

25617

**GLOBAL  
ENVIRONMENT  
FACILITY**

**MOLDOVA**

**BIODIVERSITY CONSERVATION IN THE  
LOWER DNIESTER DELTA ECOSYSTEM**

**GEF MEDIUM-SIZED PROJECT**

**PROJECT BRIEF**

**NOVEMBER 2001**

# Biodiversity Conservation in the Lower Dniester Delta Ecosystem

## Table of Context

---

PROJECT SUMMARY .....	1
<b>1. PROJECT DESCRIPTION.....</b>	<b>9</b>
I. RATIONALE AND OBJECTIVE .....	9
II. CURRENT SITUATION.....	10
<i>Issues / Problems.....</i>	<i>11</i>
<i>Baseline Course of Actions.....</i>	<i>11</i>
III. EXPECTED PROJECT OUTCOMES WITH UNDERLYING ASSUMPTIONS .....	12
IV. ACTIVITIES AND FINANCIAL INPUTS .....	13
V. SUSTAINABILITY ANALYSIS AND RISK ASSESSMENT.....	17
VI. STAKEHOLDER INVOLVEMENT AND SOCIAL ASSESSMENT .....	18
<i>ANNEX 1: Global Significance of the Lower Dniester Ecosystem .....</i>	<i>19</i>
<i>ANNEX 2: Protected Areas in Proposed Lower Dniester National Park.....</i>	<i>21</i>
<i>ANNEX 3: Additional Information on MSP Proposer Institution.....</i>	<i>25</i>
<b>2. INCREMENTAL COST ASSESSMENT .....</b>	<b>30</b>
I. BASELINE SCENARIO.....	30
II. GEF ALTERNATIVE.....	30
III. INCREMENTAL COSTS.....	31
<b>3. BUDGET .....</b>	<b>32</b>
<b>4. IMPLEMENTATION PLAN.....</b>	<b>32</b>
<b>5. PUBLIC INVOLVEMENT PLAN .....</b>	<b>33</b>
<b>6. MONITORING AND EVALUATION PLAN.....</b>	<b>38</b>
<b>7. TECHNICAL REVIEW .....</b>	<b>38</b>
<b>8. PROJECT CHECKLIST.....</b>	<b>38</b>

---

## ATTACHMENTS

ATTACHMENT 1: BUDGET BREAKDOWN .....	39
ATTACHMENT 2: PROCUREMENT.....	40
ATTACHMENT 3: FINANCIAL MANAGEMENT.....	42

---

## TABLES

ESTIMATED BUDGET (IN USD): .....	7
LIST OF REALIZED PROJECTS BY BIOTICA.....	28
INCREMENTAL COST ASSESSMENT SUMMARY .....	31
PROJECT BUDGET BY DISBURSEMENT CATEGORIES .....	32
PROJECT IMPLEMENTATION PLAN .....	32
STAKEHOLDERS IDENTIFICATION MATRIX .....	34
PROCUREMENT PLAN TABLE.....	40
PROJECT DISBURSEMENTS IN YEARS.....	42

# **Biodiversity Conservation in the Lower Dniester Delta Ecosystem**

## **Abbreviations and Acronyms**

---

BIOTICA	Project Proposer NGO
BSAP	Biodiversity Strategy and Action Plan
CAS	Country Assistance Strategy
FAO	Food and Agriculture Organization
IBRD	International Bank for Reconstruction and Development
IDA	International Development Association
IUCN	International Union of the Conservation of Nature
MSP	Medium Size Project
M&E	Monitoring and Evaluation
NGO	Non-Governmental Organization
NEAP	National Environmental Action Plan
PIU	Project Implementation Unit
RISP	Rural Investment and Services Project
UNDP	United Nations Development Programme
UNEP	United Nations Environmental Programme

## MEDIUM-SIZED PROJECT BRIEF

### PROJECT SUMMARY

<b>1. Project Name:</b> Biodiversity Conservation in the Lower Dniester Delta Ecosystem	<b>2. GEF Implementing Agency:</b> World Bank
<b>3. Country in which the Project is Implemented:</b> Republic of Moldova	<b>4. Country Eligibility:</b> Ratified the Convention on Biodiversity Conservation March 16, 1995
<b>5. GEF Focal Areas(s):</b> Biodiversity Conservation	<b>6. Operational Program / Short-Term Measure:</b> Operational Program 2 – Coastal Marine and Freshwater ecosystems
<p><b>7. Project linkage to national priorities, action plans, and programs:</b></p> <p>Conserving biodiversity and improving wetlands protection and management in the Lower Dniester Ecosystem are a national priority. The proposed project's activities to achieve these objectives are consistent with the Government's approach for protecting and preserving Moldova's biodiversity. The proposed project is identified in the Country Assistance Strategy that was prepared to guide the Bank's development assistance to Moldova and is identified as an environmental priority in three recent strategy documents adopted by Parliament:</p> <ul style="list-style-type: none"> <li>▪ The 2001 Concept of New Environmental Policy in Moldova, which identifies the creation of the Lower Dniester National Park, and the integration of biodiversity conservation into agriculture and land use planning, as national priorities. The Concept also cites the need to conclude an agreement with Ukraine on the joint management of the Dniester River resources (the Moldovan-Ukrainian Convention).</li> <li>▪ The Biodiversity Strategy and Action Plan, approved by the Parliament in 2001, analyzes threats to the country's biological diversity and emphasizes the need for <i>in situ</i> conservation of Moldova's rich biological and ecological diversity. The BSAP identifies the creation of the Lower Dniester National Park as a national priority.</li> <li>▪ The National Environment Action Plan (NEAP, 1966) identifies wetland conservation through the establishment of protected areas in the Lower Dniester river basin as one of the highest priority activities. It also identified the need for increased forest cover, improved agricultural practices and improved water quality, which are relevant issues for the present Project.</li> </ul> <p>The project is also part of the Presidential Decree on the <i>National Program of Strategic Actions for Environmental Protection for the period 1995-2020</i>, which commits Government to increase the percentage of special protected areas from 2.0% to a total of 2.8% of the total land territory.</p> <p>Moldova is signatory to the following international agreements that are directly related to the proposed project: the Convention on Biological Diversity (1995), Bonn Convention on the Conservation of Migratory Species and Wild Animals (1979); the Bern Convention on the Conservation of European Wildlife and Natural Habitats (1979); the Ramsar Convention (1971); the Helsinki Convention on Transboundary Watercourses and International Lakes (1992); and the Seville Strategy (UNESCO resolution 28 C/29).</p>	

The MSP will conserve biodiversity in the Lower Dniester River ecosystem by:

- Expanding the area under zones of strict protection and sustainable use management from 500 hectares to 5,000 hectares through establishment of a national park;
- Restoring affected wetlands and floodplain forests in the national park;
- Engaging individuals and communities in the buffer zone in the project; and
- Collaborating with Ukraine on the protection and management of the Lower Dniester ecosystem, and with Romania on the Black Sea coastal zone.

The MSP would be complementary to the proposed GEF-financed project Azov Black Sea Corridor Biodiversity Conservation in Ukraine. This Ukrainian project, now circulated to the GEF Council for Final Endorsement, would finance improvements in the protected area network on the Ukrainian Black Sea coast. One of the sites that would be eligible for investments is the proposed Lower Dniester National Park in Ukraine.

#### 8. GEF national operational focal point and date of country endorsement:

Endorsement Letters of May 5, 2000, and *November 20, 2001* by the Minister of Environment and Territorial Development. (Address: 9 Cosmonautilor St., Chisinau 2005, Moldova. Tel: 373-2-22-86-08; Fax: 373-2-22-07-48).

#### 9. Project rationale and objectives:

**Objective:** The project objective is to improve *in-situ* conservation of biodiversity in the Lower Dniester river. To achieve this, the project will: (i) support the creation of a national park in the lower Dniester river basin and build local capacity for its management; (ii) restore forest habitat linkages and water management of floodplain forests; (iii) promote sustainable management of forest and meadow resources inside and outside of the protected area; (iv) build awareness among local communities and disseminate the benefits of project activities; and (v) improve collaboration with Ukraine on the protection of the transboundary wetlands of the Dniester Delta region.

#### Indicators:

- Minimum of 5,000 ha of highest priority wetlands and riparian forests of the Lower Dniester River ecosystem (15% of the ecosystem) is protected within a functioning National Park;
- Annual surveys show positive or stabilized numbers for 5 key species by final year of the project;
- New sustainable development mechanisms in the region are introduced;
- Long-term partnership with Ukraine on transboundary wetlands management is established.

**Rationale:** The Lower Dniester Delta Ecosystem comprises approximately 300 km<sup>2</sup> of wetlands, riparian forests, and associated upland habitats, and contains some of the richest biodiversity in the Black Sea region. The wetland habitats are highly diverse, comprising water channels, reedbeds, freshwater marshes, marshy islands, and swamp forest, dominated by willow and poplar. The vegetation is very rich, with more than 700 plant species. The wetland complex is a feeding site for millions of waterfowl on the African-Eurasian flyway. Over 150 species breed in the delta area, many of which are considered internationally endangered. The wetlands and forests also provide an important function for Black Sea ecology by filtering the nutrients and pollutants transported by the Dniester River. Moldova and Ukraine share the delta ecosystem. The majority of estuarine wetlands are found in Ukraine whereas Moldova contains the majority of freshwater wetlands and riparian forests.

The project area is 30,000 hectares in southeastern Moldova, located along 54 km of the Lower Dniester River, and is bordered by Ukraine to the south and the Turunciuc branch of the Dniester River to the east. Three habitat zones overlap in the project area, and account for its high levels of biodiversity: the aquatic habitats (wetlands, swamp forests, and open water) of the riverine/Black Sea zone, the dry oak forests of the silvo-steppe zone, and the steppe zone itself.

The wetlands of the Moldovan Dniester delta have been impacted heavily by state-financed “reclamation” and conversion to agricultural lands over the last 50 years, but some of the high biodiversity values have been maintained. The project area is in rural southeastern Moldova and includes all or parts of the territories of 18 villages and a population of over 74,000 people. Major sources of threat include the following:

- Unsustainable agriculture practices. The sectoral policies of the FSU promoted conversion of wetlands and steppe to agricultural lands. These policies are no longer in place, but pressures to convert forest to grazing lands and wetlands to arable agricultural land continue at the local level. In addition, unsustainable on-farm management of soil and manure contribute to pollution and sedimentation of the wetlands in the project region.
- Overuse and illegal uses of forest, range, and wildlife. Since independence, overuse and illegal uses of natural resources, especially forest and wildlife, have increased dramatically. An important reason for this increase is the perception among local communities that the wetlands and forests of the project region belong to the state, and there is inadequate sharing of benefits with local communities.
- Insufficient integration of biodiversity considerations into local land use plans. Since independence, overuse and illegal uses of natural resources, especially forest and wildlife, have increased dramatically. An important reason for this increase is the perception among local communities that the wetlands and forests of the project region belong to the state, and there is inadequate sharing of benefits with local communities.
- The area and representativeness of protected areas is inadequate for the purposes of protecting the areas of highest biodiversity in Moldova, including the habitats in the Lower Dniester River. Protected areas cover only 2% of the country and only 1.6% of the project area.

The project will increase the area under strict protection to 15% in the Lower Dniester ecosystem, and promote sustainable development practices within the entire ecosystem.

**10. Expected outcomes:**

- Establishment of integrated wetland and forest conservation in the lower Dniester River, with effective partnership between public sector and communities in its management

**Indicators:**

- Lower Dniester National Park established, with approvals of local communities, and with an operational park administration
- Area under strict protection 5000 ha and area under improved sustainable uses 30,000 ha.
- Recovery of wetland and forest vegetation within the protected area, through:
  - natural regeneration under improved management;
  - restoration of connecting forest corridors;
  - restoration of water flows to floodplain forests.

<ul style="list-style-type: none"> <li>▪ Pilots activities implemented by local communities and individuals in the national park buffer and transition zones</li> </ul>	<ul style="list-style-type: none"> <li>▪ Scorecards on subprojects in the buffer zone show increase in: <ul style="list-style-type: none"> <li>▪ Sustainable agricultural practices;</li> <li>▪ Environmental rural services; and</li> <li>▪ Environmentally friendly land use plans.</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>▪ Local communities possess good understanding of the project and are updated on its results</li> </ul>	<ul style="list-style-type: none"> <li>▪ Questionnaire results show that at least: <ul style="list-style-type: none"> <li>• 50% of the communities in the project region are aware of the project; and</li> <li>• The % supporting its objectives increases in the course of implementation</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>▪ Collaboration of State Forestry Service and NGOs in the management of the national park</li> </ul>	<ul style="list-style-type: none"> <li>▪ Partnerships between the national park administration and international donors established with assistance of Moldovan NGOs</li> </ul>
<ul style="list-style-type: none"> <li>▪ Local authorities and communities aware of the aims of the National Park and support its realization, and supportive of the project activities and results.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Established community-based NGOs cooperate with local authorities, farmers' organizations, forestry authorities, and other stakeholders, to promote sustainable development of local communities, supporting the National Park activities. All stakeholders experience cooperation with other stakeholders in their activities.</li> </ul>
<ul style="list-style-type: none"> <li>▪ Improved coordination and collaboration between Moldova, Ukraine and Romania in wetlands conservation in the management of the transboundary Dniester delta ecosystem.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Regular co-operation with Ukrainian and Romanian environmental authorities, institutions and NGOs established.</li> </ul>
<p><b>11. Project activities to achieve outcomes:</b></p> <p><u>A. Establish Moldova Lower Dniester National Park</u> (Total Cost \$842,000: GEF \$425,000; Other \$417,000)</p> <p>The objective of this component is to improve protection and management of the Dniester wetland ecosystem by establishing the Lower Dniester National Park as a multiple use protected area. Component A will consist of the following sub-components:</p>	<p><b>Indicators:</b></p> <ul style="list-style-type: none"> <li>▪ Government decision on establishing a National Park and determining jurisdiction over the Park has been issued.</li> </ul>
<p>I. Technical studies for designation and gazettelement of the national park, finalization of the management plan, including territorial/management plan and legal documents for its creation and adoption (GEF \$90,000; Other \$242,000)</p>	<ul style="list-style-type: none"> <li>▪ Technical studies, social assessment, and stakeholder consultations carried out;</li> <li>▪ Territorial Plan and zoning plan developed.</li> <li>▪ Legal documents for the establishment of the national park completed and adopted;</li> <li>▪ Boundaries of the proposed national park marked;</li> </ul>

	<ul style="list-style-type: none"> <li>▪ Management plan for the National Park completed;</li> <li>▪ Revenue account mechanism for retention of visitor and user fees established.</li> </ul>
<p>II. Capacity building in protected areas administration, resource and visitor use management, and biodiversity monitoring, and awareness building within local communities (GEF \$85,000; Other \$25,000)</p>	<ul style="list-style-type: none"> <li>▪ Training for staff completed and implemented;</li> <li>▪ Community outreach campaign implemented;</li> <li>▪ Provide interpretive materials for visitors of the protected areas.</li> </ul>
<p>III. Establishment of park infrastructure to implement the management plan. (GEF \$200,000; Other \$22,000)</p>	<ul style="list-style-type: none"> <li>▪ Park headquarter established and equipped with the necessary communication means and office facilities;</li> <li>▪ Public information centers and tourist facilities constructed;</li> <li>▪ Transport equipment for wardens and key staff procured.</li> </ul>
<p>IV. Ecological restoration activities (GEF \$50,000; Other \$128,000)</p>	<ul style="list-style-type: none"> <li>▪ Establishment of ecological corridors, through the creation of forests interconnections between fragmented blocks of Pas;</li> <li>▪ Natural regeneration of overgrazed steppe inside the national park.</li> </ul>
<p><b>B. Biodiversity Activities in the Buffer Zone</b> (Total Cost USD \$795,000: GEF \$280,000; IDA \$425,000; Other \$90,000).</p> <p>This component would: (i) address the threats of unsustainable land and resource uses in the buffer zone on biodiversity inside and outside the national park; and (ii) engage local communities in project implementation, and share with them the benefits of the national park. Component B will consist of the following activities:</p>	<ul style="list-style-type: none"> <li>▪ Biodiversity activities under grant and credit schemes implemented.</li> </ul>
<p>I. Rural Advisory and Financial Services (GEF 200,000; Other \$490,000). Co-financing micro-credits under Rural Investment and Services Project (RISP) for small scale businesses that are consistent with the biodiversity conservation objectives of the national park.</p>	<ul style="list-style-type: none"> <li>▪ Advisory and technical services delivered to residents of the support and transition zones of the national park by the IDA Rural Investment and Services Project (RISP).</li> </ul>
<p>II. Land and Water Biodiversity Protection Plans (GEF \$80,000; Other \$25,000). Provide Grants for assisting local and regional authorities to: integrate biodiversity conservation into land use plans; update land use plans which cover parts of the buffer zone; promote improved sustainable agricultural practices on private farms.</p>	<ul style="list-style-type: none"> <li>▪ 25 applications for grants approved for: (a) updating land use plans to incorporate the new protected area boundaries; and (b) upgrading land and water protection measures within the buffer zones of the protected area.</li> </ul>



<p><u>C. International Cooperation in Dniester River Basin and Black Sea Coastal Zone</u> (Total Cost USD \$40,000: GEF \$40,000).</p> <p>The project will promote international cooperation in several areas: (i) cooperation with Ukraine on improved management of the transborder wetlands of the Dniester delta; and (ii) cooperation with Ukraine and Romania in development of the “green corridor” on the Black Sea Coast and its tributaries. Activities for the Ukraine Dniester Delta will be financed under the Azov Black Sea Corridor Biodiversity Conservation project. The Component C would consist of following activities:</p>	<ul style="list-style-type: none"> <li>▪ Memorandum of cooperation on transboundary wetlands management signed between Ukraine and Moldova.</li> </ul>
<p>I. Exchange of regional expertise in biodiversity conservation and protected areas management between Ukrainian and Romanian central and local Governments, protected areas staff, and NGOs (GEF \$30,000).</p>	<ul style="list-style-type: none"> <li>▪ A forum for information and experience exchange established with relevant Ukrainian and Romanian parties, and a schedule for meetings agreed on.</li> </ul>
<p>II. One regional (international) conferences on biodiversity conservation in the Lower Dniester River and Danube regions (the Green Corridor) (GEF \$10,000).</p>	<ul style="list-style-type: none"> <li>▪ International conferences held, programs published;</li> <li>▪ Workshops, technical studies on establishment of transboundary Dniester Delta protected area prepared and adopted.</li> </ul>
<p><u>D. Project Management, Communication, and Outreach</u> (Total Cost USD \$345,500: GEF \$230,000; IDA \$75,000; Other \$40,500).</p> <p>The Component will provide incremental support to a Project Implementation Unit (PIU) established to oversee the day-to-day implementation of the Project and disseminate the information on the project activities. The component would also raise environmental awareness in the project region and promote public participation in natural resources management. It will support NGOs and local communities in promoting environmentally sustainable development policies at the local and national level. Component D will consist of the following activities:</p>	<ul style="list-style-type: none"> <li>▪ Project activities implemented;</li> <li>▪ Communities and NGOs from the buffer zone participate in the management of the National Park.</li> </ul>
<p>I. Incremental operation costs of the PIU: procurement, financial management, and M&amp;E (GEF \$110,000; Other \$55,000)</p>	<ul style="list-style-type: none"> <li>▪ Key Project management and implementation personnel engaged;</li> <li>▪ PIU in operation;</li> <li>▪ Consistent involvement in the Project of Governmental and non-Governmental stakeholders secured;</li> <li>▪ M&amp;E plan developed and under implementation;</li> <li>▪ Project accounting system set up;</li> <li>▪ Financial audits completed.</li> </ul>

<p>II. Communication Support System (GEF \$35,000). Achieve good coordination and communication among project stakeholders, individuals and organizations engaged in project implementation</p>	<ul style="list-style-type: none"> <li>▪ Program for information dissemination established;</li> <li>▪ Project Website made operational;</li> <li>▪ Project stakeholders well informed about the project objectives, activities, and results.</li> </ul>
<p>III. Community Outreach Campaigns (GEF \$35,000; Other \$10,500). Build public awareness of the Project's objectives and encourage participation of local communities in the Project.</p>	<ul style="list-style-type: none"> <li>▪ Interpretive materials of the protected areas provided to visitors;</li> <li>▪ Project activities coordinated with the other biodiversity conservation efforts in the region;</li> <li>▪ A programme for information dissemination established;</li> <li>▪ Project website operational.</li> </ul>
<p>IV. Promote environmental advocacy role of Moldovan NGOs (GEF \$50,000; Other \$5,000). This activity would provide training and financial assistance to Moldovan NGOs to improve their role of advocates for biodiversity conservation at the national, regional, and local levels.</p>	<ul style="list-style-type: none"> <li>▪ NGOs and the public kept informed about the and project objectives and results;</li> <li>▪ Number of environmental NGO activities increased;</li> <li>▪ Activities of NGOs on local level increased.</li> </ul>

**12.**

**Estimated budget (in USD):**

	Preparation	Implementation	Total
<b>GEF MSP</b>	25,000	975,000	\$1,000,000
<b>IDA RISP</b>		450,000	\$450,000
<b>Government (in-kind)</b>		175,000	\$175,000
<b>Government (cash)</b>		85,000	\$85,000
<b>FAO</b>		100,000	\$100,000
<b>Communities</b>		80,000	\$80,000
<b>BIOTICA (in-kind)</b>	14,890	40,500	\$55,390
<b>EECONET</b>		75,000	\$75,000
<b>E-LAW</b>		10,000	\$10,000
<b>Ramsar Secretariat</b>		25,000	\$25,000
<b>TOTAL</b>	<b>\$39,890</b>	<b>\$2,022,500</b>	

*BIOTICA Ecological Society will provide 15% of project management costs on a voluntary base and office equipment (computers, photocopying machine, fax, modem, etc ) for the project needs*

**13. Information on Project Proposer:**

BIOTICA is a non-profit, non-governmental organization. It was founded in April 1993 with the mission to conserve biodiversity in Moldova. It is a member of IUCN, Social-Ecological Union (Moscow), and Northern Alliance for Sustainable Development (The Netherlands) and correspondent-member of the European Environmental Bureau (Brussels) and the founder of International Environmental Association of River Keepers, "ECO-TIRAS".

Since its establishment, BIOTICA has implemented a number of biodiversity projects in Moldova and has been instrumental in protecting the country's rich environmental heritage. It has recently completed a

MacArthur Foundation funded project titled: "Protecting Dniester River Biodiversity" under which BIOTICA scientists studied the ecosystem and status of biodiversity components along the Dniester River. The findings of the study have contributed to the preparation of this Project. BIOTICA staff have organized several international conferences, expeditions and field studies on the conservation of endangered species and habitats along the Dniester river, proposed programs of revitalization of the State Reserve "Iagorlic" with support from ISAR/USAID, the World Nature Association (private USA foundation), Audubon Society, USA, Cottonwood Foundation, USA, and local enterprises and remain actively engaged in protecting Moldova's unique biodiversity complex.

BIOTICA is actively involved in promoting relevant national environmental legislation to create the enabling environment for biodiversity conservation. It has lobbied, drafted and helped pass several legislative acts, including the Parliamentary Decree: "On Measures for Conservation of River Dniester Ecosystems and Biodiversity", "On Protective Zones of Rivers and Water Bodies," "On Wildlife," "On Environmental Impact Assessment Law", "On Drinking Water", etc. To encourage public participation in order to ensure sustainable conservation of Moldova's rich biodiversity, it helped pass the law, "On Citizens' Associations".

It has made significant efforts to raise NGO involvement in environmental issues and build capacity for implementation of relevant programs and projects. Towards this, BIOTICA has organized training in computer-use and communication techniques for representatives of scientific and non-scientific NGOs. BIOTICA has developed a warehouse of information through its numerous publications and regularly publishes information materials in national newspapers and magazines to keep the public informed of the need for and the ongoing efforts in biodiversity conservation.

**14. Information on proposed executing agency (if different from above):**

As above.

**15. Date of initial submission of project concept:**

The present Project Brief is dated November 26, 2001

**16. Project Identification Number:** P070044 (Project ID); TF 028440-K82706 (PDF-A TF);

**17. Implementing Agency contact person:** Phillip Brylski, (ECSSD), World Bank. Tel: 202 473 7031; Fax: 202 614 0696

**18. Project Linkage to Implementing Agency Program(s):**

The project is in line with the current World Bank operational program. The project is included in the Moldova CAS (Report No 18896-MD, dated April 7, 1999). This MSP would complement three projects: the IDA Rural Investment and Services Project (\$30M, at appraisal stage, but also currently under implementation through a \$1M advance on the credit); the proposed Agricultural Pollution Project under the Nutrient Reduction Program (GEF \$5M), and the IDF grant for Environmental Compliance and Enforcement Capacity Building (\$0.36M). It would also complement the proposed GEF-financed Azov Black Sea Corridor Biodiversity Project now under review for CEO endorsement.

# BIODIVERSITY CONSERVATION IN THE LOWER DNIESTER RIVER REGION

## 1. PROJECT DESCRIPTION

---

### I. Rationale and Objective

The Lower Dniester Delta ecosystem supports a diverse and abundant flora and fauna, many species of which are listed as rare or endangered in the IUCN Red Data Book. The biodiversity richness provides the rationale for preserving the unique biodiversity of the lower Dniester ecosystem. Additional rationales for protection of this area are the Lower Dniester function as an element in the larger Dniester Delta ecosystem and that it is an important link in the eastern Black Sea corridor for migratory birds.

The Project will improve in-situ conservation in the Lower Dniester river, through (i) establishment of a National Park in the lower Dniester river basin and build local capacity for its sustainable management; (ii) establishment of ecological corridors, through the creation of forests, interconnecting parks, and reserves to connect fragmented blocks of habitats which will ensure better protection of the larger units of habitats as well as preserve important wildlife migratory routes; (iii) promoting sustainable management of natural resources and build national / local capacity for such sustainable management; (iv) building awareness and education in the public in the project and its results; and (v) improving collaboration with Ukraine on the protection of the transboundary wetlands of the Lower Dniester Delta.

Recognizing the growing threat to the region's biodiversity and its negative implications, the Government of Moldova (GOM) has expressed its commitment to protect and enhance the environment of the country. Biodiversity conservation has been recognized as national priorities in the constitution of Moldova. A National Environmental Action Plan (NEAP) provides action plans for protecting Moldova's rich ecosystems, including those of the project site. The Government has also developed the Biodiversity Strategy Conservation and Action Plan, which analyzes the threats to biological diversity in the region, including measures to address them. GOM has entered into a number of international treaties, including the Convention on Biological Diversity, Pan-European Biological and Landscape Diversity Strategy, the Convention on Wetlands of International Importance Especially as Waterfowl Habitat, Convention on the Conservation of the Migratory Species and Wild Animals and Convention on the Transboundary Watercourses and International Lakes.

A consortium of Moldovan non-governmental organizations are actively involved in improving in-situ biodiversity conservation in the Lower Dniester River basin and are working closely with the environmental department of the Government. There is presently a window of opportunity and strong commitment on the part of the Government and NGO community for undertaking measures to safeguard the global biodiversity values of the region.

The activities proposed under the Project go beyond the current national conservation effort and would provide for increased integrity and sustainability of the globally significant ecosystems of the Dniester River. It will complement the ongoing biodiversity projects in the Romanian and Ukrainian part of the Danube Delta and the proposed Dniester Delta National Park in Ukraine. It will also assist the national, neighbor countries and local administration in their efforts to expand the existing protected areas network and ensure conservation of the threatened biodiversity of the region.

The project would address GEF Operational Program 2 – Coastal Marine and Freshwater Systems. The project falls within the OP2 on Coastal, Marine, and Freshwater Ecosystems (Biodiversity Conservation). The project would support *in-situ* conservation and sustainable uses in globally significant wetlands in the

Dniester River delta and 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.

## II. Current Situation

The Republic of Moldova is located in southeastern Europe, bordered on the west by Romania and by Ukraine in the north, east and south. With a population of 4.3 million people and a surface area of 33,740 sq. km, the country has a relatively high population density (127 inhabitants per sq km). The country includes a large network of smaller rivers most of them tributaries to the international rivers Dniester, Prut and Danube. Fifty nine percent of the country's territory is within the Dniester riverbasin, 23% in the Prut basin, 11% in the basins of small tributary rivers of Danube and 7% in the basins of small rivers that flow into Ukraine and finally to the Black Sea. The Dniester River flows from the Carpathian Mountains to Dniestrovsky liman (lagoon), thence to the Black Sea. Most of its broad estuary is located in Ukraine and comprises several arms that form a large marshy lagoon. An important part of the Dniester Delta ecosystem, comprising 30,000 hectares, is located in Moldova.

The Project area is located in the southern half of the Lower Dniester and covers about 25,000 ha. Natural vegetation, such as forests, meadows, steppes, bogs and lakes, make up 10% of the area. The Lower Dniester River area has three overlapping natural zones: sub-arid oak forests, wetlands, and feather-grass steppes. The project area is significant in terms of biodiversity. It contains unusually high diversity of the vegetation types, plants and animals that are typical or unique to the region. This includes (i) 83 species of fish, 54 of which occur in small populations; and (ii) 188 bird species: 95 of these nest in the project region and 93 are seasonal visitors. The Talmaza wetland, a core protected area within the proposed national park, is particularly important for migratory birds. A number of these species are classified as rare or endangered according to the Red Data Book. Additional information on the flora and fauna in the proposed National Park is found in Annex 1.

The project area is in rural southeastern Moldova and includes all or parts of the territories of 18 villages and a population of over 74,000 people. The population is dependent heavily on agriculture for income and subsistence. Agriculture is the mainstay of both the local and the national economies, accounting for about 25 percent of GDP, 40 percent of employment and 70 percent of exports (including agro-processing exports). Over the last decade Moldova has experienced significant declines in agricultural productivity.

Land privatization occurred quickly over the last five years, and each family received about 1.5 hectares. In the project area, the main crops are grapes, fruits, corn, sunflower, fruits, and other vegetables for local sale and subsistence. Since independence, progress has been made in small business development, especially in agriculture and energy related areas, although unemployment is still high (40%). However, local communities and their governments are highly supportive of conserving the natural habitats of the Dniester River through the proposed national park.

In the early 1990s, conflict occurred in the region that was associated with independence. At that time, communities and NGOs on either side of the Dniester River worked together to resolve this conflict peaceably. After the conflict was resolved, the same communities and NGOs continued their cooperation in various activities, including environmental protection of the Dniester River. The grass roots based efforts to promote peace and conserve the Dniester delta provide an excellent window of opportunity to effect local ownership of the project and achieve its objective.

Despite the good will of local communities to protect the biodiversity of the Dniester Delta, outside assistance is needed. Over the past few years there has been increasing ecological deterioration of the land, mainly due to unsustainable land management practices, harvesting of trees, and poor water management. As a result, plant and animal species have declined in number and abundance and are at risk, decreased accessibility of habitats for wide-ranging species, soil erosion, loss of forest cover with its concomitant adverse environmental effects, and reduced fish populations.

### *Issues / Problems*

The ecosystem of the Lower Dniester has been under stress for many decades. Drainage of wetlands, flood control measures and unsustainable land and resource uses within the project area are the key environmental problems facing the biodiversity in the Project area:

- Unsustainable agriculture practices. The sectoral policies of the FSU promoted conversion of wetlands and steppe to agricultural lands. These policies are no longer in place, but pressures to convert forest to grazing lands and wetlands to arable agricultural land continue at the local level. In addition, unsustainable on-farm management of soil and manure contribute to pollution and sedimentation of the wetlands in the project region.
- Overuse and illegal uses of forest, range, and wildlife. Since independence, overuse and illegal uses of natural resources, especially forest and wildlife, have increased dramatically. An important reason for this increase is the perception among local communities that the wetlands and forests of the project region belong to the state, and there is inadequate sharing of benefits with local communities.
- Insufficient integration of biodiversity considerations into local land use plans. Since independence, overuse and illegal uses of natural resources, especially forest and wildlife, have increased dramatically. An important reason for this increase is the perception among local communities that the wetlands and forests of the project region belong to the state, and there is inadequate sharing of benefits with local communities

### *Baseline Course of Actions*

The Government of Moldova is committed to protect and enhance the environment of the country and has recognized biodiversity conservation and improved water management as two important environmental priorities. The Constitution of Moldova reflects these priorities.

The diagnostic analyses of biodiversity loss and strategy/action plans for biodiversity conservation have been developed through the following:

- The Concept of New Environmental Policy in Moldova, adopted by the Parliament November 2, 2001, identifies three priorities for nature conservation in the coming years as (a) improvement of the National Ecological Network; (b) improving biodiversity and landscape diversity efforts; (c) integrating biodiversity conservation into land use planning; (d) the adoption of environmentally sustainable agricultural practices; and (e) development of a special Moldovan-Ukrainian Convention on cooperation of management of the Dniester River. The Concept specifically identifies creation of the Lower Dniester National Park as a national priority.
- With support from GEF the Government has developed a Biodiversity Strategy and Action Plan (BSAP), which was adopted by Parliament in 2001. BSAP calls for expanded forest areas, rehabilitation of the grassy ecosystem, creation of biosphere reserves, especially in the Lower

Dniester river basin, establishment of protected areas and protected ecological networks, and biodiversity monitoring.

- A National Environment Action Plan (NEAP) was adopted by Governmental Decision in 1996. The NEAP identified several priority actions to be undertaken to protect the biodiversity heritage of the country, including wetland conservation through the establishment of protected areas in the Lower Dniester river basin. It also has identified the need for increased forest cover, improved agricultural practices and improved water quality, which are relevant issues for the present Project.

In addition, the Government has established the legal and regulatory instruments for improved management of Moldova's environment through the enactment of major environmental legislation, including: Presidential Decree No. 321, dated October 6, 1995, titled. "*National Program of Strategic Actions for Environmental Protection for the period 1995-2020*". The Program aims, *inter alia*, to increase the percentage of special protected areas from 1.96% to 2.8% of the total land territory.

Practical steps to conserve biodiversity include the following environmental investments and administrative measures related to the project's objectives:

- Protected areas have been increased since independence by about 20,000 hectares, raising the area under protection from 1.4% to 2%. Two recent main additions to the protected area network are two forest preserves (Plaiiul Fagului, 6000 ha, and Padurea Domneasca, 5600 ha) and one wetland reserve along the Prut River in southwestern Moldova (Prutul de Jos, 1691 ha).
- Municipal authorities have been investing in water supply and sanitation infrastructure to improve services and protect human health and the environment. To date, the main investments have been in the capital city (Chisinau; US \$30 million credit from EBRD) and in south Moldova (\$15 million loan from Government of Turkey).
- Special projects in water supply and sanitation, forest and biodiversity conservation are financed annually from the National Environmental Fund. These investments from the NEF currently amount to approximately 4.5 million lei (USD \$345,000 equivalent).
- The State Forestry Service invests in afforestation of from 1500 to 2000 ha annually, far less than what is considered necessary but nonetheless substantial under current economic conditions.
- The Government created the Ministry of Environment in 1998, to improve environmental protection in the Republic. In 2001, the MoE became the Ministry of Ecology, Construction, and Territorial Development, and includes now a new Division on Biodiversity Conservation.
- To initiate improved cooperation with Ukraine over the transboundary Dniester River, a joint Moldovan - Ukrainian Commission for Dniester river management was created in 1994. This Commission exchanges information regularly and meets formally twice a year to discuss issues related to water quality, water volumes to be released by the Novodnestrovsciaia hydropower station during spring or summer peak flows, and fisheries management and biodiversity conservation issues.

### **III. Expected Project Outcomes with Underlying Assumptions**

The root causes of biodiversity loss in the Dniester delta are conversion of wetlands and forests to agricultural and other uses; degradation of habitats due to unsustainable uses of land and water resources, and fragmentation of habitats resulting from these causes. These factors have triggered loss of biodiversity

and ecosystem function in the Lower Dniester river basin and the wider eastern Black Sea region. Thus, the immediate objective of the Project is to protect and improve in-situ biodiversity conservation in the Lower Dniester River by creating an integrated system of protected areas and combining areas with different type of protective regime to ensure that habitats of critical conservation importance are preserved.

The Project will help to create a new protected area in the form of a National Park and establish an integrated protected ecosystem by establishing ecological corridors for conservation in the areas of the highest biodiversity in the lower Dniester River delta ecosystem. Ecological corridors will preserve important wildlife migratory routes and interconnect the other types of protected areas, thus insuring better protection of larger blocks of habitats. Located mostly along the rivers, corridors will also protect important freshwater and flood-land ecosystems. Areas with restricted use will be established to decrease land-use pressure on vulnerable natural habitats of high biodiversity importance. Different protection regimes will be increased to cover the endangered habitats and important wildlife migratory routes. This would provide a much better representation of critical ecosystems, and thus significantly increase the conservation value of the protected areas network. Establishment of ecological corridors will also substantially strengthen the capacity to protect wide-ranging species. The protected areas would also help in partial restoration of the Dniester floodplain forests.

The Project will work for the creation of a positive public attitude towards preserving biodiversity values, and engage the local communities and NGOs in establishing sustainable land use and management practices in the region.

The Project area is part of the larger wetland systems of the Dniester Delta and the Black Sea coastal zone. Through the efforts of the Project, better cooperation and exchange of information with relevant institutions, authorities and NGOs in Ukraine and Romania will be established, and coordinated management and biodiversity monitoring of the Lower Dniester ecosystem will be achieved. The project will explore the opportunity for formal creation of a transboundary protected area there.

#### **IV. Activities and Financial Inputs**

The development objective of the Project is the conservation and sustainable use of the globally significant biodiversity of the Moldovan Lower Dniester delta ecosystem. The project will also contribute to reducing pollution to the Dniester River, which is a transboundary tributary to the Black Sea. The activities in Moldova would be linked with parallel efforts in Ukraine (under the proposed Azov Black Sea Corridor Biodiversity project) and in Romania. The operational objective is to establish participatory management of the proposed national park, with strengthened protection of core areas of highest biodiversity value and sustainable uses of designated areas inside the national park and within its buffer zone. The project will be implemented in the perspective of the regional biodiversity situation and in particular of the Dniester Delta area and the Black Sea coastal zone.

The Project consists of five components. The total project costs are estimated at **USD \$2,022,500** of which **\$975,000** would be financed by GEF; \$500,000 by IDA, and \$547,500 from other sources.

**A. Establishment of Lower Dniester National Park.** (Total cost USD \$842,000; GEF \$425,000; Other Sources \$417,500) This component would improve biodiversity conservation in the Lower Dniester region by increasing the size and establish new protected areas and buffer zones. Currently, there are a number of separate, small protected areas in the project region that comprise 957 hectares under three categories (nature reserves, natural monuments, and landscape reserves). These provide insufficient protection to the sensitive areas of highest biodiversity values, and under the project would be re-organized in a common institutional and managerial framework, the Lower Dniester National Park. The national park will expand the area under protection to 5,000 ha within its boundaries. A National Park



administration formed from the existing forestry management unit that includes the territory will be responsible for its management. A Park Advisory Committee will be established to monitor the overall implementation and give advice to the PIU and the park administration. The component will include the following activities:

**A.I. Technical Studies** (Total USD \$332,000: GEF \$90,000; Other \$242,000) for designation and gazettelement of the national park, finalization of the management plan, including territorial/management plan and legal documents for its creation and adoption:

- Preparation of a Territorial Plan and the necessary governmental and decisions and regulations for the establishment of a National Park.
- Finalization of a participatory management plan for the park to protect the biodiversity and conserve the aquatic habitats of the lower Dniester River in Moldova. The plan will build on the following studies to be carried out under the project: a social assessment, rapid biodiversity assessments, technical studies for multiple resource usage (agriculture, livestock, hunting, fisheries), and visitor management requirements inside the national park and in the buffer zone. The management plan will be developed collaboratively with local communities and technical specialists through a series of workshops financed by the project. The management plan will also identify the mechanism for setting user and visitor fees within the park, how the revenues will be managed, and the decision making process for how they will be reinvested in park management. BIOTICA is working with local communities in three villages (Purcari, Olanesti and Crocmaz) to prepare management prescriptions for high priority wetlands in the project region, focusing on both the wetlands and uses of surrounding agricultural lands. This work, financed by the Ramsar Secretariat, includes the technical studies for including the Talmaza wetlands on the list of Moldova's Ramsar sites, and will serve as technical and social inputs to the participatory management plans. The wetlands in the Ukrainian part of the delta have already been designated as Ramsar sites.

**A.II. Capacity Building** (Total: USD \$110,000: GEF \$85,000; Other \$25,000). The project will provide training and capacity building through training seminars and exchange of regional expertise (from Romania and Ukraine) in protected areas administration, resource and visitor use management, biodiversity monitoring, and public education and awareness programs.

**A.III. Investments in Park Infrastructure** (Total: USDD \$222,000: GEF \$200,000; Other \$22,000). Establishment of infrastructure to support park administration and visitor use. This would include equipment (i.e., several computers, vehicles) and rehabilitation of existing State Forestry Service offices, which will be converted to the park headquarters, boundary signage, interpretive signs and information kiosks for tourists and local communities; and an observation tower for bird watching and ranger monitoring.

**A.IV. Ecological Restoration** (Total USD \$178,000: GEF \$50,000; Other \$128,000). The project would implement two restoration activities: (i) rehabilitation of several water management structures (sluice and flood gates) outside of the park, which are needed to restore water flows and manage water levels in floodplain forests and associated meadows which have become isolated from the river (financed by EECONET and FAO); and (ii) afforestation of degraded floodplain forest stands and associated degraded uplands to assist other forest conservation and recovery efforts (restoration of water flows, control of overgrazing and cutting) and restore ecological corridors. Afforestation would be carried out using native stock of local provenance provided by the State Forestry Service, and planted as in-kind contribution to the project by local communities.

**B. Biodiversity Activities in the Buffer Zone** (Total USD \$795,000: GEF \$280,000; IDA \$425,000; Other sources \$90,000). This component addresses two project needs: (i) the threats of unsustainable land

and resource uses in the buffer zone on biodiversity inside and outside the national park; and (ii) engaging local communities in project implementation, and sharing with them the benefits of the national park.

**B.I. Rural Advisory and Financial Services** (Total USD \$690,000: GEF \$200,000; IDA, \$400,000; Other sources \$90,000): The IDA-financed Rural Investment and Services Project (RISP) will provide financial and technical assistance to individuals, farmers' associations, and small businesses in the buffer zone and transition zone of the national park to improve incomes from farm and off-farm activities. RISP will provide in three areas: agricultural extension services, rural credit, and small business development assistance. RISP will finance two activities in the support zone in two areas that will benefit income-generating opportunities of the residents:

- Formation of farmer organizations (FOs), including Savings and Credit Associations (SCAs), to serve as focal points for technical and financial assistance to rural businesses and individual farmers in designing and implementing projects; and
- Assistance in product marketing to new rural entrepreneurs (including farmers) and FOs through new service providers (SPs). This would include business planning support to local investors in the agriculture and food sector.

RISP will finance a micro-credit facility to be used by individuals, farm cooperatives, and enterprises. GEF funds would be used to co-finance micro-credits for small-scale businesses which are consistent with the biodiversity conservation objectives of the national park. Some examples of eligible sub-projects include:

- Small-scale processing facilities for food/medicinal goods (e.g., milk, cheese, flour mills, fruits, berries and nuts, medicinal plants);
- Bee-keeping;
- Cultivation of valuable genetic species, including ancestors of wild species;
- Traditional handicraft activities;
- Development of nature tourism and home stay activities in the national park, buffer zone, and transition zone.

**B.II. Land and Water Biodiversity Protection Grants** (Total USD \$105,000: GEF \$80,000; IDA \$25,000). The project would finance two kinds of activities: (i) Small Scale Investments into sustainable agriculture; and integration of Biodiversity in land use plans.

- Small scale investments in improved agricultural practices on private farms to remove the threat of eutrophication of aquatic habitats within the national park, and to promote practices that are biodiversity friendly by supporting ecosystems that support habitats within the corridor. The project would provide technical assistance on implementation, and would co-finance, on a competitive basis, proposals from local farmers to participate in the program. Farmers would provide labor and farm equipment. The program would include following sub-projects:
  - Creation of vegetated buffer strips along water bodies and water courses (e.g., through conversion of plowed strips to grazing pastures or planting shrubs and/or trees) to reduce soil erosion and water pollution, and increase landscape diversity and corridors for flora and fauna.
  - Diversify crop selection of species- and cultivar-wise, to reduce reliance on pesticides and promoting natural species diversification and higher levels of agricultural biodiversity;
  - Improved management of tree shelterbelts 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; and

- Create artificial wetlands/reedbeds for wildlife and where eutrophying solutes can degrade before discharge to the Dniester River.
- Integration of biodiversity conservation into land use plans. The project would assist local and regional authorities to update land use plans that cover parts of the buffer zone. GEF co-financing to local and regional authorities would facilitate mainstreaming biodiversity conservation into land use planning and rural and urban schemes of development (legal documents for development of settlements in Moldova), which are the basis for long range planning and development. This would assist local authorities to consolidate growing “dacha” (rest home) development into already developed areas, rather than in natural habitats. The project would also assist authorities local and regional governments to update land use plans to incorporate the new protected area boundaries, and upgrade land and water protection measures within the buffer zones of the protected area.

**C. International Cooperation in Dniester River Basin and Black Sea Coastal Zone.** (Total USD \$40,000: GEF \$40,000). The Lower Dniester National Park will be located just upstream of the proposed Dniester National Park in Ukraine. In a biodiversity and Green Corridor perspective the Project should also be seen in relation to the Danube Delta Biosphere reserve in Ukraine and Romania. The component would contain the following sub-components:

**C.I. Sharing Experience** (GEF \$30,000). Sharing regional experience with Ukrainian and Romanian collaborators from local and regional government, protected areas staff, and NGOs. A work exchange program would finance Moldovan specialists to work with counterparts in Ukraine and Romania on project-related issues. The international conference participants would agree upon the specific work program.

**C.II. Conference** (GEF \$10,000). One international conference on collaborative management of protected areas in Moldova, Ukraine (including its Dniester Delta protected area), and Romania. The conference will identify needs for collaboration in wetlands conservation in the Lower Danube/Black Sea corridor with Romania and Ukraine; and agree on an action plan for meeting these needs;

**D. Project Management, Communication, and Outreach.** (Total USD \$345,500: GEF \$230,000; IDA \$75,000; Other \$40,500). A Project Implementation Unit (PIU) will be established to oversee the day to day implementation of the Project, disseminate project related information to stakeholders and be responsible for contracting for the delivery of goods, works, and consultant services. The project would raise environmental awareness in the project region and promote public participation in natural resources management and specifically in the implementation of the project. It will support NGOs and local communities in promoting environmentally sustainable development policies at the local and national level.

**D.I. PIU Support** (Total USD \$165,000: GEF \$110,000; IDA \$25,000; Other \$30,000). Incremental operating costs of the PIU, including communication support system to serve individuals and organizations engaged in Project implementation and dissemination of Project results through website and traditional means (mass media, written articles).

**D.II. Communication System** (Total USD \$35,000: GEF \$35,000). Establish a consultative process among the key stakeholders who will participate in project implementation. This will include the Moldovan sectors and institutions responsible for forestry, protected areas, environmental protection and agriculture, as well as local villages and municipalities and resources users (farmers, fishermen, and hunters). The PIU will periodically distribute the project related information to stakeholders to build commitment and ownership of the project activities within communities.

**D.III. Community Outreach Campaign** (Total USD \$45,500; GEF \$35,000; Other \$10,500). Prepare community outreach campaigns to build public awareness of the Project's objectives and encourage participation of local communities in the Project. The Project would raise the level of environmental awareness and understanding among the local, regional, and national population and provide interpretive materials for visitors to the protected area. Within the Park, interpretive facilities, such as trails, signs and kiosks, will raise the awareness of Park users about biodiversity and protecting Park resources. The campaign will also include support for the Dniester River Convention.

**D.IV. NGO Support** (Total USD \$100,000; GEF \$50,000; IDA \$50,000). Promote environmental advocacy role of Moldovan NGOs. This activity would provide training and financial assistance to Moldovan NGOs to improve their role of environmental advocates at the national, regional, and local levels.

## **V. Sustainability Analysis and Risk Assessment**

The project is expected to be institutionally, financially, and socially sustainable.

Institutional. The project will build an institutional structure for park administration that meets the mandate of the national park: protection and sustainable uses of biodiversity, participation of local communities, and visitor use/rural tourism promotion. There will be some recruitment of new staff, but the majority of staff will be assigned to the park from the local forestry department, which now manages the land and resources within the proposed national park. The Lower Dniester National Park would be the third new protected area in recent years in Moldova. The government would implement the lessons learned from these under the new project. The national park will be jointly administered by national government and the Transdnistria region.

The proposed project would pilot a new partnership with NGOs in the development and operation of protected areas in Moldova. BIOTICA and other NGOs in Moldova have good experience working with local communities, bilateral and multilateral donors, and civil society inside and outside of the country. In addition to providing Project Implementation Unit services in procurement, financial management, and workshops, the NGO BIOTICA will assist the park administration build relationships with local communities, and with European international organizations as a source of long term partnerships and co-financing. The Park Administration would have sole responsibility for park management; the NGO community would provide technical assistance in building contacts and relationships with European organizations that have a history of providing assistance and co-financing in protected areas management and rural development.

Financial. The lands within the proposed national park are currently under the jurisdiction of the State Forestry Service, which is also responsible for management of protected areas under Moldovan law. As a result, the incremental staffing costs for the park will be small.

The operating costs for the park will be financed from three sources (in decreasing order of size): (i) the state budget, through support directly to the park for recurrent operating expenses; (ii) the Environmental Fund, a state-managed fund that is fed by environmental fines and pollution fees; and (iii) the national park authority will collect fees from users of the national park. The fee structure and transparent operational procedures for use of the revenues will be developed under the project. The recurrent costs for the national park, including staff salaries, maintenance costs for buildings, vehicles and other equipment, fuel and utility costs, public education and human resource development programs, is an estimated \$75,000/year. Early in the operational phase, state budgetary support will cover about 70% of the operating costs; 20% would be covered from the Environment Fund, and 10% from user and visitor fees. The contribution from user and visitor fees is projected to increase to cover 30% of operating costs within

several years after project completion, based on investments in infrastructure, training, and marketing made during project implementation.

Social. The project concept arose following the successful efforts of villages in the project region to cooperate in averting armed conflict following independence in 1991. As such, the project concept represents a grass-roots effort to promote peace and conserve the Dniester delta ecosystem. The project was designed based on consultations with the full range of stakeholders, including national and local government, institutions engaged in natural resource management, local authorities and population, land users and tourist business, environmental and tourist NGOs, and scientific communities.

Together, these provide an excellent foundation for broad ownership and for social sustainability. The project builds on favorable conditions for creating a National Park, and upon collaboration between NGOs and governmental structures in protected areas management and environmental protection.

Some potential project risks include:

- Disagreements between Moldovan and Transnistrian authorities over establishment and operation of the national park. Since the conflicts in 1992 the situation has become relatively stable, and cooperation between the parties steadily improved. Agreements were reached during project preparation to jointly establish and manage the national park.
- Weak institutional capacity of Government agencies (mainly State Forestry Agency) to implement the project. The Government is committed to the project, but has little experience implementing internationally financed projects. The implementing agency for the project is an experienced NGO with a good project track record. The NGOs assistance to the Government agencies and local communities substantially reduces this risk. Also, the project will: (i) build capacity in the State Forest Agency, and (ii) finance technical assistance in procurement and financial management functions.
- Inadequate counterpart funding. Most of the counterpart funding will be in kind and therefore less vulnerable to local financial difficulties.

The Project's overall risk is evaluated to be moderate. Taking into consideration the interest of Moldova and neighboring Ukraine to be integrated into the European Union and efforts of both countries to harmonize their environmental laws with that of the EU legal framework, the long-term prospects of the project are good.

## **Vi. Stakeholder Involvement and Social Assessment**

Preparation of this Project has been a participatory process that has included a number of stakeholders both on international, national and local levels. The process has engaged international bodies responsible for Pan-European environmental processes, national Government and institutions engaged in natural resource management, local authorities and population, land users and tourist business, environmental and tourist NGOs, scientific circles, etc. This process has been facilitated with the help of funding from GEF (Block A Grant \$ 25,000) for the organization of one international and two local workshops. Local authorities have shown high interest in the Project. This was mirrored in signed agreement of Moldovan mayors and Transnistrian District Council to support BIOTICA Ecological Society in Project implementation. The project design provides maximal interaction with stakeholders at all phases of the Project. Strong cooperation exists between environmental authorities and NGOs in Moldova and Ukraine, and links to international organizations (Ramsar Convention, ECNC, IUCN, Wetland International, etc.) for the purpose of nature conservation in the Lower Dniester transboundary wetland area. This cooperation was greatly facilitated through the preparation workshops financed with the PDF-A grant from GEF.

## ANNEX 1. Global Significance of the Lower Dniester Ecosystem

The Lower Dniester Delta Ecosystem comprises approximately 300 km<sup>2</sup> of wetlands, riparian forests, and associated upland habitats, and contains some of the richest biodiversity in the Black Sea region. The wetland habitats are highly diverse, comprising water channels, reedbeds, freshwater marshes, marshy islands, and swamp forest dominated by willow and poplar. The vegetation is very rich with more than 700 plant species. The wetland complex is a feeding site for millions of waterfowl on the flyway between the Palearctic and the Afrotropical region. Over 150 species breed in the delta area, many of which are considered internationally endangered. The wetlands and forests also provide an important function for Black Sea ecology by filtering the nutrients and pollutants transported by the Dniester River. Moldova and Ukraine share the delta ecosystem. The majority of estuarine wetlands are found in Ukraine whereas Moldova contains the majority of freshwater wetlands and riparian forests. Some characteristics of the biodiversity of the Moldovan part of the ecosystem are as follows:

The project area contains five of the nine 9 biotopes of the Lower Dniester. The most important of these are:

- Riparian or lowland forests dominated by ash (*Fraxinus*). This particular association of forests is unique to Moldova. The oldest stands, least disturbed stands occur in the Talmaz wetland, which would be a core protected site within the proposed national park.
- Silvo-steppe communities, consisting of dry oak (*Quercus pubescens*) and steppe grass associations, which have been converted to agricultural uses elsewhere in Moldova. These associations conserve a number of rare plants typical of the Moldovan steppe; and
- Native meadows and steppes occur in the project area which have been lost elsewhere in Moldova, including wetland meadows near sea level and *Stipa* (steppe) communities on the terraces above the river banks and wetlands.

The diversity and abundance of flora and fauna includes:

- Among vascular plants 868 species (47% of those known to occur in Moldova) belonging to 406 genera occur naturally in the habitats of the project area. 25% of the higher plant species are considered threatened or declining, several of which are endemic to the region (e.g., *Shivereckia podolica* and *Genista tetragona*).
- The project area contains especially diverse and abundant plankton, macrophytes, algae (1300 species and subspecies), and terrestrial invertebrates (the highest concentration of dragonfly species in Moldova).
- The project area provides habitat and spawning grounds for 83 fish species (all of those known from the Lower Dniester River), 54 of which have small population sizes. The fish fauna includes threatened and common species of local importance such as:
  - Critically endangered sturgeon (*Huso huso*, *Acipenser stellatus*, *A. guldenstaedti*); and *Umbra krameri*, the European mudminnow, one of the most endangered species of the original Danubian fish fauna; and
  - A number of species of subsistence importance to local communities (*Alosa pontica*, *Aspius aspius*, *Siluris glanis*, *Pelecus cultratus*).
- The aquatic and associated habitats also support the richest vertebrate communities in Moldova:
  - 188 species of birds utilize the project area, half of them as breeders and half as seasonal migrants. The Talmaz wetland is a particularly important feeding ground for migrants

birds in molt. The waterbirds move regularly between the Moldovan and Ukrainian parts of the wetland. The list of threatened bird species that occur regularly in the project area include 69 species that nest (e.g., *Ciconia nigra*, *Ardea purpurea*, *Ardeola ralloides*, *Ciconia nigra* and *Hieraaetus pennatus*, *Falco cherrug*) and 132 migrants and visitors (e.g., *Plegadis falcinellus*, *Platalea leucorodia*, *Haemantopus ostralegus*, *Aythya nyroca*, *Branta ruficollis*, *Pandion haliaetus*, *Falco peregrina*, *Circus macrourus*, and *Haliaeetus albicilla*, *Circaeus gallicus*, and *Aquila pomarina*). The project area supports critically endangered species such as *Dryocopus martius*, *Otis tarda*, *Crex crex*, *Phalacrocorax pygmaeus* to name a few.

- More than 40 species of mammals occur in the project region, including 12 species of bats. This is more than one-half of the species in Moldova. Of special importance are: (i) one of two remaining herds of red deer (*Cervus elaphus*) in Moldova; (ii) a diverse community of forest-dependent bats; and (iii) the carnivore community consists of 9 species, with regionally important populations of (*Meles meles*) and marten (*Martes foina*); and (iv) six species are protected under the Berne Convention (e.g., *Felis silvestris*); and
- 18 species of herpetofauna, including critically endangered species such as *Vipera berus*, *Elaphe quatuorlineata*). A large number of these are protected under the Berne Convention, including 5 amphibians and eight reptiles.
- Rare plants protected by Bern Convention, which include the water-chestnut (*Trapa natans*), floating-moss (*Salvinia natans*), large pasque-flower (*Pulsatilla grandis*), rye-like sedge (*Carex secalina*), grass-wrack (*Zostera marina*), bladderly aldrovanda (*Aldrovanda vesiculosa*), and Black Sea speedwell (*Veronica euxina*).

**ANNEX 2: Protected Areas in Proposed Lower Dniester National Park**

	Object name	Location	Character of area	Space, ha	Ownership
<b>STRICTLY PROTECTED AREAS</b>					
<b>I. Existing Areas</b>					
<b>Natural reserves</b>					
A.	Togai swamp	East of Crocmaz village, 100m from Dniester river, Olanesti forest area, quarter 27	Swamp	50	State
<b>I. Proposed Areas for Inclusion</b>					
B.	The Bychii Cut natural site	Talmaza forest area, Talmaza wetlands natural site, quarters 16, 19	Forest	160	State
C.	Unghiul Satului swamp	Stefan-Voda forest area, Unghiul Satului natural site, Southern part of quarter 43	Wetlands, forest, meadows	30	State
D.	Talmaza Wetlands forest-swampy complex	Talmaza forest area, Talmaza wetlands natural site, quarters 14, 15, 17, 18.	Forest, wetlands, lake	320	State
E.	Rascaieti site with steppe vegetation	Stefan Voda forest area, Ciobruciskaya-Nagornaia natural site, quarter 33, Eastern border.	Steppe	5	Local authorities
<b>Total, strictly protected zone:</b>				<b>565 ha</b>	
<b>PROTECTED AREAS IN THE DNIESTER DELTA</b>					
<b>I. Existing Areas</b>					
<b>Natural reserves</b>					
A.	Copanca	Copanca forest area, Copanca natural site, quarters 41, 43, 44.	Forest, Mediterranean type forest with glades	167	State
B.	Leuntea	Copanca forest area, Copanca natural site, quarter 50; 12, 14 assigned	Forest, Mediterranean - glades	30.1	State
C.	Olanesti	South-Eastwards Olanesti village, Stefan Voda forest area, Olanesti natural site, Northern part of quarter 23	Forest	54	State
D.	Ripa de piatra ravine	Northern part of Tudora village	Palaeon-tologic	2	State
E.	Ripa lui Alba ravine	Upward Cioburciu village, near the forest belonging to Olanesti forest area	Palaeon-tologic (miocen)	2	State
F.	Purcari ravine	To the North of Purcari village, on the bank of Dniester river.	Palaeon-tologic	5	State
<b>Landscape reserves</b>					
G.	Turkish garden	Copanca forest area, Eastern half of Adajia natural site, quarter 65; Eastern half of Turkish garden natural site, quarter 66	Forest	112	State
<b>Resource reserves</b>					



	Object name	Location	Character of area	Space, ha	Ownership
H.	Complex of flood-land carbonate meadow-black soil and silt-swampy soils of Bessarabian steppe province	Talmază forest area, Talmază wetlands natural site, quarters 9, 10, 13, forest and meadow	Forest and meadow	200 (100: 100)	State, local authorities
<b>II. Proposed Areas for Inclusion</b>					
I.	Cot-Crocmaș natural site	Olanesti forest area, Cot-Crocmaș forest site, quarter 51, to the South of "Togai" swamp	Forest	37	State
K.	Unghiul Satului natural site	Stefan Voda forest area, Unghiul Satului natural site, Northern part of quarter 43	Forest	41	State
L.	Adam natural site	Stefan Voda forest area, Northern part of Adam natural site bordering with the swamp	Forest	28	State
M.	Talmază wetlands natural site	Talmază forest area, Talmază wetlands natural site, quarters 11, 12, 20, 21, 22	Forest	400	State
N.	Cioburciu-Stinca site with steppe vegetation	To the North of Rascaieti village, Stefan Voda forest area, Cioburciu-Stinca natural site, quarter 30, North-Eastern border	Steppe, forest, glades	15	Local authorities
O.	Cotul Chirei regulated fish spawning site	Flood-land meadow on the right bank of Dniester river, meander Nr.1, North-Eastwards Talmază village	Meadow	50	Local authorities
P.	Turunciuc ichthyologic reserve with the Complex on aboriginal fish reproduction	Turunciuc sleeve and the left bank of Turunciuc sleeve, from Cioburciu village to the bridge in Hlinoe village, from Turunciuc bank to the state dam	Flood-land meadow	30	State
Q.	Jidran natural site for fish spawning and growth	Flood-land meadow and isolated loop of Dniester, Jidran natural site, Talmază wetlands natural site, quarter 21, 22	Flood-land meadow; 2 km Dniester loop	215 (15: 200)	State, Local authorities
R.	Purcari Cut regulated fish spawning site	Flood-land meadow on the Dniester left bank, meander Nr. 14, South-Eastwards Nezavertailovka village	Flood-land meadow	150	State
S.	Turstan-Jidran tourists' pathway	From Turstan to Jidran natural site	Dam	3800 m	State
T.	Aivazia wetland	Olanesti and Cricmaș communities, lowland (1.5 m below the Dniester level) in the drained valley between Olanesti and Cricmaș villages	Grass fen, haying and grazing meadows	60 40: 20	Local authorities Private
U.	Chior-meanders	Stefan Voda forest area, forest-swamp semi-isolated Dniester River paired meanders vis-à-vis covered with earth Teru (Chior Lake), quarters 21, 22	Complex of forest, fen and pools	110	State
<b>Total, Protected Areas with special management :</b>				<b>1708 ha</b>	
<b>BUFFER ZONE WITH REGULATED ECONOMIC ACTIVITY</b>					
<b>I. Existing Areas</b>					
<b>Natural reserves</b>					
A.	Olanesti	South-Eastwards Olanesti village, Stefan Voda forest area, Olanesti natural site, Southern half of quarter 23	Forest	54	State

	Object name	Location	Character of area	Space, ha	Ownership
<b>Landscape reserves</b>					
B.	Turkish garden	Copanca forest area, Adajia natural site, Western half of quarter 65, Turkish garden natural site, Western half of quarter 66.	Forest	112	State
<b>Monuments of garden-park arts</b>					
C.	Leuntea park	Gradinita village	Forest, monument of nature	21,49	State
<b>II. Proposed Areas for Inclusion</b>					
D.	Adam-Palii natural site	Stefan Voda forest area, Adam natural site, Southern part of quarter 41; Palii natural site, quarter 42.	Forest	46	State, Private
E.	Talmazza wetlands-9 natural site	Talmazza forest area, Talmazza wetlands natural site, quarter 9.	Forest	100	State
F.	Turstan natural site	Talmazza forest area, Talmazza wetlands natural site, North-Eastern corner of quarter 10, between Dniester and economic dam	Forest	10	State
G.	Old Dniester natural site	North-Eastwards Copanca village, region of Old Dniester bed adjoining to Dniester, Chitcani natural site, quarter 35	Forest	30	State
H.	Angle-Meander	Dniester right riverside meander between Raskaets and Purcari villages	Swampy sparse growth of trees	30	Local authorities
I.	Cot Crocmaz natural site (alongside with Togai swamp)	To the North-East of Crocmaz village, Stefan Voda forest area, Olanesti natural site, quarter 48	Forest, meadows	40	State
J.	Tudora natural site	To the North-East of Tudora village, Stefan Voda forest area, Olanesti natural site, quarter 49	Forest, meadows	90	State
K.	Site of Mediterranean-type forest with glides	Westwards Rascaieti village, Stefan Voda forest area, Ciobruciskaia-Nagornaia natural site, quarter 32, Northern border	Steppe vegetation surrounded by forests	5	State
L.	Podkova-Krivenkoie lakes flood-land system	To the left of Rascaieti-Hlinoe highway, up to Dniester; Northern border – adjoining highway to quarter 19 of Talmazza wetlands natural site	Flood-lands	900	State
M.	Turunciuc-Dniester flood-land system	Southwards Cioburciu village, left bank of Dniester river, meander nr.2, between Dniester and state dam.	Flood-lands	100	State
N.	Old river-bed of Dniester river	Part of Dniester near Slobodzea village, between Copanca and Leuntea villages up to Talmazza village, 40 km long	Old river-bed	120	State
O.	Talmazza wetlands canal system	Between the state dam and Western border of “Talmazza wetlands” forest-swamp complex	Canal and flood-lands	9 (1:2)	State
P.	Riverside fish spawning sites	Strip of bank 30-m width, along the left bank of Turunciuc sleeve from Hlinoe village to Nezavertailovka village, along the left bank of Dniester from Slobodzea to Purcari village, and along the right bank of Dniester from the opposite side of Slobodzea to Palanca village	Riverside flood-lands	780	State

	Object name	Location	Character of area	Space, ha	Ownership
Q.	The Lower Dniester canal system	Between Dniester bed and state dam, from Jidran natural site to Palanca village (2/3 <sup>rd</sup> of the site length), width of flood-lands with canal is 30 m	Flood-lands, canal	220	State
S.	Forest tract Copanca	Copanca forest area,	Forest, Mediterranean - glades; plantings	1650	State
T.	Forest tract Valea Stiuba	Talmaza forest area, To the West of Popeasca Village	Altered Mediterranean an forest	81	State
U.	Forest tract Valea Turcul	Talmaza forest area Talmaza forest area To the North-West of Popeasca Village	Altered Mediterranean an forest	120	State
V.	Forest tract Valea Stinei-Tufa- Talmaza Stinca	Copanca forest area, Westwards Talmaza	Altered Mediterranean an forest	403	State
W.	Forest tract Zaozernoe	Talmaza forest area, To the South of Talmaza Village	Altered Mediterranean an forest	182	State
X.	Forest tract Orehovoe	Talmaza forest area To the South-West of Cioburciu Village	Altered Mediterranean an forest	226	State
Y.	Forest tract Grusevov	Talmaza forest area, To the South of Cioburciu Village	Altered Mediterranean an forest	54	State
Z.	Forest tract Arpentievo	Stefan-Voda forest area, To the South of Cioburciu Village	Altered Mediterranean an forest	126	State
Aa.	Forest tract Ciobruci Nagornoe	Stefan-Voda forest area, Cioburciu forest area, Southwards of village	Altered Mediterranean an forest	670	State
Bb.	Forest tract Ciobruchskoe Stinca	Stefan-Voda forest area, Cioburciu forest area, Eastwards of village	Forest and plantings	105	State
Cc.	Forest tract Crocmaz	Stefan-Voda forest area, Westwards Crocmaz Village	Mainly old planted forest	247	State
Dd.	Olonesti-Crocmaz lowland	Communes Olonesti and Crocmaz Dniester valley between Olonesti and Crocmaz villages	Drained arable and abandoned lands, meadows	556	Local authorities, Private
<b>In all, related to Buffer zone with regulated economic activity:</b>				<b>7,088 ha</b>	
<b>TOTAL</b>				<b>9,361 ha</b>	

*Transition zone (zone of collaboration // economic zone) : Transition zone occupies about 45,000 ha from total supposed area of "Talmaza wetlands" protected region. There are localities here, state objects and those related to any other ownership type, belonging to various private and juridical persons which are dealing with economic activities, in compliance with the regime of the National Park*

### ***ANNEX 3: Additional Information on MSP Proposer Institution***

#### **BIOTICA Ecological Society**

##### **Contact address:**

P.O.Box 1479, Chisinau MD-2043, Moldova

Tel.: +373-2-243-717

Tel./Fax: +373-2-243-274

E-mail: [biotica@mdearn.cri.md](mailto:biotica@mdearn.cri.md), [paolo@mdearn.cri.md](mailto:paolo@mdearn.cri.md)

<http://www.scils.rutgers.edu/~olejka/biotica/>

**Contact person:** Piotr Gorbunenko, President

BIOTICA is registered as a national Moldovan not-for-profit non-political nongovernmental environmental association in April 2nd, 1993 (Non-profit number 158). In accordance with national legislation it was reregistered on June 3, 1998. The organization «BIOTICA» consists of scientists, experts, teachers and students in ecology, biology, law and journalism. Membership - 60 (of which 12 hold PhDs).

##### **Priorities:**

BIOTICA has such main areas of activity:

- Conservation of biodiversity;
- Development of national environmental legislation and public participation;
- Creation of legal basis for NGOs activity in Moldova.

##### **Results of Activity:**

***Biodiversity conservation:*** BIOTICA has organized expeditions and field studies on the conservation of endangered species and habitats along the river Dniester, proposed to local authorities the program of revitalization of the State Reserve "Iagorlic" after the civil war of 1991-1992, supported by ISAR/USAID, the World Nature Association (private USA foundation), Audubon Society, USA, Cottonwood Foundation, USA, and local energetic enterprises. BIOTICA successfully drafted and lobbied the Parliamentary Decree «On Measures for Conservation of River Dniester Ecosystems and Biodiversity» from July 10, 1997. In present BIOTICA has finished realization of the project «Protecting Dniester River Biodiversity» with support of John D. & Catherine T. MacArthur Foundation (USA) - \$ 34,000, which included study of the status of biodiversity components and ecosystems, lobbying of the conservation issues. In frame of this project we united into work team forces of scientists from several research institutes, but in November 1998 organized huge International Conference on the protection of the Dniester river biodiversity (more than 160 participants, including 60 foreigners) and published proceedings, 1998, 210 pp. In October 7-9, 1999, the second international Conference «Biodiversity Conservation in the Dniester River Basin» was organized. More than 260 people, including 100 foreign participants, gathered to discuss the river problems. Three MPs of Ukrainian Parliament took part. They meted also with Moldovan colleagues in Parliament, where discussed the draft of bilateral convention on the protection of Dniester River natural resources, elaborated by BIOTICA. Both Moldovan and Ukrainian MPs decided, that such convention on transboundary watercourse is necessary for sustainable use of the river resources. Because a lot of representatives of NGOs took part in a conference, just next day they remained in Moldova to organize the Eco-Forum «Dniester-99», where the International Environmental Association of River Keepers «Eco-TIRAS» was established. It is registered under Moldovan law.

Thanks to this activity, with help of GEF (World Bank) the project «Water Quality Management and Biodiversity Conservation of the Lower Dniester» (\$ 25,000) was started in May 1999 directed to establishment of new National Park «Lower Dniester» as a part of common with Ukraine protected area. The book: Tatiana Sarapanovscaia «Environmental Problems of the Middle Dniester» (1999) is published on the basis of our work.

**Environmental legislation and public participation:** BIOTICA has proposed numerous amendments to Moldovan environmental drafts: "On Protective Zones of Rivers and Water Bodies," "On Wildlife," "On Environmental Impact Assessment Law", «On Drinking Water», etc. For example, in national environmental legislation was introduced a procedure for public participation in environmental decision-making (EIA Law); and 32 taxons of invertebrates were additionally protected as well as wolves. BIOTICA is the author of the draft of the law "On Access to Environmental Information" (supported by Eurasia Foundation -USAID), that is closely connected with ECE Directive 313/90 and Sofia'95 Declaration. This draft is presented to the Parliament in October 1996 and to the Environmental Committee of the Interparliamentary Assembly (IPA) of CIS countries in St. Petersburg as a model law for the countries of the community and already passed in IPA on December 6, 1997. On April 1999 it was passed in Parliament in the first reading. BIOTICA firstly in Moldova published the collection of International treaties, ratified by the country (1998, 285 pp.). Also BIOTICA published the book «Environmental Legislation of Moldova» (1996-1998) in two languages - Moldavian/Romanian and Russian (1999, 260 pp. each), as well as Aarhus Convention in three languages, including official one (1999). BIOTICA was the main initiator and promoter of the pioneer ratification of this convention by the Parliament of Moldova in April 1999.

**Development of non-profit legislation and support of NGO development:** In 1994-1996 BIOTICA refined the draft of the Law "On Citizens' Associations" with support from the Eurasia Foundation/USAID and presented it to the Parliament. The draft law was passed in the Parliament of Moldova on May 17, 1996 and officially published January 23, 1997. In 1998 the BIOTICA team has organized training in computer and communication techniques for 23 representatives of scientific and NGO communities. In 1995 BIOTICA prepared the large report "Legal and Financial Environment of NGOs in Moldova" to establish the local office of "New-REC" in Moldova (support of the Regional Environmental Center, Hungary). BIOTICA publishes the book «For What and How NGOs are Creating», Chisinau, 1997, 116 pp., in two linguistic versions - in Romanian and in Russian. This book became the bestseller in Moldova, which only this publication describes current public opinion about non-profit sector, legal and financial framework and comments, recommendations for people, which want to create NGO, and model documents for registration. BIOTICA was active in drafting of the law «On Foundations» (adopted in 1999).

Together with several other Moldovan environmental NGOs, BIOTICA is trying to introduce high ethic standards of activity and cooperation in the Moldovan "third sector" and initiated the agreement in this field. BIOTICA actively participated with 12 other NGOs in the large project "Development of the Sphere of Ecology in Moldova" (1995-1997), supported by GTZ, Germany, as well in the implementation of "New-RECs" project in Moldova. Together with the group of environmental NGOs and scientists with support of GTZ we published the book «Environment of Moldova» (1999, 160 pp., in Romanian).

BIOTICA was the national participant of international NGO team analyzed current situation with public participation in Europe (Regional Environmental Center project), the results in form of REC publication were distributed among participants of the Aarhus pan-European Ministerial Conference «Environment for Europe», 1998. During London (1999) pan-European Ministerial Conference «Health and Environment for Europe» in official documents distributed to participants was included the national report for Moldova on the issue of legal issues of access to information and public participation in environmental and health matters, drafted by BIOTICA.

BIOTICA realized together with German NGO «Independent Institute for Environmental Concerns - UfU (Berlin) TACIS-Democracy project «Democracy through Participation» having aim to enforce partnership between NGOs, MPs and governmental decision makers to develop participation in decision making. In frames of this project were strongly developed capacities of national NGOs in public participation and enforced the national legislation in this field. Two books were published and widely distributed in the CIS area: «Democracy through Participation» and «Aarhus Convention» (first official edition in national language in Europe).

### **Publications**

BIOTICA regularly publishes informative materials in national newspapers and different magazines (in English, for example, Russian Conservation News, 1996-1998, numbers 8-11, 13), for example, the quarterly bulletin “Participation”.

### **Membership**

Individual membership – 60. BIOTICA is a member of IUCN, Social-Ecological Union (Moscow), and The Northern Alliance for Sustainable Development – ANPED (The Netherlands) and correspondent-member of the European Environmental Bureau (Brussels), founder of International Environmental Association of River Keepers «ECO-TIRAS».

### **Links and contacts**

BIOTICA has numerous links and contacts in the world – GLOBE EU and GLOBE Europe (Brussels), European Human Rights Foundation (Brussels), Independent Institute for Environmental Concerns - UfU (Berlin), Friends of the Earth International (Belgium), Both Ends (The Netherlands), IUCN, The Conservation Foundation (London), Imperial College (London), etc.

### **Administration and accounting control procedures; current auditing arrangements**

Chairman of the Governing Board, who oversees all program managers, has the ultimate responsibility for the administration of activities carried out by the Wildlife Foundation. Administration of financial resources is dealt with by the accounting staff, reporting to the Chief Accountant of the Foundation. Overall accounting and bookkeeping follows national regulations and requirements. Parallel accounting is being carried out using US GAAP methodology. The accounting system is computer based and allows for individual funds management according to specific donor’s requirements.

Foundation regularly reports on the status of its assets to tax authorities and on the use of grant funds to the concerned donor agencies. Every year the Foundation has its accounts audited by an independent auditor. Russian fiscal year is January 1 – December 31.

### *Norms and procedures for contracting goods, services and works*

Procurement under the project will follow the World Bank procurement guidelines and comply with the provisions of the Attachment 3 to the Project Brief "Procurement under the Project". A procurement consultant will be engaged to carry out procurement of goods and services, including the preparation of bidding documents and RFPs, evaluation, contract monitoring, and reporting on the overall status of the project procurement.

## List of Realized Projects by BIOTICA

Donor and Sum (US\$)	Dates of the Project	Topic of the Project	Results	Partners
Dniester Hydro Power Station	1993	Monitoring of the populations of rare fish species of Cuciurgan water body	Report and recommendations for conservation	No
World Nature Association	1994	Estimation of the population of endangered European mud-minnow <i>Umbra krameri</i> in the Dniester River	Conservation measures proposed	No
Eurasia Foundation	1994-1995	Drafting of the Law «On Public Associations» for Moldova	Law is drafted and passed in Parliament	No
REC-Budapest	1995	Study of legal and financial environment of NGOs in Moldova	Report, presented in Sofia conf.	No
ISAR-Kiev	1995-1996	Drafting of Concept to restore the aquatic reserve «Iagorlic»	The Concept was presented to the reserve authority	No
Eurasia Foundation	1996	Drafting of the law «On Access to Environmental Information» for Moldova	Law is adopted in first reading (1999); Law is adopted as a model for NIS (1997)	No
Cottonwood Foundation	1997	Semi-artificial reproduction of fishes in the Middle Dniester	Training of local people, nests distribution, etc.	No
Eurasia Foundation	1997	Writing and publishing of the book «For What and How NGOs are Creating»	Book is written and published	No
REC-Hungary	1997-1998	Drafting of national report on access to environmental information, public participation and access to justice	Report is published by REC in «Doors to Democracy»	EcoPravo-Lviv (Ukraine)
ISAR-Kiev	1998	Eco-Tourist Expedition «Middle Dniester-98» and book publication	Expedition, book «Environmental Problems of the Middle Dniester», 1999	No
ABA-CEELI	1998	Publication of the collection of international treaties on environmental issue	Collection is published	No
REC-Hungary	1998-99	Drafting of national report on access to environmental and health information, public participation and access to justice in environmental & health issues	Report is published in London'99 Ministerial Conf. documents	Ecopravo-Lviv (Ukraine)
MacArthur Foundation	1998-1999	Development of Concept of the Ecological Restoration of the River Dniester	Research report, substantiation for establishing of new wetland reserve «Talmaza plavni», two international conferences with 160 and 260 people	No
EU Tacis Democracy Program	1998-1999	«Democracy through Participation» - support of ratification and implementation of Aarhus Convention in Moldova	Moldova became the first country ratified the convention; NGOs proposed a lot of amendments in laws, etc.	Independent Institute for Environmental Concerns - UfU (Berlin)
ABA-CEELI	1999	Publication of collection of environmental laws (1996-98)	Published book «Environmental legislation of Moldova (1996-1998) - 2000 copies	Ministry of Environment of Moldova

Donor and Sum (US\$)	Dates of the Project	Topic of the Project	Results	Partners
Cottonwood Foundation	1999	Video movie on semi-artificial reproduction of fish for restoration	Movie is created and distributed	No
GEF-World Bank (PDF-A)	1999-2000	Drafting of project proposal «Water quality management and biodiversity conservation in the Lower Dniester»	In action, ecological net concept and creation of National Park in the lower Dniester is proposed	Consortium of NGOs
REC-Moldova	1999	Eco-Forum NGO «Dniester-99»	ECO-TIRAS International Environmental Association of River Keepers is established and registered. 21 NGO are members	No
REC-Moldova,	2000	Training of Transdnestrian eco-NGOs in capacity building	In action	No
National Environmental Fund of Moldova,	2000	Concept of eco-network in the Republic of Moldova elaboration and mapping	In action	No
	1995-2000	Drafting and lobbying and amending of the laws on water protection zones, on wildlife conservation, on potable water, on hydro meteorology, on natural resources, on EIA, on the fund of natural protected areas	Amendments are adopted	No
	1997	Drafting of the Parliamentary regulation on the Measures for Amelioration of the Environmental Status of the Dniester River	Regulation is adopted	No
	1999-2000	Drafting of Bilateral Treaty on the Protection and Sustainable use of Natural Resources of the Dniester River	Draft of the Treaty is currently under the discussion in the Ministry of Environment	No



## **2. INCREMENTAL COST ASSESSMENT**

---

### **I. BASELINE SCENARIO**

The Government of Moldova has recognized biodiversity conservation as a high priority. Through developing a Biodiversity Action Plan and National Environmental Action Plan, it has identified main directions and programs for improving the biodiversity conservation in the country. The Government has passed the Concept of New Environmental Policy in Moldova in the Parliament and established legal instruments for improved biodiversity management. Eventhough the economic situation in the country has restricted the Government's capacity to implement the priority programs, some investments have taken place: protected areas have been increased by about 20,000 hectares, raising the area under protection from 1.4% to 2%; two forest reserves (Plaiiul Fagului, 6000 ha, and Padurea Domneasca, 5600 ha), and one wetland reserve along the Prut River in southwestern Moldova (Prutul de Jos, 1691 ha) have been added to the protected area network.

Specifically in regards to the Low Dniester area, the baseline is estimated to include the following items. For Component A: (i) \$14,890 from BIOTICA would be spent on preparation of various funding proposals; (ii) \$50,000 in kind from the Government would be spent on ecological restoration activities; and (iii) \$360,000 IDF Grant for Environemntal Compliance and Enfoircement Capacity Building in Moldova, which will improve the legal framework, compliance monitoring, and enforcement capacity for environmental management. For Component B: (iv) Municipal authorities have been investing in water supply and sanitation infrastructure to improve services and protect human health and the environment, and special projects in water supply and sanitation, forest (afforestation) and biodiversity conservation are financed annually from the National Environmental Fund and by Forestry Service. These investments from municipalities, Environmental Fund and Forestry Service are estimated at \$350,000 as a baseline; and (v) \$50,000 would be invested by communities in some agricultural works (but not necessarily for environmentally-friendly activities). For Component C: (vi) a joint Moldovan - Ukrainian Commission for Dniester river management was created in 1994. This Commission exchanges information regularly and meets formally twice a year to discuss issues related to water quality, water volumes to be released by the Novodnistrovscaia hydropower station during spring or summer peak flows, and fisheries management and biodiversity conservation issues. \$50,000 in-kind would be contributed by the Government to support the activity of the Commission. And for Component D: (vii) \$10,500 would be spent by BIOTICA and (viii) \$15,000 by EU Regional Environmental Center in Moldova (REC) on public awareness campaigns.

### **II. GEF ALTERNATIVE**

Under the GEF alternative, GEF funds would be used for incremental activities needed to ensure biodiversity conservation and promote the sustained protection and rehabilitation of the ecosystem. The Project will help to create a new protected area in the form of a National Park and establish an integrated protected ecosystem by establishing ecological corridors for conservation in the areas of the highest biodiversity in the lower Dniester River delta ecosystem. Ecological corridors will preserve important wildlife migratory routes and interconnect the other types of protected areas, thus insuring better protection of larger blocks of habitats.

Building upon the baseline activities described above (some of which are parallel activities), the GEF Alternative would ensure streamlining of available scarce resources; channel the investments towards sustainable and environmentally friendly activities; full public awareness and participation of the communities in the sustainable management of their natural assets. The GEF Alternative would make credits under RISP accessible and grants available to local Communities for environmentally friendly and sustainable agricultural activities. Without the MSP, the marginal and ad hoc efforts to conserve the biodiversity would continue, but could not ensure the protection of the Park territory. The GEF MSP

would help the country develop public commitment, institutional and participatory mechanisms, and social and legal framework to restore and conserve the biodiversity for a longer term. The total cost of the GEF Alternative is estimated at \$2,847,500.

### III. INCREMENTAL COSTS

The difference in cost between the baseline scenario (\$875,000) and the GEF Alternative (\$2,847,500) amounts to \$2,022,500. The availability of GEF Funds (\$975,000) for the proposed MSP would leverage additional funding that would not otherwise be available. This leveraged funds include \$400,000 co-financing from IDA's Rural Investment and Services Project for Component B.

#### Incremental Cost Assessment Summary

	BASELINE (US\$)			ALTER- NATIVE TOTAL	INCREMENT (US\$)		
	BIOTICA	Other	Total		GEF	Other	Total
<b>Preparation (PDF)</b>							
Preparation of MSP	14,890	0	14,890	49,890	25,000	15,000	35,000
<b>Implementation (I)</b>							
A. Establish Moldova Lower Dniester National Park	0	410,000	410,000	1,202,000	425,000	417,000	842,000
B. Biodiversity in Buffer Zone	0	400,000	400,000	1,195,000	280,000	515,000	795,000
C. International Cooperation	0	50,000	50,000	90,000	40,000	0	40,000
D. Project Management and Commitment Building	10,500	4,500	15,000	360,500	230,000	115,500	345,500
<b>Total Implementation (I)</b>	<b>\$10,500</b>	<b>\$864,500</b>	<b>\$875,000</b>	<b>\$2,847,500</b>	<b>\$975,000</b>	<b>\$1,047,500</b>	<b>\$2,022,500</b>
<b>Total (PDF+I)</b>	<b>\$25,390</b>	<b>\$504,500</b>	<b>\$889,890</b>	<b>\$2,897,390</b>	<b>\$1,000,000</b>	<b>\$1,062,500</b>	<b>\$2,057,500</b>

### 3. BUDGET

GEF incremental project costs are broken down into expenditure categories as shown in the following budget table. Detailed budget breakdown is included in the Attachment 1.

#### Project Budget by Disbursement Categories

Category	GEF	Other sources	Project total (US \$)
Consultant Services	\$255,000	\$302,500	\$540,500
Goods	\$175,000	\$148,000	\$323,000
Civil Works	\$75,000	\$2,000	\$77,000
Credit Co-Financing	\$110,000	\$50,000	\$160,000
Small Grants	\$80,000	\$30,000	\$110,000
Workshops / Training	\$200,000	\$490,000	\$690,000
Operational costs	\$80,000	\$25,000	\$105,000
<b>Project Total</b>	<b>\$975,000</b>	<b>\$1,047,500</b>	<b>\$2,022,500</b>

### 4. IMPLEMENTATION PLAN

The duration of the project is four years. The NGO BIOTICA will have overall responsibility for project implementation. A small Project Implementation Unit would be established within BIOTICA to handle procurement, financial management, and project M&E functions.

Project implementation will be guided by a multi-sectoral steering committee comprised of representatives of the Ministry of Environment and Territorial Development, including its departments of forestry, fisheries, and land use planning, local government and communities, and the scientific community.

The State Forestry Service, which manages most of the national protected areas, will implement Component A. Components B-D will be tendered. A Local Advisory Committee would advise BIOTICA and the State Forestry Service on project and park-related activities, and to ensure that local stakeholder opinions and concerns are heard. The committee will include representatives of district and village governments in the project area, local communities, NGOs, and user groups.

#### Project Implementation Plan

Activities	Project-months							
	6	12	18	24	30	36	42	48
A. Creation of Dniester National Park								
Development of management plans								
Implementation of management plans								
B. Sustainable Land Uses and Ecotourism								
C. Build Awareness								
D. International Cooperation								
E. Project management								

## 5. PUBLIC INVOLVEMENT PLAN

---

Stakeholder Identification. The stakeholders in this Project include international bodies responsible for the Pan-European environmental processes, national Government and institutions engaged in natural resource management, local authorities and population, land users and tourist business, environmental and tourist NGOs, and scientific communities. Preparatory funding from GEF (Block A Grant \$ 25,000) was used to develop a detailed analysis of the project stakeholders, solicit their input to project design, and plan their involvement in project implementation. The stakeholder matrix is found below.

The full range of stakeholders participated in project preparation:

- In addition to collaboration with stakeholders in the project region throughout preparation, two workshops were held. The first was hosted by local authorities and attended by local communities and user groups, representatives from the Parliament of Moldova, Ministry of Environment, State Forest Agency, experts, NGOs from Moldova and Odessa oblast, Ukraine. This workshop was held in Talmază village, the focal area of the proposed national park. The workshop agreed on the main problems to be addressed, the project's framework for addressing root causes of biodiversity loss, how to address project sustainability, and the implementation arrangements. The second was held in Slobodzia village with the mayors of villages in the project region held. The mayors endorsed the project design and, with other local and regional authorities.
- The Moldovan preparation team drafted a governmental decree for bilateral Moldo-Ukrainian Convention on the protection and sustainable use of the natural resources of the Dniester River. This decree and its implementation were the subject of an International Conference on Biodiversity Conservation of the Dniester River, with input from legal experts in the U.S. The chapter of this document is dealing with bilateral regulation of the use of biological resources of the river. This will be presented to Moldovan Government, and after draft approval - to the Ukrainian counterpart.
- Expert working groups representing various research and governmental institutions from Moldova and Transdnistria region were established under the project steering committee to advise and inform the preparation team on the project design. These working groups were drawn from representatives of the Ministry of Environment, Ministry of Agriculture, the State University of Moldova, Fishery Research Station, Institute of Zoology of the Academy of Sciences of Moldova, National Institute of Ecology of Moldova, State Forest Agency, State Water Management Concern, NGOs.
- A seminar was held with the scientific and environmental public in Chisinau within the frame of the International Conference "Biodiversity Conservation of the Dniester River Basin". Over 115 persons from Moldova, Transdnistria, Ukraine, Russia, USA and Germany took part in the Seminar, including representatives from state organizations, such as the Parliament, Governments, Ministries, Agencies, Academy of Science and other research institutions, local authorities, NGOs; scientific community, and the press. The seminar participants endorsed the project design.

Information Dissemination and Consultation. The general information on Project implementation will be distributed at sub-national and village level using mass-media resources (e.g. national and local newspapers, TV, radio). Press conferences, round tables and briefings will be organized on regular basis. The Project plans to involve local community, especially youth, into implementation of practical measures, like planting of trees and bushes, soil protection efforts, etc., in order to develop environmental awareness. Teachers will be invited to local seminars to be informed about the Project and to give inputs and comments.

Specific information will be discussed at by-annual international conferences on biodiversity conservation of the Dniester River basin, which already became a tradition in this region. Usually governmental representatives, MPs, scientific community, NGOs, local authorities, mass media and others attend these conferences. A series of educational, informative and consultative seminars for local communities will be carried out. Due to the transboundary context of the Project, NGOs and local authorities from Ukraine and Romania will be invited to local conferences and seminars.

The activities and their outcomes will be reflected in leaflets and bulletins. These materials will be disseminated in all villages of the Project area. Environmental and legal experts will carry out a range of consultations and discussions in local communities in order to involve people in decision-making processes and give them insight in environmental legislation.

**Stakeholders Participation.** The involvement of local authorities and communities is crucial for the success of the Project. The project design provides for maximal interaction with stakeholders at all phases of the Project for development of sustainable and environment friendly resource management schemes. The Project Implementation Unit will organize stakeholder interaction using participatory processes and methods.

**Social and Participation Issues.** The Project is expected to benefit from the cooperation of the local communities and environmental interest group. Serious Project-related conflicts and adverse social impacts are not anticipated. New job opportunities will be created in the Project area, through development of ecological and agricultural tourism and through the build up of a park administration and management.

A potential social problem of the Project could be the reduction of the level of income for people that rely on natural resources of the Project area such as wood energy, livestock foraging, fishing, hunting etc. This problem will be minimized through compensatory actions and establishment of sustainable nature management practices.

### Stakeholders Identification Matrix

Stakeholders	Involving in the Project	Nature of involvement
<b>State Authorities</b>		
Parliament	Co-executing Agent	Environmental Legislation improvement Elaboration the mechanisms of environmental legislation adoption and observation
Ministry of Environment and Territories' Development	Co-executing Agent	Rational Use of Natural Resources Development of environmental legislation, action plan, norms and standards State control on the quality of environment Extension of the protected area Biodiversity conservation
Ministry of Agriculture and Food Industry	Co-Executing Agent	Promotion of the land use practice in region Licensing and regulations of the agrochemicals use Development of the crop cultivation use Implementation of the soil protected measures Use of the animal farms wastes

Stakeholders	Involving in the Project	Nature of involvement
Ministry of Education, Science and Youth	Co-executing Agent	The environmental education development in local villages The methodical environmental literatures introduction Teaching staff support and education
Ministry of Culture	Benefit	Environmental culture development Mass-media services providing
State Forestry Service	Co-executing Agent	Forest resources management, protection and monitoring Forestation of eroded and agricultural lands Natural protected areas management Regulation of hunting, wood production
Processing Industry	Affected Benefit	Waste water treatment standards observation Environmental legislation observation The possibility of water treatment plant reconstruction
Academy of Science	Benefit Collaborators	Participation in development of relevant legislation, standards, acts Evaluate of the human activity on the state of environment Scientific explanation of the rational using of the natural resources Monitoring of the natural processes and state of environmental Introduction of advanced know-how for environmental and economic situation improving (alternative sources of energy) Consultations
Apele Moldovei State Water Management Concern	Co-executing Agent Benefit	Development of programs, plans, normative documents on the water resources use Support of hydro-technical construction in working state Cleaning of the water bodies Irrigation and melioration of agricultural lands Protection from flooding (state damp protection and reconstruction)
<b>Regional Authorities</b>		
Tighina Judet	Benefit	Interest in the Project implementation Biodiversity conservation and water quality improving
Authorities of Transdnistria	Co-executing Agent Benefit	Interest in the Project implementation and public involvement Promote cooperation among land users and owners
State Committee for Environment and Natural Resources	Co-executing Agent Benefit	Rational Use of Natural Resources, State control on the quality of environment Extension of the protected area Biodiversity conservation

Stakeholders	Involving in the Project	Nature of involvement
Environmental Agency of Tighina Judet	Collaborators Benefit	Interest in the Project implementation, environmental protection Control of rational using of the natural resources
<b>Local Community</b>		
Authorities (Mayors and Councils)	Benefit, Affected, Collaborators	Promote cooperation among all land users and owners Implement decisions Land use and household damp protection Participate in conflict resolving process Promotion of training and educational activities Developing of agro- and eco-tourism and national handicraft
Population	Benefit	Needs the environmental education, culture and legislation knowledge improving Receiving the environmental information Involving in decision-making process Participation in the environmental action, events
Farmers	Benefit, Affected	Crops and animal protection Agrochemicals use Agricultural activity in potential protected area; pasture activities
Enterprises	Benefit, Affected	The natural resources using The environmental legislation observation The water treatment plant reconstruction
Schools	Benefit, Collaborators	Educational trainings, Environmental protection actions Information distribution
Fisher-men	Benefit	Fish breeding Introduction of valuable fish species Using of the poaching fish breeding
Hunters	Benefit	Animal destroy Using of the poaching animal destroy Introduction of valuable animal populations
Pasture Users	Benefit	Using of the pasture area in the water protected zone and national park area The additional pasture creation
Handcrafters	Benefit	Participation in the exhibition on national and international level The handicraft articles presentation for tourists and enterprises
<b>Other Stakeholders</b>		
NGOs	Co-executing Agents, Collaborators, Benefit	Rising of public awareness Participation in necessary documentation Development of the Project implementation Cooperation with public authorities Information dissemination, environmental trainings, public involvement, consultations

Stakeholders	Involving in the Project	Nature of involvement
Mass-media	Collaborators, Benefit	The Project implementation process illumination Information publication and dissemination
Eco-Agro-Tourists	Benefit, Collaborators	Using the National Park area and water body Forest, fish, animal and water consuming; the natural landscape
International Environmental Organizations	Collaborators	Experience exchange in the natural resources using Environmental education with modern methods Consultation and information providing
Tourist Agencies	Benefit	The natural landscape and water ways using The handcraft making articles acquirement
Scientific Institutions	Benefit	Participation in environmental monitoring process Obtained new data about environmental state and processes Participation in introduction of alternative sources of energy and nontraditional technologies Biodiversity conservation, Scientific research, excursions, expeditions, observations



## 6. MONITORING AND EVALUATION PLAN

Project monitoring will be carried out by the NGO BIOTICA in collaboration with the Ministry of Environment and Territorial Development. The evaluation will include data on performance indicators, a mid-term review, a description and analysis of stakeholder participation in Project implementation, and an explanation of how the monitoring and evaluation results will be used to adjust the implementation of the Project, if warranted. The performance indicators and the monitoring and evaluation process will be incorporated into a detailed Monitoring and Evaluation Plan prepared in the first 3 months of project implementation. The monitoring evaluation will be based on the IUCN framework for assessing management effectiveness of protected areas, adapted for local and project circumstances.

The PIU, operating within BIOTICA's offices, would prepare the following progress reports on a semi-annual basis:

- project status reports, reflecting: (i) the status of project implementation, problems encountered, actions suggested for overcoming these problems; (ii) the current state of project indicators; and (iii) the costs incurred to date for each project component and estimated costs of completion; and
- procurement reports describing the progress of procurement activities against the procurement plan, deviations from this plan, reasons for them, and remedial actions.

## 7. TECHNICAL REVIEW

Not Applicable

## 8. PROJECT CHECKLIST

<b>PROJECT ACTIVITY CATEGORIES</b>			
<b>Biodiversity</b>	<b>Climate Change</b>	<b>International Waters</b>	<b>Ozone Depletion</b>
Prot. Area zoning/mgmt.: <b>X</b>	Efficient prod. & distrib.:	Water body: <b>X</b>	Monitoring:
Buffer zone development: <b>X</b>	Efficient consumption:	Integrated land and water: <b>X</b>	Country program:
Inventory/monitoring: <b>X</b>	Solar:	Contaminant:	ODS phaseout:
Ecotourism: <b>X</b>	Biomass:	Other:	Production:
Agro-biodiversity: <b>X</b>	Wind:		Other:
Trust fund(s):	Hydro:		
Benefit-sharing: <b>X</b>	Geothermal:		
Other: Eco-networking <b>X</b>	Fuel cells:		
	Other:		
<b>TECHNICAL CATEGORIES</b>			
Institution building: <b>X</b>			
Investments:			
Policy advice: <b>X</b>			
Targeted research: <b>X</b>			
Technical/management advice: <b>X</b>			
Technology transfer:			
Awareness/information/training: <b>X</b>			
Other:			

**ATTACHMENT 1: BUDGET BREAKDOWN**

	<b>GEF</b>	<b>Other Cofinancing Totals</b>	<b>Total Cost</b>
<b>A. Establish Moldova Lower Dniester National Park</b>			
<b>A.I. Studies and Management Plans</b>			
Technical studies	\$35,000	\$75,000	\$110,000
Management Plans	\$35,000	\$85,000	\$120,000
Workshops	\$20,000	\$50,000	\$70,000
<b>A.I. Subtotal</b>	<b>\$90,000</b>	<b>\$210,000</b>	<b>\$300,000</b>
<b>A.II. Capacity Building</b>			
Training Consultant	\$35,000	\$25,000	\$60,000
Exchange Studies	\$50,000	\$0	\$50,000
<b>A.II. Subtotal</b>	<b>\$85,000</b>	<b>\$25,000</b>	<b>\$110,000</b>
<b>A.III. Infrastructure Investments</b>			
Equipment	\$25,000	\$1,000	\$26,000
Vehicles	\$50,000	\$1,000	\$51,000
Rehabilitation Works	\$125,000	\$20,000	\$145,000
<b>A.III. Subtotal</b>	<b>\$200,000</b>	<b>\$22,000</b>	<b>\$222,000</b>
<b>A.IV. Ecological Restoration</b>			
Water Management Rehabilitation	\$10,000	\$76,000	\$86,000
Afforestation of Floodplain Forest	\$40,000	\$52,000	\$92,000
<b>A.IV. Subtotal</b>	<b>\$50,000</b>	<b>\$128,000</b>	<b>\$178,000</b>
<b>A. Subtotal</b>	<b>\$425,000</b>	<b>\$385,000</b>	<b>\$810,000</b>
<b>B. Biodiversity in Buffer Zone</b>			
<b>B.I. Rural Advisory and Financial Services</b>			
Co-Financing for RISP Credits (Source of Funds)	\$200,000	\$490,000	\$690,000
<b>B.II. Land and Water Protection Grants</b>			
Small Grants	\$80,000	\$25,000	\$105,000
<b>B. Subtotal</b>	<b>\$280,000</b>	<b>\$515,000</b>	<b>\$795,000</b>
<b>C. International Cooperation</b>			
<b>C.I. Regional Exchange Program</b>			
	\$30,000	\$0	\$30,000
<b>C.II. International Conference</b>			
	\$10,000	\$0	\$10,000
<b>C. Subtotal</b>	<b>\$40,000</b>	<b>\$0</b>	<b>\$40,000</b>
<b>D. PIU Support</b>			
<b>D.I. PIU Support</b>			
PIU Staff	\$20,000	\$30,000	\$50,000
Operating Costs	\$10,000	\$0	\$10,000
Monitoring & Evaluation Consultant	\$15,000	\$25,000	\$40,000
Procurement Consultant	\$15,000	\$0	\$15,000
Audit	\$50,000	\$0	\$50,000
<b>D.I. Subtotal</b>	<b>\$110,000</b>	<b>\$55,000</b>	<b>\$165,000</b>
<b>D.II. Communication &amp; Dissemination</b>			
	\$35,000	\$0	\$35,000
<b>D.III. Community Outreach Program</b>			
	\$35,000	\$10,500	\$45,500
<b>D.IV. NGO Support</b>			
	\$50,000	\$50,000	\$100,000
<b>D. Subtotal</b>	<b>\$230,000</b>	<b>\$115,500</b>	<b>\$345,500</b>
<b>TOTAL PROJECT</b>	<b>\$975,000</b>	<b>\$1,015,500</b>	<b>\$1,990,500</b>

## ATTACHMENT 2: PROCUREMENT

**Procurement Implementation.** BIOTICA will be responsible for carrying out procurement of goods, works and services, according to the Procurement Plan shown at Table 1. Given the small size of the grant an agency procurement capacity assessment of BIOTICA was not carried out. However a desk review has been done by a procurement specialist that considered the existing capacity adequate to process and implement the contracts to be financed by the grant. In addition, in order to ensure adequate implementation a Procurement Specialist will be contracted by BIOTICA early during project implementation to initiate bidding procedures, documentation, filing, etc acceptable to the Bank.

Procurement under the Grant will be carried out in accordance with the Guidelines, Procurement under IBRD Loans and IDA Credits (January 1995 as revised to date) and the Guidelines, Selection and Employment of Consultants by World Bank Borrowers (January 1997 as revised to date).

**Procurement Planning.** A detailed procurement plan is presented in Table 1 below.

**Goods.** Goods will be procured on the basis of shopping in accordance with section 3.5 of the Guidelines.

**Civil Works.** Minor civil works-like contracts will be procured on the basis of fix price lump-sum contracts awarded on the basis of not less than three quotations received from qualified local contractors in consistency with Section 3.5 of the Guidelines.

**Training/workshops.** Contracts for training and workshops, preparation of material, renting facilities, travel and subsistence of participants, facilitators fee and participation to study-tours will generally be procured on off the shelf basis.

**Operational Costs.** The grant will finance operational costs such as operation and maintenance of staff salaries, vehicles, rent, office equipment, insurance for equipment and vehicles procured under the project, office materials and utilities and communication expenditures required for the implementation of the project.

**Procurement Records.** BIOTICA will establish procedures to manage procurement and contract implementation in accordance with the Guidelines. Separate records and filing system by contract acceptable to the Bank will be established.

**Procurement Plan Table**

	Amount	Method	Year/Month
<b>Consultant Services</b>			
Technical Studies	\$35,000	Individual	
Management Plans	\$35,000	Individual	
Training Consultant	\$35,000	Individual	
Communication & Dissemination Consultant	\$35,000	Individual	
Community Outreach Program	\$35,000	Individual	
NGO Support	\$50,000	Individual	
Monitoring & Evaluation Consultant	\$15,000	Individual	
Procurement Consultant	\$15,000	Individual	
<b>Subtotal</b>	<b>\$255,000</b>		

<b>Civil Works</b>			
	Rehabilitation Works	\$125,000	NB
	Water Structure Rehabilitation	\$10,000	Quotes
	Afforestation of Floodplain Forest	\$40,000	Quotes
	<b>Subtotal</b>	<b>\$175,000</b>	
<b>Goods</b>			
	Equipment for PIU	\$25,000	NS
	Vehicles	\$50,000	NS
	<b>Subtotal</b>	<b>\$75,000</b>	
<b>Workshops / Study Tours / Training</b>			
	Exchange Studies	\$50,000	TBD <sup>1</sup>
	Workshops	\$20,000	TBD
	International Conference	\$10,000	TBD
	Regional Exchange Program	\$30,000	TBD
	<b>Subtotal</b>	<b>\$110,000</b>	
<b>Co-Financing for RISP Credits (Source of Funds)</b>		\$200,000	SOF for RISP <sup>2</sup>
<b>Small Grants</b>		\$80,000	Small Grants <sup>3</sup>
<b>Operating Costs</b>			
	PIU Operation	\$10,000	IOC <sup>4</sup>
	PIU Staff	\$20,000	IOC
	Audit	\$50,000	IOC
	<b>Subtotal</b>	<b>\$80,000</b>	
<b>TOTAL</b>		<b>\$975,000</b>	

<sup>1</sup> According to Semi-Annual Training Plans prepared by PIU and submitted to the Bank for no objection before implementation.

<sup>2</sup> Source of Funds for matching grants under RISP Small Credit component: No Procurement for this activity under this project. These funds are Source of Funds for co-financing for small credits issued under Bank's Rural Investment and Services Project in Moldova (RISP). Thus the Procurement of small credits would be carried out under RISP, and eligible activities will automatically be qualified for a partial grant from this activity. The ratio of individual matching grants to credits obtained from RISP will be agreed upon during project implementation.

<sup>3</sup> Small Grant Procurement Guidelines will be followed.

<sup>4</sup> Incremental Operating Cost will be procured on the bases of annual plans.

## ATTACHMENT 3: FINANCIAL MANAGEMENT

### 1. Progress Reports

BIOTICA will retain services of qualified financial management expert in order to set up reporting and financial management system for the project.

BIOTICA will be responsible for preparing and sending the Bank annual reports and semi-annual summaries of project advancement covering progress towards realizing activities and reaching targets for each disbursement period, linking them to established activity indicators. The annual report will be given to the Bank at least one month prior to the end of the disbursement period.

### 2. Disbursements

The following table summarizes estimated costs for the three years of the GEF project by expenditure category.

**Project Disbursements in Years**

<b>DISBURSEMENT CATEGORIES</b>	<i>Total</i>	<b>FY02</b>	<b>FY03</b>	<b>FY04</b>
Consultant Services	<i>\$255,000</i>	\$153,000	\$76,500	\$25,500
Civil Works	<i>\$175,000</i>	\$105,000	\$52,500	\$17,500
Goods	<i>\$75,000</i>	\$45,000	\$22,500	\$7,500
Workshops / Training / Study Tours	<i>\$110,000</i>	\$66,000	\$33,000	\$11,000
Operating Costs	<i>\$80,000</i>	\$48,000	\$24,000	\$8,000
Co-Financing for RISP <sup>5</sup>	<i>\$200,000</i>	\$120,000	\$60,000	\$20,000
Small Grants	<i>\$80,000</i>	\$48,000	\$24,000	\$8,000
<b>TOTAL</b>	<b><i>\$975,000</i></b>	<b>\$585,000</b>	<b>\$292,500</b>	<b>\$97,500</b>

### 3. Project financial statements and financial reporting

Project financial statements will include a statement of receipts, sources and uses of funds, and undisbursed balances of the Special Project Account. The funds flow statement will indicate sources (GEF) and payments according to project expenditure categories and project components. Financial statements will show realized payments against those budgeted, and information reported will include the value of all contracts signed; i.e., commitments relative to actual payments.

BIOTICA will maintain separate records and accounts for project expenditures as well as a register of assets purchased with project funds. BIOTICA will also be responsible for preparing project financial statements including balance sheets, and source and use of funds statements, according to accounting standards accepted by the Bank and the government.

### 4. Audits

Audits will be carried out by competitively selected independent company, acceptable to the Bank. Audit reports will be sent to the Bank no later than four months after the end of each fiscal year (calendar year)

<sup>5</sup> Funds under this category will be disbursed for eligible activities based on the SOEs received from the Rural Investment and Services Project of the Bank. This Category is simply a Source of Funds to cover grant portion of small grants awarded under RISP, while the credit portion of the credits will be disbursed from the Small Credit Component of the RISP.

in which grant funds are spent. The final financial report and audit will be sent within six months of the date of the last expenditure.

## **5. Special Account**

BIOTICA will open a Special Account (SA) in US dollars in a commercial bank acceptable to the Bank. The initial deposit will be limited to US \$..... corresponding to estimated GEF-eligible project expenditures for the first 12 months of the project. The Special Account will be managed per Disbursement Letter issued by the Bank shortly after the project effectiveness.

The replenishment application will be sent at least one month prior to the end of the disbursement period and will be supported by the following documentation:

- a) reconciled statement from the commercial bank in which the account is established showing all transactions in the Special Account;
- b) annual report covering progress in realizing the activities and reaching the targets set forth in each disbursement period;
- c) forecast of grant funds to be covered by the withdrawal application, adjusted for any under-expenditure during the previous period; and
- d) detailed project disbursement and indicator plan for the next project year.