoring.* Reserve biologists, oblast government staff, technical college instructors, and NGOs would receive training in wetlands management at site, watershed, and landscape levels, and in wetlands hydrology. The training would focus on methods for the management and protection of wetlands, including tools in habitat management and wetland use by migratory waterbirds. Principles and practices of waterbird monitoring would also be covered, including basic life history strategies, microhabitat use related to vegetation structure and water regime, food habits and wetland productivity, and migrational strategies. A training program in wetland and waterbird monitoring would be developed and implemented by Wetlands International, and financed by the Dutch government. This program would assist with the improvement of facilities of key organizations engaged in waterbird monitoring, and would provide training in the collection, management, and analysis of baseline data, and long-term monitoring of migratory waterbird populations, waterbird breeding colonies and rare/endangered species.

iii) *Warden skills.* Warden staff would receive training to improve their effectiveness at enforcement and to promote their expanded role in reserve monitoring and public education. This training will be provided by the wardens of the Danube Delta Biosphere Reserve, which received warden training in Ukraine and the Netherlands under the Ukraine Danube Delta GEF project (completed in 1998).

The Rural Land Titling Project will work with the biodiversity project to identify and gazette lands under "state reserve" and protected areas within the boundaries of former collectives in the project region and in their vicinities. This will apply especially to the boundaries of zapovedniks (strictly protected areas under national management), zakasniks (protected areas under local authorities), forests (under the committee on forestry), and streams and rivers (some of which are to remain under state ownership and management). The two projects will also clarify the management regimes and responsibilities for these areas. The Programmatic Adjustment Loan (PAL) will reform the management of the environment fund, an important source of discretionary funding for Ukraine's environmental priorities, to be used in part for improved financing for the management of protected areas in the corridor.

Project Component 2 - US\$5.57 million

Support Protected Area Corridor Planning (US\$0.61 GEF, 4.0 IBRD, 0.96 other)

Component Objectives. The objective of this component is to promote coastal protected area planning and to mainstream biodiversity conservation into protected area and land use planning.

Expected Results. The results would be: (i) completion of an assessment of natural assets of the corridor; (ii) a finalized coastal protected area plan based on participatory consultations with a full range of stakeholders, and endorsed by regional and national government; and (ii) prepare and implement land use plans for coastal raions on the Azov and Black seas.

In the course of project preparation, activities to integrate biodiversity conservation objectives in the corridor were developed that link the project with the \$60M IBRD Ukraine Rural Land Titling Project (FY '02), which will award land titles to individual farmers within the former kolхозes (farm collectives)

which have been privatized but are now being managed as joint stock companies. The two projects will pilot mainstreaming of environmental protection (especially of biodiversity values) into the land titling process for former collective farms surrounding the Ramsar sites addressed under the GEF project.

Activity 2.1: Identify Key Corridor Natural Areas

The project will finance a rapid biological appraisal of natural areas, including steppe, forest, and wetland habitats, based on remote sensing and field surveys. The surveys will identify important fishery spawning grounds, waterbird foraging and nesting sites, movement corridors, and other ecologically important features of the corridor. The surveys and subsequent consultations with stakeholders at the local, regional, and national levels will be used to: (i) identify priority conservation targets throughout the corridor and measures for their conservation; and (ii) provide inputs to finalize the draft protected area plan developed during project preparation, with emphasis on landscape-level linkages among protected areas at the local, regional, and national levels. The technical measures to improve protection, public education and awareness activities, etc. would be eligible for financing under the competitive small grants program for biodiversity conservation (activity 3.3). A national conference would be held at the end of the first year of implementation to disseminate and endorse the results of the corridor assessment. Wetlands International will provide technical assistance for undertaking and publishing field inventories of wetlands in the corridor.

Activity 2.2: Establish Landscape Level Monitoring

The project would establish a monitoring program to determine trends in the status of biodiversity in the corridor, to gauge the health of coastal ecosystems at the landscape level, and to monitor impacts to the key Ramsar sites that are receiving support under the project. The specific subjects and methods of data collection would be identified by protocols developed in parallel with the survey of corridor natural areas. This monitoring system would focus on indicators of ecosystem health such as: (i) area of natural habitats; (ii) migratory waterbird numbers, which are considered an important indicator of flyway function; and (iii) studies on the status and autecology of individual indicator species, some of them threatened in Ukraine. The oblast departments of environment (regional branches of the MENR) and the protected areas administrations, with technical assistance of specialists from the Academy of Sciences, would be responsible for implementing the monitoring program and maintaining it after project completion. The monitoring results would be disseminated in electronic form (email and the project website) and paper reports to state institutes and organizations and NGOs engaged in monitoring activities, oblast environment departments, and the public. Wetlands International will provide technical assistance for annual and seasonal waterbird surveys in the corridor.

Activity 2.3: Finalize Natural Corridor Plan

During preparation, a draft coastal protected area plan was developed based on a ranking of natural wetland and upland sites within the corridor, according to the following criteria: biodiversity significance, representatives of threatened wetland and steppe communities, and priority for achieving the project objectives. Most of the high priority sites are existing or proposed national nature parks and biosphere reserves, which are managed at the level of national government under the direct or indirect jurisdiction of the MENR. A second tier of protected areas consists of *zakasniks* and Regional Landscape Parks which are under the jurisdiction of local and oblast (regional) government. Both types of protected areas are links in the coastal protected area network.

The MENR, including its five regional departments in the coastal oblasts, and the Crimean State

Committee for Environment and Natural Resources, NGOs, and local stakeholders would finalize the Coastal Protected Area Plan. The plan would consist of: (i) a strategic vision for Ukraine's coastal protected areas based on the extensive data available on biodiversity and social significance of the sites. This would be developed based on workshops with local stakeholders and in congruence with internationally accepted (i.e., IUCN, Wetlands International) criteria for protection and management; (ii) an economic analysis of the role of protected areas in local economies and financing needs for their long-term operation that emphasizes cost recovery mechanisms.

A publication summarizing the Coastal Protected Area Plan, its objectives, and the activities planned for its implementation would be prepared under the direction of the MENR with the participation of regional departments and NGOs, and would be incorporated into the land use plans that will be prepared under the project. This publication would be one of the materials used to raise public awareness and understanding of the project and the importance of wetlands conservation in the project region, and would be presented for adoption at a national conference in year two.

Activity 2.4: Prepare Land Use Plans to Improve Land Use Practices Within the Corridor

The project would work with local and regional governments to prepare land use plans in the coastal zones of the five participating oblasts and the zone of influence around proposed Sivash National Nature Park in Crimea. The land use plans would support integration of environmental objectives in coastal land and resource use. The planning process would involve the identification of zones, sites, habitat patches, corridors and natural barriers and would develop model plans for management. These plans may include small scale restoration activities to minimize biodiversity loss and promote dispersion of particular species. The plans would also identify actions at both the policy level and in terms of technical assistance that would be needed to achieve longer term land use objectives. The project would also build capacity at the oblast and rayon levels for implementing these plans.

The land use plans would be piloted in Kherson oblast, which includes Chornomorsky Reserve, and in Crimea, which includes the zone of influence around the proposed Sivash National Nature Park. In the second phase of this effort, based on lessons learned and models developed in the two project focal areas, land use planning activities would be undertaken in the coastal zones of Odessa, Mykolaev, Zaporizhia, and Donetsk oblasts.

The Rural Land Titling Project will work with the biodiversity project under this component to implement the technical and consultative process for land titling, including identifying lands to remain in state ownership and the agency responsible for their management, and build consensus on ownership and use of non-agricultural and marginally productive agricultural lands within the former collective boundaries. The projects will: (i) develop cadastre maps of farm parcels and natural habitats based on satellite imagery and aerial photos, to map environmentally important areas (small rivers, forests, wetlands) around key Ramsar sites in the corridor; (ii) assess the environmental management needs of lands within the former collective farm, including soils conservation and management of on-farm wetlands; (iii) evaluate the feasibility of developing conservation easements, with favorable tax incentives, for uses of environmentally sensitive, marginal agricultural lands. Ukrainian agricultural, land management, and environmental institutes will carry out these assessments for each former collective, and incorporate the results into the land titling outputs.

Project Component 3 - US\$ 7.14 million

Build Capacity and Awareness in Biodiversity Conservation (US\$1.27 GEF, 4.0 IBRD, 1.87 other)

Component Objectives. The objective of this component is to build capacity and awareness in local communities, user groups (e.g. hunters and farmers), public sector agencies, and NGOs on the Project's activities in the corridor, and to promote regional cooperation in biodiversity and wetlands conservation.

Expected Results. The planning activities would yield: (i) educational programs on wetlands conservation for primary and secondary schools, reaching an estimated 20,000 pupils; (ii) wetland and waterfowl conservation books for hunters and public sector agencies and field guides on biodiversity of the corridor ; (iii) strengthened civil society engaged in corridor conservation activities; and (iv) improved cooperation among public sector actors in the region (including neighboring countries) in wetland and waterfowl conservation.

Activity 3.1: Support Environmental Education

The project would support environmental education activities to build awareness in wetlands conservation and management in selected urban and rural kindergartens, schools and universities of the project region. The project would fund educational materials (curricula, brochures and other printed material), equipment, and program costs (e.g., transportation costs) for primary and secondary schools. The programs for primary and secondary schools would be developed by Melitopol Pedagogical University. An environmental education training in the local teachers' college and a wetlands and waterbird management curriculum for Melitopol Agro-technical college and Zaporizhia University would be developed in cooperation with universities of the project region and international consultants.

The education program would be implemented through environmental education programs at local institutions (Donetsk State University, Kherson Teachers' Training College, Mykolaiv Teachers' Training College, Odessa State University, Simferopol State University), and would target 20 secondary schools and 20 kindergartens, reaching a target population of approximately 20,000 pupils and scholars. By including post-graduate teachers' training and establishment of a mobile educational program, these educational efforts would be extended into smaller towns and rural areas. Additional environmental education and awareness activities will be eligible for funding through the small grants program on a competitive basis (see below).

The project would finance preparation of a field guide on the birds of coastal Ukraine as a tool in promoting awareness and understanding of biodiversity in the corridor. The book would fill a gap in the availability of educational materials on rare and endangered birds of Ukraine, that is essential to the project's education and awareness building activities. Preparation of the book was initiated through a small grant from the Dutch government. The project would finance the costs for completing the guide and printing 5,000 copies.

Activity 3.2: Build Capacity in Environmental NGOs

The project would build capacity in two groups of NGOs engaged in activities important for biodiversity conservation in the corridor:

- (i) Environmental NGOs would receive in-country training to increase their capacity for achieving biodiversity conservation outcomes through:
 - business skills and office management. This would involve training in basic business practices and office management, including management systems, financial and accounting

practices, marketing strategies, and proposal preparation and fund-raising;

- use of the media in environmental advocacy. This will involve training in public relations in nature conservation, including design, planning, and organization of campaigns, contact with journalists and media, NGO-networking and public relation activities, and design of publications and information materials;
- modern of environmental education and nature interpretation, including conceptual framework, analysis and definition of target groups, choice of reserve-specific themes, methods and design of events and activities, implementation and evaluation of programs, and long-term planning and capacity building in environmental education; and
- workshops for the exchange of regional expertise with NGOs to promote networking and cooperation inside and outside Ukraine (e.g., Wetlands International, Euronatur, IUCN, WWF).

(ii) Non-governmental associations of hunters in the corridor would receive training in wetland conservation and waterfowl management. Hunting grounds in the project region are under lease and management to hunting groups, the largest of which is the Ukrainian Association for Hunters and Fishermen. These hunting organizations are responsible for managing game populations, monitoring population trends, and supporting the recovery of selected threatened species (e.g., from the Red Book of Ukraine). The clubs function as non-governmental organizations and their common interest in wetlands conservation and waterfowl management and their presence in virtually all local communities makes them an important target group for capacity building under the project. The project will finance preparation of a hunter's manual, building on similar manuals used elsewhere in Europe and North America, which teaches hunters best practices in wetland and waterfowl conservation and sustainable use. The manual will be used as a manual in a series of training workshops for hunting associations in the corridor. The project will also assist the hunting associations in organizing an umbrella conservation organization dedicated to wetlands and waterfowl management and conservation, modeled on the North American organization, Ducks Unlimited.

Activity 3.3: Establish a Small Grants Program to Build Support for Biodiversity Conservation

The project would establish a small grants program to support activities by local communities and NGOs which promote biodiversity conservation in the protected areas and their support zones, and build awareness and support among local communities of the project and the role of individuals and non-governmental organizations in achieving these. The PIU would: (i) prepare and disseminate the Small Grants Guidelines, including description, scoring and selection criteria, and call for proposals; (ii) hold workshops with local communities to build understanding of the objectives and criteria for selection and administration; (iii) monitor implementation of the individual grant contracts, and (iv) publish annual summaries of the competition, including descriptions of proposals received and selected, and the basis for their selection; and (iv) organize a conference and awards program in years three and five of the project for participants in the program to review results and disseminate the lessons learned. Individual grants would be made on a competitive basis under transparent criteria and procedures. The eligibility criteria for individual projects would include direct support of protected area and conservation management objectives.

Activities would be considered throughout the defined ecological corridor. NGOs, local administrations,

community interest and resource user groups, individuals and local communities would be eligible, but not staff of the government agencies engaged in project implementation. The activities to be financed would include:

- i) Conservation support to priority Ramsar sites and steppe areas. The corridor contains a number of proposed and existing protected areas which are of global significance, as recognized in the draft coastal protected area plan. The following sites are important elements of the coastal protected area network, and are not receiving financing under component 1 of the project. proposed Dniester National Nature Park, (Odessa oblast), Tiligul Regional Landscape Park (Mykolaiv oblast), Azov Sivash National Nature Park (Zaporizhia oblast), Dnpro Delta, Kinburn Regional Landscape Park, Dzarylgach zakasnik, and Askanya Nova biosphere reserve (Kherson oblast). For these sites, activities by NGOs, user groups, community interest groups, and local governments which improve the protection and management of these areas would be eligible for financing on a competitive basis through the small grants program.
- ii) Technical studies and proposals to integrate biodiversity conservation objectives into local economic activities. Grants would be provided for incremental protection and restoration of wetland and marine resources or resource bases that are under exploitation by local users, user groups, and community interest groups. This could include financing of incremental costs to non-governmental actors to undertake field and other technical studies to improve knowledge about biodiversity in the corridor and proposals to convert military reserves to protected areas. The corridor contains a number of wetland and undisturbed steppe communities which are within military reserves which are being considered for conversion to other land uses and ownership. The small grants program may finance education activities, workshops, and technical studies for the improved protection and management of these areas.
- iii) Environmental awareness and education proposals. The project would support the development and implementation of community-based environmental education and awareness activities such as community based environmental awareness programs, workshops on biodiversity conservation and protected areas management, and school competitions and conferences on environment.

Activity 3.4: Promote Regional and International Cooperation

The project would support regional and international cooperation in wetland conservation and waterfowl flyway management, and exchange of regional expertise, through the following:

- i) Two international conferences would be held on implementation of international agreements related to wetlands and waterbird conservation to which Ukraine is a signatory (Ramsar, Bern, and Bonn Conventions, including the Agreement on the Conservation of African-Eurasian Migratory Waterbirds). The outputs of these workshops would be technical reports and a draft cooperative agreement in waterfowl and flyway management among the riparian countries of the Black Sea (Ukraine, Romania, Bulgaria, Turkey, and Georgia), including coordinated annual waterbird censuses.
- ii) Exchange of regional expertise. Natural resource biologists from the riparian countries of the Black Sea would meet annually to share data and the results of monitoring activities and collaborate on wetlands habitat and waterbird conservation issues. The workshop results would be translated and published. Discussions will include knowledge of existing population data sets,

banding data, habitat inventory, habitat degradation, and challenges to the resource.

Regional working visits would also be arranged for the region's protected area managers, ecologists and environmentalists, and for administrators and environmentally active politicians. The visits would promote the cooperation of the region's biodiversity conservation management and administration. Participants would come from the project area's protected areas management, ecological education and training centers, ornithological stations, scientific biological, agricultural and forestry institutes, NGOs among other things. The administrative level would be typically represented by Oblasts' environmental, land use and forestry departments. Where appropriate, Rayon administrations (agriculture) could be involved as well.

Project Component 4 - US\$9.78 million

Demonstrate biodiversity friendly agriculture practices (US\$0.84 GEF, 7.5 IBRD, 1.44 other)

Component Objectives. The objective of the agricultural component is to support changes in agricultural land use and production methods which reduce agricultural impacts on biodiversity in the project protected areas, and which are economically sustainable. The component would: (i) provide technical assistance to key stakeholders (farmers, agricultural institutes responsible for extension services, and NGOs) on sustainable agriculture practices and their application in coastal Ukraine, and on the environmental and economic benefits of these practices; and (ii) implement a competitive small grants programs (SGP) for improved on-farm management practices which have direct biodiversity conservation benefits for the priority protected areas in the corridor. This component would be implemented in collaboration with the Rural Land Titling project, which will implement environmental management practices into the land titling process for former collective farms in the corridor.

The project would improve the contribution of the agricultural landscape to the corridor's biodiversity, based on three principles:

- *Agricultural lands contain important biodiversity.* Although the crop and range lands contain substantially lower biodiversity values than natural habitats, they can be managed to maintain important biodiversity. Agricultural land *per se* contains a greater or lesser degree of diversity at the landscape level and hosts a species and genetic diversity which is profoundly affected by the production methods and land use applied. For example, the unploughed steppe communities that surround the protected areas targeted under the project support a number of threatened species, and migratory waterfowl rely on these and cropland habitats for forage.
- *Agricultural lands can support biodiversity values in core conservation areas.* Water, air, flora and fauna are exchanged across the borders between core conservation areas and neighboring agricultural land. The specific agricultural practices employed can profoundly affect the physical and biological environment within the core areas. Agricultural lands also serve as open space corridors between protected areas.
- *Demonstration of the interdependence of agricultural lands and protected areas is necessary for the sustainability of protected area functions.* Farmland and woodland comprise approximately 80% and 8 %, respectively, of the land use in the project region. Agricultural production remains the primary source of income for people in areas adjacent to core conservation areas and an important component of Ukrainian national production. The sustainable use of biodiversity in the agricultural production landscape is important for conserving biodiversity in the corridor, including in protected areas. The expansion of conservation areas and development of 'biodiversity-friendly' agricultural technology is

key to creating and maintaining farmers' positive attitude, and is necessary for the long-term success of conservation activities in protected areas.

Expected Results. The agriculture activities would: (i) engage 25 or more farms around the project protected areas to implement sustainable agriculture practices; and (ii) quantify the economic benefits of these practices to improve their replicability elsewhere in the corridor.

Activity 4.1: Train farmers, agricultural institutes, and NGOs in biodiversity-friendly agriculture activity

The agricultural component would be initiated through a training program in sustainable agriculture for farmers, agricultural institutes, and NGOs. Farm staff, agricultural institute staff, and NGOs would receive training in the agricultural practices of the component and in the financial issues that would influence project sustainability. These would include:

- workshops/courses on environmental issues in agriculture and the design and rationale of the project. For each of the farms contracted to undertake project activities, a group with a representative mix of age, gender, work duties and specialization would receive the training.
- economics and profitability of sustainable agriculture activities.
- specialized training in agriculture, forestry, and farm management for the farms contracted under the project.
- technical assistance to farms to assist them to prepare and implement plans that integrate management of croplands, grazing meadows and range lands, and shelterbelt forests to achieve biodiversity benefits.

Activity 4.2: Implement On-farm Investments in Sustainable Agriculture

The Project would implement a competitive small grants programs (SGP) for improved on-farm management practices which have direct biodiversity conservation benefits for the priority protected areas in the corridor. The approach of the program would be as follows:

Implementation Procedures and Eligibility. An outreach and education activity (activity 4.1) would target eligible farms in an information campaign designed to build awareness and support for the activity and provide instructions to farmers on how to apply to the SGP.

A competitive small grants program would fund: (i) works and goods to be undertaken by the farm or farmers association to improve management of soil, nutrients, livestock and livestock waste, and riparian areas, and protection of natural habitats; and (ii) technical or other services by agricultural institutes, farmers/farmer associations, and NGOs to provide training or to disseminate the techniques and lessons learned.

Eligible farms would be those around the project's main protected areas where improved on-farm management of soil, nutrients, and natural habitats would have direct benefits for biodiversity conservation objectives the improved to environmental would be eligible. This would include an estimated 25 farms around Chornomorsky, Sivash, Preazovsky, Meotida, and Dniester. Successful applicants to the small grants would receive technical assistance, delivered through an agrarian institute and international

specialists.

Each of the farms selected to participate in the SGP would receive assistance through the technical assistance and training activity to prepare a brief farm plan which identifies improvements in on-farm environmental practices and an agreement on the improvements to be implemented under the project. The farm plans will specify changes in uses of certain areas -- areas of low inherent productivity and high environmental costs-- from arable or agricultural production and measures to reduce nutrient runoff. These areas will be used for protection purposes (e.g., biodiversity conservation areas, shelter belts) and/or for less intensive production (pastures and hay meadows). The farm plans would also specify additional measures to reduce erosion and nutrient runoff (e.g., the use of swales to hold runoff).

Contributions of farmers. Farmers will co-finance the agricultural investments through donation of farm staff services to implement the activities and 30% co-financing of goods (excluding seeds) to implement the project.

Activities to be Financed: The project would implement sustainable agricultural practices which improve the management of soil, nutrients, livestock and livestock waste, and water bodies, and protect natural habitats (forests, steppe, and wetlands). The project would finance the partial costs of equipment, goods (seeds, fuel, etc.), and the full training costs and other consultant services to implement a range of farm activities, including:

i) Improvements in crop and soil management through:

- use conservation tillage and contour tillage practices: employing conservation tillage to improve protection of soil against wind and water erosion by avoiding periods of bare soil, compaction and disturbance of biogenic soil structures decrease topsoil loss and soil degradation.
- improved manure storage
- maximize the duration that soils are covered by crops, through a combination of increased use of winter crops, leaving stubble fields unplowed until spring, undersowing with grass and/or legumes for fodder or green manure, and establishing perennial pastures and hay meadows.
- implement plant nutrient management plans which rely more on green manure and less on fertilizers, and based on soil testing technology, to decrease the rate of plant nutrient application per area unit and season.
- diversify crop selection of species- and cultivar-wise, to reduce reliance on pesticides and promoting natural species diversification and higher levels of agricultural biodiversity; and
- selection of pasture species to improve soil coverage and drought resistance.

ii) Improvements in landscape and habitat management by:

- reducing tillage on land sloping in excess of 5 degrees to reduce soil erosion and loss, and

increase landscape biodiversity

- restoring biodiversity in degraded and unproductive agricultural areas by allowing areas to naturally recover (e.g., by reducing or eliminating grazing pressure on unplowed steppe).
- improving the management of tree shelter belts to reduce wind erosion and maintain landscape and species diversity. The forest stands in the agricultural landscape provide food and shelter for animals, and are an important component of corridors for flora and fauna. They also provide fuelwood and non-timber forest products to local communities.
- creating leaving no-till buffer strips along watercourses to reduce physical degradation of embankments, soil erosion, and water pollution, and increase landscape diversity and corridors for flora and fauna (breeding as well as migrating).
- creating artificial wetlands/reedbeds for wildlife and where eutrophying solutes can degrade before discharge to stream courses and the Black Sea.

The Rural Land Titling Project and the biodiversity project will work together to assess the environmental management needs of lands within the former collective farm, including soils conservation and management of on-farm wetlands. The projects will also evaluate the feasibility of developing conservation easements, with favorable tax incentives, for environmentally sensitive, marginal agricultural lands. Ukrainian agricultural, land management, and environmental institutes will carry out these assessments for each former collective, and incorporate the results into the land titling outputs. The WWF Partners for Wetlands and the TACIS Lower Danube Lakes project will assist with the development of organic agriculture in Odessa oblast, and are promoting the establishment of European markets for agricultural products.

Project Component 5 - US\$2.12 million

Project Management and Information Dissemination (US\$0.87 GEF, 1.25 other)

The project would finance the operating costs of a Project Implementation Unit (PIU) which reports to the Ministry of Environment and Natural Resources. The PIU will be responsible for contracting for the delivery of goods, works, and consultant services to implement the project, and will work under the direction of the Project Steering Committee. The PIU staff will include a project director, financial management specialist, accountant, and one or more procurement specialists.

Activity 5.1: Establish communication support program.

The PIU would be responsible for developing a communication support program to serve (i) those engaged in project activities, and (ii) stakeholders/interested public outside of the project. A communication system would be developed to facilitate project management and enable effective collaboration. In its first phase, the selected groups engaged in project implementation (environment departments of the five oblasts and the Crimean State Committee for Environment and Natural Resources, protected areas, and NGOs) would be provided with internet capability (hardware, software, and training), to serve as one of the main day-to-day communication systems for the project. The communication support program would also be developed to disseminate information to the public and increase their awareness of the project and its results. This would be accomplished through establishment and operation of a web site and homepage of the project. Co-financing for this activity will be provided by the Danish development assistance organization Danida.

Annex 3: Estimated Project Costs
UKRAINE: Azov Black Sea Corridor Biodiversity Conservation

Project Cost By Component	Local US \$million	Foreign US \$million	Total US \$million
1. Support Protected Areas Management	3.08	0.98	4.06
2. Support Protected Area and Corridor Planning	0.57	0.09	0.66
3. Build Capacity and Support for Biodiversity Conservation	1.38	0.13	1.51
4. Demonstrate Biodiversity Friendly Agriculture Practices	1.00	0.03	1.03
5. Project Management and Information Dissemination	0.75	0.10	0.85
Total Baseline Cost	6.78	1.33	8.11
Physical Contingencies	0.24	0.06	0.30
Price Contingencies	0.80	0.09	0.89
Total Project Costs¹	7.82	1.48	9.30
Total Financing Required	7.82	1.48	9.30

Project Cost By Category	Local US \$million	Foreign US \$million	Total US \$million
Works	0.87	0.05	0.92
Goods	1.03	0.89	1.92
Consulting Services, Training and Workshops	2.65	0.53	3.18
Small Grants	1.44	0.00	1.44
Incremental Operating Costs	0.66	0.01	0.67
Recurrent Costs	1.17	0.00	1.17
Total Project Costs¹	7.82	1.48	9.30
Total Financing Required	7.82	1.48	9.30

Note: Costs included here reflect actual costs of the Azov-Black Sea Corridor Biodiversity Conservation Project and do not include US\$16.0 million in associated IBRD funds and US\$7.2 million in parallel financing listed on the financing page.

¹ Identifiable taxes and duties are 1.06 (US\$m) and the total project cost, net of taxes, is 31.44 (US\$m). Therefore, the project cost sharing ratio is 21.95% of total project cost net of taxes.

Annex 4

UKRAINE: Azov Black Sea Corridor Biodiversity Conservation INCREMENTAL COSTS AND GLOBAL ENVIRONMENTAL BENEFITS

Overview

1. The project objective is to conserve coastal biodiversity on the Azov-Black Sea by strengthening the protected area network and mainstreaming biodiversity conservation into the agricultural landscapes which connect them. The GEF Alternative will: (i) support protected areas management; (ii) support protected area and corridor planning; (iii) build capacity and awareness of biodiversity conservation; and (iv) demonstrate biodiversity friendly agriculture practices. This will include prioritizing, managing and monitoring a network of marine and terrestrial protected areas in the corridor along the northwest shelf of the Black Sea to maintain the corridor's ecological functions, preparing land use plans to improve agricultural and other land use practices that mainstream biodiversity conservation objectives into development priorities, and building support and cooperation for wetlands conservation through environmental education and small grants programs. The GEF Alternative intends to achieve these outputs at a total incremental cost of approximately US\$32.5 million, of which a grant of US\$6.9 million is requested from GEF. The Government of Ukraine has committed to financing US\$1.7 million of its resources, and oblast governments are providing US\$0.4 million. The U.S. Government, UK Know How Fund, Dutch Government, Danish Government, EC TACIS program and World Wide Fund for Nature (WWF) are providing a total of US\$7.2 million to complement GEF funding. Additionally, GEF funds are leveraging US\$16.0 million in associated IBRD funds, under the Programmatic Adjustment Loan and the Rural Land Titling Project, and US\$0.3 million in private contributions (co-financing from farmers participating under Component 4).

Context and Broad Development Goals

2. Ukrainian territory covers one-third of the Black Sea coastlines and includes the most diverse and extensive coastal wetland and nearshore marine habitat in the region. The shallow fresh and salt water communities and mudflats comprise one of the largest wetland complexes in Europe, and serve as key components of an ecological corridor that links natural communities in the northern Black Sea region and provide critical wintering and feeding habitat for over one million waterbirds migrating through the northwest shelf along various Eurasian-African flyways. Fifteen of twenty-seven European threatened bird species stopover or breed in the Black Sea, and the wetlands support the majority of the world's populations of the white pelican, red-breasted goose, and pygmy cormorant. Sixty percent of the world's population of the broad-billed sandpiper use the wetlands for stopover and molting. The region's undisturbed steppe habitats are likewise species rich and support a large number of endemic plant and animal species. Together, the marine, wetland, and adjoining steppe communities support more than 100 species found in the Red Data Book of Ukraine and the IUCN Red List.

3. The terrestrial and marine biota of the region have been heavily impacted by human activities. Steppe habitat in the region has been largely converted for agricultural cultivation and other purposes, while wetlands have been converted into fish ponds, rice farms, and other agricultural lands. Agricultural runoff, especially from rice farming, introduces fresh water and organic pollutants into the brackish wetlands, degrading the benthic and fish communities and reducing their value as foraging habitat for migratory birds. Eutrophication and pollution from various point and nonpoint sources has likewise impacted marine communities. The root causes of environmental degradation in the Black Sea region include: inadequate land use planning; inadequate enforcement of existing laws; public programs which

undermine efforts to protect environmental resources; and limited financial resources for promoting conservation activities in the region.

4. The broad development goals of the Ukraine focus on private sector development; public sector restructuring, social protection and poverty alleviation, and environmental protection. The Government of Ukraine has taken important steps toward improved environmental management in recent years, giving broad powers to the Ministry of Environment and Natural Resources; producing, with external cooperation, an environmental study to identify policy and investment priorities; preparing a Biodiversity Strategy and Action Plan with support from the World Bank/Global Environment Facility; developing a strategy for phasing out chlorofluorocarbons and other ozone-depleting substances; and closing the remaining units Chernobyl. Over the medium term, the Government aims to modernize environmental standards and related regulatory infrastructure; decentralize authority for environmental management and regulatory activities to improve local programs and encourage accountability; strengthen management of protected areas and expand these areas to include formerly public and military land; introduce conservation measures that respond to changes in agriculture and forestry, as well as to progress in land privatization; and support projects that combine economic opportunities with environmental or conservation measures.

Baseline Scenario

5. Since the 1980s, poor economic performance in the former Soviet Union in general, and Ukraine in particular, led to runaway inflation, rapidly increasing debt, and a virtual collapse of exports. Poverty, which was not completely unknown in Ukraine and the other republics prior to the breakup of the former Soviet Union, increased significantly, leading to shortages of food and other consumer goods. Following independence in 1991, economic output in Ukraine dropped by 26 percent by 1994, agricultural production fell by 25 percent while consumption declined precipitously in real terms, an estimated 32 percent from 1991 to 1994. Since 1994, the economy has stabilized; nonetheless, the increase in poverty among Ukrainians triggered a variety of short-term economic activities with long term implications.

6. Over the last five decades, Ukraine's Black Sea coastline has been transformed from a diverse ecosystem supporting a rich variety of coastal and marine species to one that has been severely degraded by eutrophication, agricultural activities, and industrial pollution. Intense pressure from grazing, silviculture, agriculture, fishing, hunting and trapping, and upstream pollution, has severely impacted the once diverse and large populations of fish and birds as well as rare mammals. In response to these activities, the Government of Ukraine has begun to act to protect important natural resources and to preserve biodiversity, most notably through the Black Sea Environment Program. These activities are principally coordinated by the Ministry of Environment and Natural Resources (MENR), which was created in 1991 to administer environmental programs and policies throughout Ukraine.

7. Through MENR, the Government of Ukraine is coordinating national, regional, and local efforts in the Black Sea region related to natural resource management, coastal protection and integrated coastline management, air and water pollution, environmental monitoring and environmental impact assessments, capacity building and public awareness. Over the next five years, it is expected that the sum of activities related to environmental protection in and around the project area is approximately US\$25 million. Of this total, slightly more than twenty percent of activities are directed towards biodiversity conservation and bioresources, or US\$5.6 million. In addition, a number of activities which will be completed by the estimated starting date of the GEF Alternative, and thus are not included in the Baseline Scenario, include activities related to Ukraine's participation in the Black Sea Environment Program (BSEP). In 1996, the BSEP produced the *Black Sea Strategic Action Plan*, which addresses means to reverse environmental

degradation in the region.

8. Ukraine's Enabling Activities for Biodiversity, which were completed in 1998, have allowed for the formulation of strategies and actions necessary for the protection and sustainable use of the nation's biodiversity in accordance with Article 6 and 8 of the Convention on Biological Diversity. In addition, Ukraine's first National Report to the Conference of the Parties has been prepared. Associated objectives of these activities included definition and/or refinement of priorities for the conservation and sustainable use of biological and landscape diversity; guidance of activities under the Pan-European Biological and Landscape Diversity Strategy to meet key GEF objectives, and promotion of institutional and public awareness regarding the conservation and sustainable use of the nation's biological diversity.

9. **Donors.** A number of natural resources management and biodiversity conservation activities in Ukraine are being financed by other development agencies, or will be under implementation through IBRD projects. These and the Government's contributions are summarized in the Incremental Cost Analysis matrix and discussed below:

i) The IBRD Rural Land Titling Project and Programmatic Adjustment Loan (PAL) will support the Government of Ukraine's reform program, setting the basis for sustained economic growth, poverty reduction and improved environmental protection. The Rural Land Titling Project (\$60m) would issue land ownership titles to farmers and other rural land owners and help educate farmers about their land rights. As a contribution to the GEF Alternative, it would also map environmentally important areas (small rivers, forests, wetlands) around key Ramsar sites in the corridor, educate farmers and local governments about sustainable uses of these, and build consensus on ownership and use of non-agricultural and marginally productive agricultural lands within the collective boundaries. One of the key themes of the PAL reform program is to develop an integrated environmental permitting and fine system which improves financing mechanisms and incentives for reducing air and water pollution. The outcome of the environmental component of the PAL (\$250m) will include (i) inventory of industrial and other polluters throughout the country; (ii) strengthened financing mechanism for environmental protection; and (iii) pilot projects in compliance and monitoring. An estimated US\$33 million of the combined cost of the two operations will contribute directly towards environmental improvements. US\$16.0 million of this amount is estimated to contribute specifically towards biodiversity conservation and is, therefore, considered part of the incremental cost of the GEF alternative. The remaining US\$17.0 million is considered part of the baseline.

ii) USAID's Biodiversity Support Program, which is running regional workshops to identify conservation priorities and implementing an NGO small grants program for Crimean nature conservation activities (US\$250,000).

iii) Birdlife International activities including establishment of a field center and inventory of field sites and migratory waterbird status (US\$50,000).

iv) United Kingdom's Darwin Initiative, which is supporting protected area planning for wetlands and steppe areas in the Black Sea region (US\$35,000).

v) European Union activities targeted towards coastal conservation in the project area (US\$5,000).

10. **Costs.** Total expenditures under the Baseline Scenario are estimated at US\$22.94 million,

including US\$5.6 million from the Government of Ukraine and US\$17.34 million through international cooperation.

11. **Benefits.** Implementation of the Baseline Scenario will result in improved wastewater quality discharged into the Black Sea, limited protection of biodiversity in coastal areas and limited public awareness of the need for biodiversity conservation. However, marginal government resources directed to terrestrial, marine and wetland biodiversity in general and migratory waterbird species in particular are unlikely to ensure protection of globally significant biodiversity. NGO efforts will serve to marginally increase awareness of threats to biodiversity in the region. In terms of protecting biodiversity in Azov-Black Sea corridor, however, it is unlikely that the limited expenditures will have a significant impact in slowing agricultural encroachment into fragile habitats.

Global Environmental Objective

12. As a consequence of the current course of action, regarded as the Baseline Scenario, the Black Sea corridor will likely continue to lose marine, wetlands and upland communities, and hence the unique animal and plant species dependent upon these habitats. This is due to encroachment upon the Black Sea coastline for agricultural and aquaculture activities as well as pollution from domestic, municipal and industrial wastes. Given the present pressures of agricultural and other competing demands on environmental resources along the coastline, as well as the limited local capacity to protect these areas, the loss of marine, wetland, and upland areas will continue to threaten millions of migratory waterbirds which pass through the Mediterranean en route to Africa each year.

13. **Scope.** The GEF Alternative would build on the Baseline Scenario by developing and implementing a network of marine and terrestrial protected areas in the ecological corridor along the northwest shelf of the Black Sea; building capacity at the regional and local level to support decentralized conservation management; standardizing biodiversity monitoring efforts; expanding public awareness; supporting international cooperation aimed at protecting endangered migratory waterbirds, and demonstrating biodiversity-friendly agricultural practices. GEF funds have been critical for leveraging increased counterpart financing for protected areas management from the Government of Ukraine, local oblast governments and private donors, and the following parallel financing and co-financing:

- i) The U.K. Department of International Development (DFID) is financing technical assistance for protected areas management, including management plan preparation, staff training, community participation in protected areas management, and environmental education (US\$400,000).
- ii) Wetlands International, with funding from the Dutch Ministry of Agriculture, will provide technical assistance for undertaking and publishing field inventories of wetlands in the corridor, and for annual and seasonal waterbird surveys (US\$500,000).
- iii) United States Government is funding technical assistance for remote sensing and a GAP analysis of the Azov-Black Sea corridor (\$200,000).
- iv) World Wide Fund for Nature is implementing activities in conjunction with the Green Danube program that are targeted towards wetlands conservation as well as public education (US\$3.5 million).
- v) The Danish Government is contributing funds to support management of project activities,

especially protected area corridor planning and biodiversity-friendly agricultural activities (US\$600,000).

vi) The European Commission's Technical Assistance Program for CIS countries (TACIS) is supporting management of protected areas around the lakes of the lower Danube that are concentrated in the Odessa oblast, the western-most oblast of the corridor (US\$2.0 million).

14. **Costs.** The total cost of the GEF Alternative is estimated at US\$55.44 million, detailed as follows: (i) strengthen protected areas management - US\$11.25 million (*GEF financing - US\$3.31 million*); (ii) support protected area and corridor planning, including land-use planning and monitoring - US\$20.44 million (*GEF financing - US\$0.61 million*); (iii) build capacity and public support for biodiversity conservation through environmental education and public awareness programs - US\$9.75 million (*GEF financing - US\$1.27 million*); (iv) demonstrate biodiversity friendly agriculture practices - US\$11.88 million (*GEF financing - US\$0.84 million*); and (v) project management - US\$2.12 million (*GEF financing - US\$0.87 million*).

15. **Benefits.** Implementation of the GEF Alternative would protect unique coastal and marine landscapes and numerous threatened endemic species, as well as enhance the region's function as an internationally important flyway for waterbirds and other species. Benefits generated from the project would include those classified as "national" - protection of local and regional environmental resources and increased public awareness of environmental issues - as well as those considered "global" in nature. Global benefits would include the protection of migratory waterbirds, marine environments and species-rich steppe communities which support a large number of endemic plant and animal species, as well as outreach to and involvement of local communities and local governments in biodiversity conservation.

Incremental Costs

16. The difference between the cost of the Baseline Scenario (US\$22.94 million) and the cost of the GEF Alternative (US\$55.44 million) is estimated at US\$32.5 million. This represents the incremental cost for achieving global environmental benefits. Parallel and co-financing have been secured from bilateral donors for US\$7.2 million, and the associated IBRD Program Adjustment Loan and Land Privatization Project will contribute US\$16.0 million. In addition, the Government of Ukraine has committed to financing US\$1.7 million from its own resources to complement GEF funding; oblast governments are providing US\$0.4 million and counterpart financing requirements for the small grants program and donations from local businesses are contributing US\$0.3 million. A GEF grant of US\$6.9 million is proposed.

Incremental Cost Matrix

Component Sector	Cost Category	US\$ Million	Domestic Benefits	Global Benefits
Protected Areas management	Baseline	3.34	Limited capacity to plan and implement protected area management in wetland and upland sites	
	With GEF Alternative	11.25		Sustainable integrated conservation management at priority sites of internationally important biological diversity and buffer zones; meaningful participation of local stakeholders in protected area management activities.
	Increment	7.91		
Protected area and corridor planning	Baseline	14.40	Limited capacity to develop a network of protected areas in Azov-Black Sea corridor	
	With GEF Alternative	20.44		Increased local, national and international understanding of threats to globally significant biodiversity in Azov-Black Sea corridor
	Increment	6.04		
Public support for biodiversity conservation	Baseline	2.60	Public awareness of environmental issues and the need for sustainable natural resource management	
	With GEF Alternative	9.75		Increased local, national and international understanding of threats to globally significant biodiversity in Azov-Black Sea corridor and increased support conserve it
	Increment	7.15		
Biodiversity friendly agriculture practices	Baseline	2.60	Limited low-impact agricultural practices	
	With GEF Alternative	11.88		Reduced impacts on coastal and marine biodiversity from

				agricultural practices; increased awareness and use of biodiversity-friendly agricultural activities
	Increment	9.28		
Project management and information dissemination	Baseline	0.00	Not applicable	
	With GEF Alternative	2.12		Not applicable
	Increment	2.12		
Totals	Baseline	22.94		
	With GEF Alternative	55.44		
	Increment	32.50		

Annex 5: Financial Summary
UKRAINE: Azov Black Sea Corridor Biodiversity Conservation
Years Ending

	IMPLEMENTATION PERIOD						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Total Financing Required							
Project Costs							
Investment Costs	0.9	1.9	2.4	1.8	1.1	0.0	0.0
Recurrent Costs	0.3	0.2	0.2	0.3	0.2	0.0	0.0
Total Project Costs	1.2	2.1	2.6	2.1	1.3	0.0	0.0
Total Financing	1.2	2.1	2.6	2.1	1.3	0.0	0.0
Financing							
IBRD/IDA	0.8	1.6	2.0	1.5	1.0	0.0	0.0
Government	0.4	0.5	0.5	0.5	0.2	0.0	0.0
Central	0.3	0.4	0.4	0.4	0.2	0.0	0.0
Provincial	0.1	0.1	0.1	0.1	0.0	0.0	0.0
Co-financiers	0.0	0.0	0.0	0.0	0.0	0.0	0.0
User Fees/Beneficiaries	0.0	0.0	0.1	0.1	0.1	0.0	0.0
Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Project Financing	1.2	2.1	2.6	2.1	1.3	0.0	0.0

Main assumptions:

The line for IBRD/IDA financing refers to the GEF contribution. Costs do not include US\$16.0 million in associated IBRD funds or US\$7.2 million in parallel financing.

Annex 6: Procurement and Disbursement Arrangements

UKRAINE: Azov Black Sea Corridor Biodiversity Conservation

Procurement

Summary of Procurement Procedures.

Proposed procurement arrangements are summarized in Tables A and A1. Consulting services, goods and works financed by the Bank shall be procured in accordance to Bank procurement guidelines. All other procurement information, including capability of the implementing agency, estimated dates for publication of General Procurement Notice and the Bank's review process is presented in Tables B and B1.

Project Implementation Unit. The Ministry of Environment and Natural Resources (MENR) is the implementing government agency for this project, responsible also for policy guidance. A Project Implementation Unit (Interecocentre), under the supervision of MENR, will be responsible for procurement, accounting, financial reporting and auditing. Interecocentre served as Government's PIU for three earlier GEF grants and, as a result, has extensive experience managing projects in accordance with World Bank guidelines. Interecocentre will be responsible for (i) the whole cycle of procurement of all works, goods and services under the project, including filing/record keeping of all related operations and activities; (ii) assisting MENR to prepare an annual work program and budget, which will be approved by the Bank; and (iii) coordinating the delivery of technical assistance provided by international consultants.

Procurement Capacity Assessment. An assessment of the PIU's capacity to implement the project's procurement plan was carried out in September of 2000. The review addressed legal aspects, procurement cycle management, organizations and functions, support and control systems, record keeping, staffing, general procurement environment and made a general risk assessment of the PIU. The review rated the project's risk with regard to procurement as high. The following actions are advised to be implemented to mitigate this risk:

- i) Allocate project funds for activities that address the project's high risk rating, including sending Interecocentre's procurement specialist to courses on international procurement for projects financed by the World Bank Group.
- ii) Outsource a consultant knowledgeable (and with concrete experience) of procurement, as per Bank procurement rules, to start working on the procurement documentation and to assist Interecocentre in dealing with complex procurement activities and provide on-hands training to its staff. In order to expedite project procurement, this consultant should be sitting at Interecocentre for the first year of the project, with a second phase period to cope with the flow of procurement work on a "as needed basis", say 3 or 4 times a year. Considering the urgency of the task and the non-fluency in English of the two Interecocentre procurement staff, a Russian- or Ukrainian-speaking person should be hired. Hiring this consultant must be a condition *sine qua nonto* to commence the procurement of goods, works and technical assistance services under the proposed loan.
- iii) During the first year of project implementation the PAS for this project --or a procurement accredited staff-- should participate in two supervision missions. This frequency may change to once a year as (and if) the procurement capacity of Interecocentre is improved. During supervision missions the PAS for this project will allocate time for consultations with the staff on practical

procurement cases.

iv) A provision in the Procurement Schedule of the Loan Agreement will be made for IS, stating that procurement of vehicles, office equipment and computer hardware through IAPSO as an alternative to International Shopping procedure. Also, the Borrower is welcome to invite IAPSO to compete with other suppliers in procurement of those goods under International Shopping Procedures.

v) It is further recommended that the current procurement officer acquire more working knowledge of the English language to effectively handle international procurement. He should also be trained or attend procurement courses, before grant effectiveness, if possible.

(vi) A procurement book containing the Bank's standard procurement documents will be provided to Interecocentre during project negotiations.

(vii) The project launch workshop should devote adequate time to updating Interecocentre staff procurement skills. During this workshop, the contents of the procurement book should be explained to Interecocentre procurement staff.

(viii) A minimum of ten contracts representing different procurement methods (not subject to prior Bank review) should be reviewed by the Project Procurement Accredited Staff on an ex-post basis during the supervision missions;

(ix) Thresholds for prior review of contracts and per procurement method will be reasonably on the lower side until a follow-up review on Interecocentre's procurement capacity indicated the need for a revision to increase them.

Procurement of Goods and Works

Goods and works will be procured in accordance with the provisions of the "Guidelines for Procurement under IBRD Loans and IDA Credits" published by the Bank in January 1995 and revised in January and August 1996, September 1997, and January 1999. The appropriate standard procurement documents issued by the Bank will be used with the minimum changes acceptable to the Bank.

Participation of Government Owned Enterprises (GOEs) in procurement of goods and works. GOEs willing to participate in procurement of works and goods financed by the Bank in this project should meet the Bank's eligibility criteria: they should be financially and legally autonomous and operate under commercial law in Ukraine. Their status has to be properly clarified by interested GOEs before participating in any bid under this project.

Procurement of Civil Works (US\$0.71 million). Civil works are intended for construction and/or renovation of visitor centers, observation towers, information kiosks, trails and boat piers, planting and ecosystem restoration activities at the project sites, and for technical services/works to demarcate protected area boundaries. The following methods of procurement would be used:

National Competitive Bidding or NCB for Works (US\$0.40 million). NCB procedures will be applied for works contracts estimated to cost below US\$250,000. For these contracts the ECA Regional Bank standard NCB documents will be used. All contracts will be advertised in the national press or official gazette, to ensure that a wide range of contractors, including foreign contractors, if interested, can have the

opportunity to bid.

Procurement of Minor Civil Works or MCW (US\$0.31 million). Minor civil works contracts with an estimated cost below US\$50,000. These works will be procured under lump-sum, fixed price or unit rate contracts awarded on the basis of quotations obtained from at least three qualified local contractors in response to local advertisement. The bidding document shall include a detailed description of works, including basic specifications, the required completion period, a basic form of agreement consistent with the standard document to be cleared by the Bank and relevant drawings, where applicable. The award shall be made to the contractor who offers the lowest price quotation for work and who has the experience and resources to successfully complete the contract. A list of qualified contractors should be formed --and periodically updated-- by the PIU by requesting at least every six months expressions of interest and relevant information from local contractors while advertising local minor civil works contract opportunities.

Procurement of Goods (US\$1.86 million). Vehicles, radio communication equipment, boats and outboard motors, information technology, audio-visual equipment, field equipment, agricultural equipment, furniture, pre-fab warden stations, office equipment and supplies will be grouped to the extent practical to encourage competitive bidding. The following methods will be used:

International Competitive Bidding or ICB (US\$0.90 million). Goods contracts for procurement of vehicles, boats and outboard motors, information technology, radio-communication and agriculture equipment estimated to cost above US\$100,000 or more will be procured through ICB procedures.

National Competitive Bidding (US\$0.34 million). Goods contracts with an estimated cost less than US\$100,000 for the procurement of pre-fab warden stations (wooden houses) will be procured through NCB procedures using ECA standard NCB bidding documents. All contracts will be advertised in the national press or official gazette, to ensure that a wide range of contractors, including foreign contractors, if interested, have the opportunity to bid. It is envisaged that 2-3 packages of these pre-fab houses will be needed. Given the existence of several established local suppliers in Ukraine, it is unlikely that foreign companies would bid, since the contract will include delivery and set up. However, no foreign company would be disqualified, should it bid for these contracts.

International Shopping or IS (US\$0.22 million). Contracts for the procurement of information technology and field equipment estimated to cost less than US\$100,000 may be procured under IS procedures by obtaining competitive price quotations from at least three suppliers in two different countries. Award through IAPSO would be acceptable as an alternative to IS, and IAPSO could be invited as a supplier under the said IS procedures.

National Shopping or NS (US\$0.38 million). Goods contracts for vehicles, information technology, audio visual equipment, information signs, field equipment, furniture, seeds, published materials and agriculture equipment estimated at \$50,000 or less may be procured through using NS procedures.

Procurement of Consultants' Services (US\$2.69 million). Contracts for consultants' services will be awarded in accordance with the provisions of the "Guidelines for the Selection and Employment of Consultants by World Bank Borrowers" published by the Bank in January of 1997 and revised in September 1997 and January, 1999. The services financed under the grant are: technical assistance for protected area management and monitoring, land use planning, agricultural land use planning and public awareness, regional and other studies and small grant program management, etc. Selection of Consultants and their contracts will be based on the standard documents issued by the Bank for the procurement of such

services with the minimal necessary modifications as agreed by the Bank. Non-Governmental Organizations (NGOs) can compete in the selection process under the provisions of Bank Guidelines, provided that they have expressed their interest in doing so, and that their qualifications are satisfactory to both the Government and the Bank.

Selection of firms (US\$1.75 million). Quality-and Cost-Based Selection (QCBS) will be the preferred method for selection of firms in contracts with estimated values above US\$100,000. QCBS method will be used to select the technical assistance for designing and implementing the land use planning program and agriculture small grants program. Due to the nature and relatively small size (estimated to cost \$203,000) of the latter assignment, it is preferable that bidding for this contract be limited to eligible local firms and NGOs. Least Cost Selection Method will be applied to procurement of consultants to develop and maintain a corridor monitoring database, create a nature corridor map, organize international conferences, manage the biodiversity small grants program, implement the second phase of land use planning, and carry out annual audits. Services for developing a nature corridor and protected area plan, monitoring and education programs, field studies, field guides and designing and supervising civil works, etc., estimated to cost less than \$100,000 may be procured following selection based on Consultants Qualifications (CQ).

Selection of Individuals (US\$0.44). Unless otherwise agreed with the Bank, individual consultants will be selected on the basis of their qualifications for the assignment by comparing at least 3 CVs from potential eligible candidates. All consultancy positions estimated to cost \$10,000 or more will be advertised.

Small grants (US\$1.0 million financed by the Bank). Small grants to encourage public awareness of biodiversity and corridor conservation, sustainable resource use, park development, park-friendly business activities and biodiversity-friendly agriculture practices will be awarded to project beneficiaries on a competitive basis at each of the project sites. The mechanisms for awarding these grants, including establishing grant committees and developing eligibility criteria, procedures for application and a monitoring system, will be determined within the first year of project implementation with the participation of local stakeholders and will be submitted for the Bank's approval before implementation. Small grants in an average of \$4,000, will be available for consultant services, goods, and works, for a maximum amount of US\$25,000 for each grant. We can envision application of commercial practices for procurement below \$10,000, while national shopping procedures will be applied for procurement of goods estimated to cost \$10,000 and above.

Review by the Bank of Procurement Decisions.

Goods and Works: The following contracts are subject to Bank's prior review as set forth in paragraphs 2 and 3 of Appendix 1 to the Guidelines: (i) all ICB contracts; (ii) all contracts for goods and works to be procured through NCB; (iii) the first two contracts procured under IS procedures, the first two contracts procured under NS procedures and the first two contracts procured for Minor Civil Works are subject to prior review.

Consultants: With respect to consulting services, prior Bank review will be required for all terms of reference for consultant services. Contracts for services estimated to cost the equivalent of \$100,000 or more for firms are subject to Bank's prior review as set forth in paragraphs 2 and 3 of Appendix 1 to the Guidelines, as well as the first two contracts procured through LCS and CQ. For contracts with individuals amounting to \$25,000 or more, the qualifications, experience, terms of reference and terms of employment shall be furnished to the Bank for its review and approval prior to contract signature. All other contracts are subject to post review (one in 5 contracts). With respect to the selection of individuals, all

consultancy positions estimated to cost \$10,000 or more will be advertised.

Procurement methods (Table A)

Table A: Project Costs by Procurement Arrangements
(US\$ million equivalent)

Expenditure Category	Procurement Method ¹				Total Cost
	ICB	NCB	Other ²	N.B.F.	
1. Works	0.00 (0.00)	0.40 (0.32)	0.31 (0.25)	0.00 (0.00)	0.71 (0.57)
2. Goods	0.90 (0.90)	0.36 (0.29)	0.60 (0.42)	0.00 (0.00)	1.86 (1.61)
3. Services Training & Workshops	0.00 (0.00)	0.00 (0.00)	2.69 (2.69)	0.30 (0.00)	2.99 (2.69)
4. Small Grants	0.00 (0.00)	0.00 (0.00)	1.12 (1.00)	0.00 (0.00)	1.12 (1.00)
5. Incremental Operating Costs	0.00 (0.00)	0.00 (0.00)	1.14 (1.03)	0.00 (0.00)	1.14 (1.03)
6. Recurrent Costs	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.89 (0.00)	0.89 (0.00)
Total	0.90 (0.90)	0.76 (0.61)	5.86 (5.39)	1.19 (0.00)	8.71 (6.90)

^{1/} Figures in parenthesis are the amounts to be financed by the Bank Grant. All costs include contingencies.

^{2/} Includes civil works and goods to be procured through commercial practices, national shopping, consulting services, services of contracted staff of the project management office, training, technical assistance services, and incremental operating costs related to managing the project.

Incremental Operating Costs include: incremental expenses incurred on account of project management and monitoring, including office supplies and materials, postage, promotional materials, press releases and software upgrades, travel, operations and maintenance costs for vehicles and boats; and staff, communications and office space for the PIU only.

Recurrent Costs are financed 100% by Government and include protected area staff salaries and costs for legally establishing the protected areas.

Table A1: Consultant Selection Arrangements (optional)
(US\$ million equivalent)

Consultant Services Expenditure Category	Selection Method							Total Cost ¹
	QCBS	QBS	SFB	LCS	CQ	Other	N.B.F.	
A. Firms	0.38 (0.38)	0.00 (0.00)	0.00 (0.00)	0.53 (0.53)	0.84 (0.84)	0.00 (0.00)	0.30 (0.00)	2.05 (1.75)
B. Individuals	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.44 (0.44)	0.00 (0.00)	0.44 (0.44)
Total	0.38 (0.38)	0.00 (0.00)	0.00 (0.00)	0.53 (0.53)	0.84 (0.84)	0.44 (0.44)	0.30 (0.00)	2.49 (2.19)

1\ Including contingencies

Note: QCBS = Quality- and Cost-Based Selection

QBS = Quality-based Selection

SFB = Selection under a Fixed Budget

LCS = Least-Cost Selection

CQ = Selection Based on Consultants' Qualifications

Other = Selection of individual consultants (per Section V of Consultants Guidelines), Training, Workshops and Study tours, etc.

N.B.F. = Not Bank-financed

Figures in parenthesis are the amounts to be financed by the Bank Grant.

Prior review thresholds (Table B)

Table B: Thresholds for Procurement Methods and Prior Review ¹

Expenditure Category	Contract Value Threshold (US\$ thousands)	Procurement Method	Contracts Subject to Prior Review (US\$ millions)
1. Works	> 250,000 < 250,000 < 50,000	ICB NCB MCW	0.41
2. Goods	> 100,000 <100,000 < 100,000 < 50,000 <10,000	ICB NCB IS NS CP	1.47
3. Services	> 100,000 < 100,000	QCBS LCS, CQ IND	0.7
4. Miscellaneous			
5. Miscellaneous			
6. Miscellaneous			

Total value of contracts subject to prior review: 2.58

Overall Procurement Risk Assessment

High

Frequency of procurement supervision missions proposed: One every 6 months (includes special procurement supervision for post-review/audits)

* NCB for goods <US\$100,000 is only for the procurement of prefabricated wooden houses.

¹ Thresholds generally differ by country and project. Consult OD 11.04 "Review of Procurement Documentation" and contact the Regional Procurement Adviser for guidance.

Disbursement

Allocation of grant proceeds (Table C)

Disbursements will follow normal Bank procedures and will be made against the categories of expenditures indicated in Table C. The proceeds of the proposed project area expected to be disbursed over a period of five years. The anticipated completion date is December 31, 2006, and the closing date is June 30, 2007.

Table C: Allocation of Grant Proceeds

Expenditure Category	Amount in US\$million	Financing Percentage
Civil Works	0.57	80%
Goods	1.61	100% of foreign expenditures 100% of local expenditures (ex-factory costs) and 80% of local expenditures for other items procured locally
Consultant Services, Training and Workshops	2.69	100%
Small Grants	1.00	100%
Incremental Operating Costs	1.03	90%
Total Project Costs	6.90	
Total	6.90	

Use of statements of expenditures (SOEs):

Project funds will be initially disbursed under the Bank's/IBRD's established procedures, including Statements of Expenditure (SOEs). During project negotiations, the recipient will confirm if it wishes to consider a move to Project Management Reports (PMR-) based disbursements and if so, agreement will be reached on an action plan to enable PMR-based disbursements. Additionally, a move to PMR-based disbursements will be made at the mutual agreement of the recipient and the Bank/IBRD and will be considered once the PIU is familiar with the project's monitoring aspects and is considered able to produce sufficiently timely and reliable project management information. SOEs, or PMRs if used as the basis of disbursement, will be audited as part of the annual project auditing requirements (see further details below).

Use of Statements of Expenditures: Withdrawal applications would be fully documented, except for expenditures under: (a) contracts for goods valued at less than US\$50,000 each; (b) contracts for works less than US\$50,000 each; and (c) contracts for consulting firms costing less than US\$100,000 equivalent, and contracts for individual consultants costing less than US\$50,000 equivalent; (d) expenses for training; (e) all small grant contracts; and (f) all incremental operating costs.

Special account:

Special Account (SA): To facilitate disbursements against eligible expenditures under the Grant account, the Government will establish a Special Account (SA) in a commercial bank to be operated by the PIU under terms and conditions satisfactory to the Bank. The authorized allocation of the SA amounts to US\$500,000 equivalent. Upon effectiveness, the Bank will provide for an advance of US\$250,000

representing 50% of the authorized allocation. When the total funds withdrawn from the Grant Account amount to US\$2.0 million, the beneficiaries may withdraw the remaining balance amounting to US\$250,000 equivalent. Replenishment applications should be submitted not later than every three months. These applications would be fully documented, except in the case where disbursements are made on the basis of Statements of Expenditure (SOEs) or Project Management Reports (PMRs), and would in all circumstances be supported by appropriate SA reconciliation statements and bank statements. The SA will be maintained by the central PIU and audited as part of the annual project auditing requirements (see further details below).

Financial Management:

Financial Management Assessment: Responsibility for the financial management of the project will be that of the InterEcoCentre (CPIU). The Bank/IBRD conducted a financial management assessment of the CPIU and confirmed that it does not satisfy the Bank's/IBRD's minimum financial management requirements. In particular, the following areas need to be addressed prior to Board presentation: (i) the preparation of a draft accounting manual; (ii) the development of a revised spreadsheet system to enable the CPIU to prepare Project Management Reports (PMRs) 1A (Source and Uses of Funds), 1B (Uses of Funds by Project Activity) and 1E (Special Account Statement); (iii) the selection of the bank in which the Special Accounts will be housed and thus the finalization of the project's flow of funds; (iv) the finalization of the audit terms of reference; and (v) the presentation to the Bank/IBRD of a short-list of auditors acceptable to the Bank/IBRD. In addition, the CPIU does not have in place an adequate project financial management system that can provide, with reasonable assurance, accurate and timely information on the status of the project (PMRs) as required by the Bank/IBRD for PMR-based disbursements. During project negotiations, the recipient will confirm if it wishes to consider a move to PMR-based disbursements and if so, agreement will be reached on an action plan to enable PMR-based disbursements.

Financial management accountability framework: The financial management accountability framework of Ukraine has not been the subject of a detailed review by the Bank/IBRD. However, primarily because of other implementation considerations, any weaknesses that may exist in that framework has been mitigated for this project by the appointment of the InterEcoCentre (PIU) as the project implementing agency, an agency with considerable experience of implementing similar projects, and requiring the Bank's/IBRD's no-objection to both the auditors and the terms of reference in respect of the audits required by the project. Additionally, weaknesses in the Ukraine banking sector will be mitigated by the use of a bank deemed eligible by the Bank/IBRD to house the project's Special Accounts. However, these weaknesses neither compromise the fiduciary responsibilities of the recipient nor of the Bank/IBRD.

Project Management Reports (PMRs): Project management-oriented PMRs will be used for project monitoring and supervision. The formats of the PMRs have been drafted and will be confirmed during Negotiations. The PIU will produce a full set of PMRs for every calendar quarter throughout the life of the project beginning with the period ending 18 months after Board presentation, however, the financial PMRs 1A, 1B and 1E as well as the four procurement PMRs, 3A, 3B, 3C and 3D, will be produced from project effectiveness.

Disbursements: Project funds will be initially disbursed under the Bank's/IBRD's established procedures, including Statements of Expenditure (SOEs). As discussed above, during project negotiations, the recipient will confirm if it wishes to consider a move to PMR-based disbursements and if so, agreement will be reached on an action plan to enable PMR-based disbursements. Additionally, a move to PMR-based disbursements will be made at the mutual agreement of the recipient and the Bank/IBRD and will be considered once the PIU is familiar with the project's monitoring aspects and is considered able to produce

sufficiently timely and reliable project management information.

Audit Arrangements: Audits by independent auditors and on terms of reference both acceptable to the Bank/IBRD will be conducted throughout project implementation of: the project financial statements; Statements of Expenditures (SOEs), or PMRs if used as the basis of disbursement; Special Accounts; and the InterEcoCentre. As discussed above, the finalization of the audit terms of reference and the presentation to the Bank/IBRD of a short-list of auditors acceptable to the Bank/IBRD are conditions of Board presentation. The audits will be procured by the PIU through Least-Cost Selection and the selection of the project's auditors is condition of project effectiveness. The audited financial statements / reports together with the auditor's reports and opinions will be presented to the Bank/IBRD no later than six months after the end of each fiscal year and also at the closing of the project. The contract for the audit will be extended from year-to-year with the same auditor, subject to satisfactory performance. The cost of the audit will be financed from the proceeds of the GEF Grant as an incremental operating cost.

Annex 7: Project Processing Schedule
UKRAINE: Azov Black Sea Corridor Biodiversity Conservation

Project Schedule	Planned	Actual
Time taken to prepare the project (months)	30	45
First Bank mission (identification)	10/15/1997	10/15/1997
Appraisal mission departure	10/15/2000	02/16/2001
Negotiations	01/15/2001	07/19/2001
Planned Date of Effectiveness	04/15/2001	

Prepared by:

Ukraine Ministry of Environment and Natural Resources,
 InterEcocentre NGO

Preparation assistance:

GEF Project Preparation Grant of US\$ 250,000

Bank staff who worked on the project included:

Name	Speciality
Phillip Brylski	TTL; Sr. Biodiversity Specialist
Charis Wuerffel	Operations Analyst
Alexei Slenzak	Projects Officer
Marjory-Anne Bromhead	Sector Manager; Quality Assurance
Jose Martinez	Procurement Analyst
Ranjan Ganguli	Sr. Financial Management Specialist
Kishor Uprety	Legal Counsel
Jonathan Pavluk	Senior Legal Counsel
Janis Bernstein	Senior Social Scientist
Jan Post	Peer Reviewer, Sr. Environmental Affairs Specialist
Gail Lee	Team Assistant

Annex 8: Documents in the Project File*
UKRAINE: Azov Black Sea Corridor Biodiversity Conservation

A. Project Implementation Plan

The PIP includes the following:

1. Implementation arrangements
2. PIU staffing and job descriptions
3. Detailed cost tables
4. Financial management operational procedures
5. Procurement Capacity Assessment
6. Procurement Plan
7. Implementation Schedule

B. Bank Staff Assessments

1. Procurement Capacity Assessment, by Procurement Specialist
2. Financial Management Assessment, by Sr. Financial Management Specialist
3. Social Assessment, by Kiev International Institute of Sociology
4. Environmental Management Plan

C. Other

Ukrainian legal documents

Verkhovna Rada. 2000. Law on the State Program of Formation of the National Ecological Network for 2000-2015 of Ukraine.

Verkhovna Rada. 1995. The Water Code of Ukraine.

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Central Board for Protected Areas. 2000. The procedures for creation of Natural Parks. Methodological Recommendations. Kiev. (in Russian)

Regional Conservation Planning Documents

Black Sea Environment Program. 1996. Transboundary diagnostic analysis.

World Bank/Wetlands International. 1994. Conservation of Black Sea wetlands: a preliminary action plan.

Documents prepared under UK Environment Know How Funds to Flora and Fauna

International as support to establishment of Meotida Regional Landscape Park:

Management prescriptions and stakeholder consultation results for Sivash National Park and Meotida Regional Landscape Park

Ukraine. Strengthening Management Capacity in National Parks, Inception Report, January 2000

Strengthening Management Capacity in National Parks - Ukraine. Supported by DFID. Trip Report, 27 February - 7 March 2000

Planning and Creating the New Lukomorea Nation Park in Donetsk Oblast, Ukraine on the Azov Sea. Provisional Workshop Output

Scientific background on the creation of the regional landscape park "Meotida".

Documents prepared under the Wetlands International program

Wetlands of International Importance of Ukraine, Kiev - 2000

Programme and Action Plan for Waterbird Monitoring in the Azov-Black Sea Region of the Ukraine, Kiev - 2000

Sivash - the lagoon between two seas. Kiev, 2000 (brochure)

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Numbers and distribution of breeding waterbirds in the wetlands of Azov-Black Sea Region of Ukraine, Kiev-2000 (in Russian)

Bibliography of Wetlands of the Azov-Black Sea Region of Ukraine. Kiev, 2000 (in Russian)

Support for the conservation of wetlands and wetland species in the Azov-Black Sea region of Ukraine project. Work plans for 1997-1999

Wetland strategy development, Ukraine 19 August 1999

Documents prepared under preparation for the proposed Sivash National Nature Park

Feasibility Study for the Establishment of the National Park 'Sivashsky'

Scientific Background for establishment of the National Park 'Sivashsky' (in Russian) - 1998

Evaluation of the status of the biodiversity and basic problems management plan of the National Park 'Sivashsky' (in Russian) - 1999

Sub component: Creation of the Objects Nature-Reserve Fund (in Russian)

*Including electronic files

Annex 9: Statement of Loans and Credits
UKRAINE: Azov Black Sea Corridor Biodiversity Conservation

Project ID	FY	Purpose	Original Amount in US\$ Millions			Cancel.	Undisb.	Difference between expected and actual disbursements ^a	
			IBRD	IDA	GEF			Orig	Frm Rev'd
P035786	2001	LVIV WATER/WW	24.25	0.00	0.00	0.00	24.25	0.00	0.00
P055738	2001	SEVASTOPOL HEAT SUPPLY IMPROVEMENT	28.20	0.00	0.00	0.00	28.19	0.00	0.00
P055739	2000	PROJ.	18.29	0.00	0.00	0.00	17.97	-0.02	0.00
P049174	1998	KIEV PB ENERGY EFFIC	16.40	0.00	0.00	0.00	15.90	13.52	4.20
P044832	1998	TREASURY SYSTEMS	200.00	0.00	0.00	0.00	191.12	82.86	24.85
P044728	1998	KIEV DISTRICT HEAT.	0.00	0.00	23.20	0.00	10.80	11.77	-6.50
P044851	1997	ODS PHASE-OUT (GEF)	70.00	0.00	0.00	0.00	23.78	19.51	0.00
P038820	1995	EXPORT DEVELOPMENT HYDROPOWER REHAB	114.00	0.00	0.00	14.16	30.23	44.39	2.93
Total:			471.14	0.00	23.20	14.16	342.24	172.03	25.48

UKRAINE
STATEMENT OF IFC's
Held and Disbursed Portfolio
May-2001
In Millions US Dollars

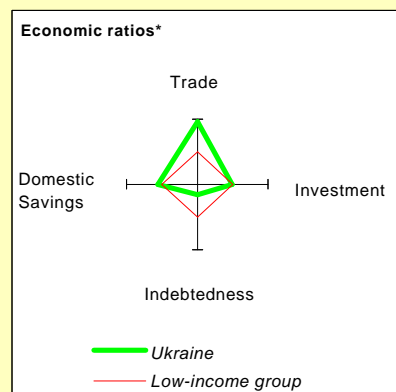
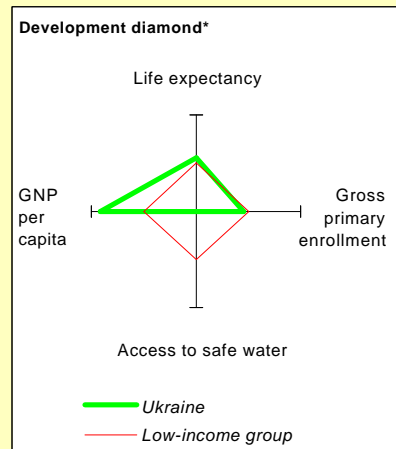
FY Approval	Company	Committed				Disbursed			
		IFC				IFC			
		Loan	Equity	Quasi	Partic	Loan	Equity	Quasi	Partic
1998	Creditanstalt Uk	0.00	2.28	0.00	0.00	0.00	2.28	0.00	0.00
1996	FUIB	0.00	5.00	0.00	0.00	0.00	5.00	0.00	0.00
2000	MBU	0.00	1.78	0.00	0.00	0.00	0.85	0.00	0.00
1994/96	Ukraine VC Fund	0.00	1.50	0.00	0.00	0.00	0.80	0.00	0.00
	Total Portfolio:	0.00	10.56	0.00	0.00	0.00	8.93	0.00	0.00

FY Approval	Company	Approvals Pending Commitment			
		Loan	Equity	Quasi	Partic
1998	Creditanstalt Uk	5.00	0.00	0.00	0.00
1996	FUIB	10.00	0.00	0.00	0.00
2000	MBU	5.00	0.00	0.00	0.00
	Total Pending Commitment:	20.00	0.00	0.00	0.00

Annex 10: Country at a Glance

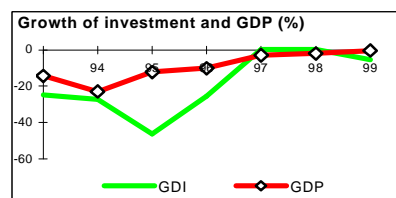
UKRAINE: Azov Black Sea Corridor Biodiversity Conservation

POVERTY and SOCIAL	Europe & Central Asia		Low-income		
	Ukraine	Asia			
1999					
Population, mid-year (millions)	50.0	475	2,417		
GNP per capita (Atlas method, US\$)	750	2,150	410		
GNP (Atlas method, US\$ billions)	37.5	1,022	988		
Average annual growth, 1993-99					
Population (%)	-0.7	0.1	1.9		
Labor force (%)	-0.4	0.6	2.3		
Most recent estimate (latest year available, 1993-99)					
Poverty (% of population below national poverty line)	27		
Urban population (% of total population)	68	67	31		
Life expectancy at birth (years)	67	69	60		
Infant mortality (per 1,000 live births)	14	22	77		
Child malnutrition (% of children under 5)	..	8	43		
Access to improved water source (% of population)	64		
Illiteracy (% of population age 15+)	0	3	39		
Gross primary enrollment (% of school-age population)	87	100	96		
Male	87	101	102		
Female	87	99	86		
KEY ECONOMIC RATIOS and LONG-TERM TRENDS					
	1979	1989	1998	1999	
GDP (US\$ billions at official exchange rate)	41.9	30.8	
Gross domestic investment/GDP	..	28.9	20.8	19.8	
Exports of goods and services/GDP	..	32.1	41.9	52.8	
Gross domestic savings/GDP	..	28.8	18.5	20.9	
Gross national savings/GDP	..	36.9	17.7	22.5	
Current account balance/GDP	-3.1	2.7	
Interest payments/GDP	1.0	2.5	
Total debt/GDP	30.4	40.8	
Total debt service/exports	11.1	14.4	
Present value of debt/GDP	27.8	37.3	
Present value of debt/exports	63.8	68.7	
	1979-89	1989-99	1998	1999	1999-03
(average annual growth)					
GDP	..	-10.7	-1.9	-0.4	2.5
GNP per capita	..	-10.7	-2.4	-0.7	2.6
Exports of goods and services	..	0.5	-13.4	-7.9	6.0



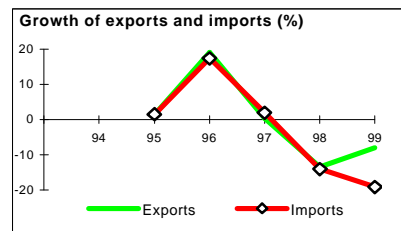
STRUCTURE of the ECONOMY

	1979	1989	1998	1999
(% of GDP)				
Agriculture	..	22.9	14.2	12.8
Industry	..	48.4	35.4	38.4
Manufacturing	..	9.1	5.6	5.2
Services	..	28.7	50.4	48.8
Private consumption	..	53.9	59.8	60.2
General government consumption	..	17.3	21.6	19.0
Imports of goods and services	..	32.1	44.2	51.7



(average annual growth)

	1979-89	1989-99	1998	1999
Agriculture	..	-6.3	-11.2	-4.2
Industry	..	-13.5	-0.1	3.4
Manufacturing	..	-13.4	0.0	5.5
Services	..	-3.1	-0.6	-1.8
Private consumption	..	-8.0	1.3	0.5
General government consumption	..	-4.7	-3.5	-12.0
Gross domestic investment	..	-22.4	0.4	-5.4
Imports of goods and services	..	4.0	-14.0	-19.1
Gross national product	..	-11.1	-2.7	-1.3

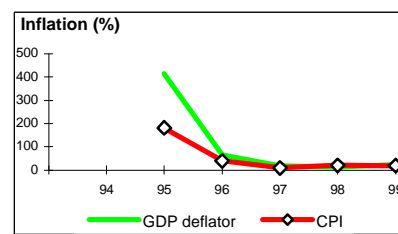


Note: 1999 data are preliminary estimates.

* The diamonds show four key indicators in the country (in bold) compared with its income-group average. If data are missing, the diamond will be incomplete.

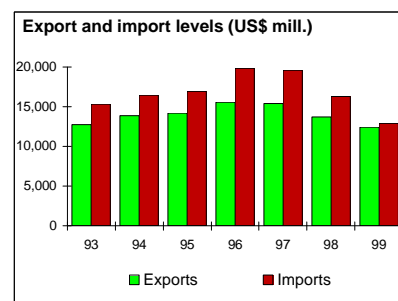
PRICES and GOVERNMENT FINANCE

	1979	1989	1998	1999
Domestic prices				
(% change)				
Consumer prices	20.0	19.2
Implicit GDP deflator	..	3.8	12.0	24.4
Government finance				
(% of GDP, includes current grants)				
Current revenue	36.0	34.4
Current budget balance	-2.1	-2.0
Overall surplus/deficit	-2.8	-2.4



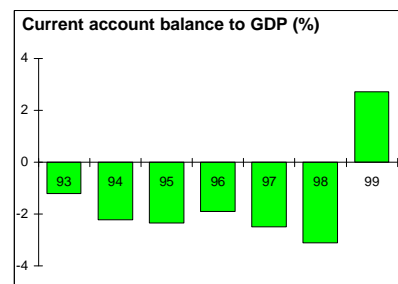
TRADE

	1979	1989	1998	1999
(US\$ millions)				
Total exports (fob)	13,699	12,463
Ferrous and non-ferrous metals	5,336	4,874
Food and agricultural raw materials	1,379	1,418
Manufactures	2,393	1,981
Total imports (cif)	16,283	12,945
Food	1,052	902
Fuel and energy	6,170	5,441
Capital goods	3,172	2,255
Export price index (1995=100)	96	95
Import price index (1995=100)	102	105
Terms of trade (1995=100)	94	91



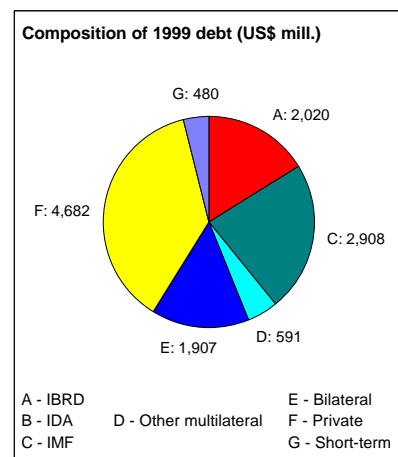
BALANCE of PAYMENTS

	1979	1989	1998	1999
(US\$ millions)				
Exports of goods and services	17,621	16,234
Imports of goods and services	18,828	15,237
Resource balance	-1,207	997
Net income	-871	-869
Net current transfers	782	706
Current account balance	-1,296	834
Financing items (net)	-28	-551
Changes in net reserves	1,324	-283
Memo:				
Reserves including gold (US\$ millions)	793	1,094
Official exchange rate (local/US\$, average)	2.4	4.1



EXTERNAL DEBT and RESOURCE FLOWS

	1979	1989	1998	1999
(US\$ millions)				
Total debt outstanding and disbursed	12,718	12,588
IBRD	1,599	2,020
IDA	0	0
Total debt service	2,017	2,600
IBRD	68	98
IDA	0	0
Composition of net resource flows				
Official grants	98	0
Official creditors	253	297
Private creditors	1,344	-574
Foreign direct investment	743	489
Portfolio equity	0	62
World Bank program				
Commitments	680	0
Disbursements	385	422
Principal repayments	0	2
Net flows	385	420
Interest payments	68	96
Net transfers	317	326



Additional Annex 11

Social Assessment and Stakeholder Participation Plan

1. The results of a Social Assessment (SA) and consultations on two proposed national parks were incorporated into the project to improve the effectiveness of the project design by identifying and mitigating potential social risks. The social assessment was based on household surveys and discussions with focus groups in the Golaya Pristan and Skadovsk districts of Kherson oblast. Separate management planning workshops were held with user groups, individuals, and representatives of local, regional, and national government from the areas of the proposed Preazovsky and Sivash National Parks.
2. The objectives of the SA were to: (i) identify key stakeholders (beneficiaries, affected people and institutions, donor organizations), their interests (complementary and competing), and their roles in natural resource protection; (ii) identify community activities that are threatening biodiversity in project areas; (iii) determine the values, attitudes, and interests of key actors toward land use, conservation, and sustainable development activities; (iv) ensure that the project's objectives and components are acceptable to key stakeholder groups; (v) identify risks to stakeholders and mitigation of those risks; (vi) study the social and economic situation; and (vii) develop a public participation plan to ensure stakeholder participation during project implementation. The assessment was prepared by a multi-disciplinary team experienced in social surveys and the preparation of participation plans.

Characteristics of the Region

3. An estimated 7 million people live in the coastal region of Ukraine. 46% of those surveyed depend to some extent upon natural resources for income and subsistence. For 28% of those surveyed, agricultural products were the primary source of income for the household. The most important crops are grains, melons, potatoes, and carrots. Dairy farming is currently increasing, after a long term decline in livestock (mainly sheep and cattle) operations as irrigated croplands were intensified in the region. Income from the sale of medicinal herbs, mushrooms, and berries is important. Agricultural products are mainly used for private consumption and barter/sale (typically in the nearby urban areas of Ochakov, Nikolayev, and Kherson). One of the key problems facing the agricultural community is scarcity of financial resources for the purchase and repair of farm equipment, gasoline, and irrigation and drainage systems.

Government Stakeholders

4. Ministry of Finance. The Ministry of Finance has overall responsibility for Ukraine's financial performance, is responsible for allocating part of the Government's financial contribution to project implementation, and for ensuring that Bank funds are used effectively and are of benefit to the Ukrainian people.
5. Ministry of Ecology and Natural Resources. The newly reorganized Ministry of Ecology and Natural Resources (MENR) is responsible for environmental monitoring and protection. The MENR has an established institutional network with clearly allocated responsibilities at national and oblast levels. The Department of Forestry within the MENR is responsible for forest management in the project region.
6. Crimea State Committee for Environmental Protection (CSCEP). The CSCEP is responsible for

implementing environmental policies, laws, and regulations in the Autonomous Republic of Crimea. The CSCEP is the implementing agency for project activities in Crimea.

7. Oblast and Rayon Administrations. The oblast administrations are responsible for implementing the Government's environmental policy and regulations at the regional level. With regard to the project, rayon administrations are involved in the consultation and approval process for new protected areas. Both administrations are responsive to the needs of local communities and businesses, especially with regard to economic development.

8. Research and Training Institutes. Ukraine's Academy of Sciences and Agricultural Institutes have a strong tradition in research. The Academy of Sciences is responsible for the management of selected nature reserves and biosphere reserves, including Chornomorsky biosphere reserve which would receive financing under the project. The Agricultural Institutes manage a network of agricultural research stations where they carry out research on agricultural production systems and provide training to local collective farms, which have been privatized in recent years. The Kherson Agricultural Institute has good linkages with local farms, and would implement the training program in sustainable agriculture under component 4.

Local Communities

9. There are five main local population groups in the project region with specific interest in the project and the sustainable development of coastal resources. For some of these groups, however, there are conflicts between this long-term objective and the desire for short-term economic gain:

- Urban inhabitants with diverse recreational interests in the project region (e.g., hunting and fishing, and picnicking and camping near the shore).
- Urban inhabitants with dachas and garden plots in the project region, or the desire to own a dacha there in the future.
- Residents of urban and rural communities with interests in fisheries and other economic activities for subsistence and supplemental income (e.g., fisheries, collection of medicinal herbs, mushrooms, berries; garden plots for growing food).
- Farm and fishery enterprise owners, farm workers, and individual fishermen;

National and Regional NGOs.

10. Environmental NGOs have been increasing in number and effectiveness since the transition. They have contributed to the successes of previous initiatives and projects, including those financed by GEF, and would play key roles in project management, implementation, and in monitoring governance issues. An NGO is serving as the Project Implementation Unit, under the direction of MENR.. And NGO will also be involved in managing the environmental education program in Melitopol. Local NGOs will be eligible to apply for funding, under the small grants program, for environmental education and biodiversity conservation activities.

Other interested organizations:

11. Industry representatives, local companies and trade associations. Employees and trade groups of economic enterprises (e.g., steel works companies) are frequent users of the recreational facilities in the

project region. Some of the recreational facilities are owned by the companies and maintained for the use of their workers and families. The companies have indicated their interest to co-finance the management of regional landscape parks, which are seen as a means of securing recreational opportunities.

Attitudes of Local Population Toward Project Activities and Natural Resources

12. According to the results of the Social Assessment surveys, the most acute problems faced by the population are unemployment and weak community and medical services. 48 percent of respondents indicated that the highest priority is economic growth, whereas 20 percent indicated that the highest priority was environmental protection.

13. The social assessment found that 59% of those surveyed had a positive attitude toward the project whereas 4 % had a negative attitude. The following findings and recommendations of the social assessment have been incorporated into the project design:

- the management of the Project's protected areas should emphasize multiple use of natural resources rather than strict protection, and should ensure access to resources by local users.
- incentives should be used to encourage sustainable use of natural resources by local communities, rather than punitive fines.
- the project should implement a public awareness campaign on the project to increase environmental awareness of the ecology of the region and the impact of unsustainable development.

Participation Plan

14. The main project stakeholders, issues of particular concern to them, and mechanisms for their participation in the project are summarized in the table below.

Summary of Stakeholder Analysis and Participation Plan

Stakeholder Groups	Interests at stake in relation to the project and impact of project on stakeholder	Influence and participation of Stakeholder
Ministry of Ecology and Natural Resources	<ul style="list-style-type: none"> • Development and coordination of environmental policy • Supervision of Project Implementation Unit that will administer project activities 	<ul style="list-style-type: none"> • Executing Agency, with overall responsibility for project implementation • Chairs the Project Advisory Committee
Crimea State Committee for Environmental Protection	<ul style="list-style-type: none"> • Responsible for implementing Ukraine's environmental policy in the Autonomous Republic of Crimea. 	<ul style="list-style-type: none"> • Implementing agency project activities in Crimea • Member of the Project Advisory Committee
Oblast and Rayon Administrations	<ul style="list-style-type: none"> • Responsible for implementing national environmental laws and regulations at regional and local levels • Lead the consultation and approval process at regional and local levels for new protected areas • Major interest in the welfare of regional populations and economic development, for example through increased tourism. 	<ul style="list-style-type: none"> • Representative of oblasts to serve on Project Advisory Committee (in rotation) • Oblast and rayon administrations to serve on local advisory committees for protected area and agriculture components • Dedicate staff resources for implementation & coordination of project activities • Responsible for implementing land use planning (activity 1.4) in collaboration with rayon administrations • Finance and manage regional landscape parks
Academy of Sciences	<ul style="list-style-type: none"> • Strong record in applied and basic research on biodiversity • Manage some protected areas, including Chornomorsky Biosphere Reserve 	<ul style="list-style-type: none"> • Chairs the Scientific Advisory Committee to review/endorse activities related to the project's scientific program • Implements component 2 activities at Chornomorsky biosphere reserve

