



MEDIUM-SIZED PROJECT PROPOSAL REQUEST FOR GEF FUNDING

AGENCY'S PROJECT ID:

GEFSEC PROJECT ID:

COUNTRY: Bulgaria, Romania

PROJECT TITLE: Promoting Payments for Ecosystem Services (PES) and Related Sustainable Financing Schemes in the Danube Basin

GEF AGENCY: UNEP

OTHER EXECUTING AGENCY (IES): WWF Danube-Carpathian Program Office and WWF Macroeconomic for Sustainable Development Program Office

DURATION: 4 years

GEF FOCAL AREA: Biodiversity with relevance to International Waters

GEF OPERATIONAL PROGRAM: OP 2 with relevance to OP 9

GEF STRATEGIC PRIORITY: BD 2, BD4 with relevance to IW 1

ESTIMATED STARTING DATE: 1st of April 2006

IMPLEMENTING AGENCY FEE: 9%

FINANCING PLAN (US\$)	
GEF PROJECT/COMPONENT	
Project	974,990
PDF A *	25,000
Sub-Total GEF	999,990
CO-FINANCING**	
GEF Agency	
Government & Other	
Project	123,000
PDF A	5,000
Bilateral	
NGOs	
Project	1,041,487
PDF A	20,000
Sub-Total Co-financing:	1,189,487
Total Project Financing:	2,189,477

* Approval date of PDF A: 1st of June 2005

** Details provided in the Financing Section

CONTRIBUTION TO KEY INDICATORS OF THE BUSINESS PLAN:

The project falls under Strategic Priorities 2 and 4. With regard to strategic priority 2, the project will contribute:

- Up to 7 million hectares of production landscapes that contribute to biodiversity conservation will qualify to receive payments for ecosystem services.
- 5 demonstration projects in the fisheries and/or agriculture sectors targeted to mainstreaming biodiversity into these sectors.

With regard to strategic priority 4, the project will make significant contributions to the conservation community's knowledge of how to scale-up Payment for Ecosystem Services schemes in large international watersheds.

RECORD OF ENDORSEMENT ON BEHALF OF THE GOVERNMENT:

- Silviu Stoica / Director GEF National Focal point / Ministry of Environment and Water /Romania / 14 March 2005
- Fatme Iliaz, Deputy Minister GEF Political Focal Point / Ministry of Environment and Water / Bulgaria / 28 March 2005

Copy of these and other 11 endorsement letters are to be found in Annex A

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

Mr. Olivier Deleuze
Officer-in-Charge
Division of GEF Coordination
United Nations Environment Programme
25420624166 Tel
25420624041 Fax
olivier.deleuze@unep.org
Date: (Month, Day, Year)

Project Contact Persons:

Alain Lambert

UNEP/GEF (tel: +55 61 30389234 in Brazil)
alain.lambert@undp.org.br

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LIST OF ACRONYMS

BD	Bio-diversity
CAP	Common Agricultural Policy (EU)
CB	Capacity Building
CBD	Convention of Biological Diversity
CBO	Community-Based Organization
CIFOR	Center for International Forest Research
DG-Environment	Directorate General for Environment, European Commission
DRP	Danube Regional Program
EAFRD	European Agriculture Fund for Rural Development (EU)
EBRD	European Bank for Reconstruction and Development
ENP	European Neighborhood Policy (EU)
ES	Ecosystem Services
EU	European Union
GEF	Global Environment Facility
GTZ	German Society for Technical Cooperation
IBRD	The World Bank
IDA	International Development Agency
ICPDR	International Commission for the Protection of the Danube River
IRBM	Integrated River Basin Management
IUCN	International Union for the Conservation of Nature
IW	International Waters
LDGC	Lower Danube Green Corridor
NGO	Non-Government Organization
NRM	Natural Resource Management
OEMN	One Europe More Nature
OP	Operational Program (GEF)
PES	Payments for Ecosystem Services
SAP	Strategic Action Plan
SF	Sustainable Financing
UNDP	United Nations Development Program
UNESCO	United Nations Education Science and Culture Organization
UNEP	United Nations Environmental Program
WFD	Water Framework Directive (EU)
WWF	World Wide Fund for Nature / World Wildlife Fund
WWF-DCPO	WWF Danube-Carpathian Program Office
WWF- EPO	WWF European Policy Office
WWF-MPO	WWF Macroeconomic for Sustainable Development Program Office

A – SUMMARY

Project Objectives and Outcomes

The project development objective is to foster payments for ecosystem services (PES) and related sustainable financing schemes that support environmental conservation and improved rural livelihoods in large-scale international watersheds. Our focus will be in the Lower and Middle Danube basins in Bulgaria and Romania, where WWF has been working for a number of years in partnership with all major stakeholders. As we deliver in these focus countries, we will produce watershed-wide lessons and models that will be shared with other Danube countries – particularly Serbia & Montenegro, Croatia, Ukraine and Moldova – and with Danube national and international river basin agencies. Likewise, through an active program of exchanges and engagement, the proposed project will bring these lessons and models to the attention of managers and stakeholders in other international watersheds around the world. Over a four-year period we expect to achieve the following outcomes:

OUTCOME 1: Payments for ecosystem services (PES) and sustainable financing schemes (SF) schemes that reward the maintenance, improvement or adoption of conservation-friendly land uses are contributing to integrated river basin management and rural livelihoods in the Lower and Middle Danube.

OUTCOME 2: Key stakeholders in the wider Danube river basin, particularly in the Lower and Middle Danube, are aware of PES and related sustainable financing mechanisms, and are considering adapting them to their sub-river basins and situations.

OUTCOME 3: The project has made significant contributions to the conservation community's knowledge of how to scale-up PES and sustainable financing schemes as well as how to incorporate them in integrated river basin management so that they deliver significant conservation and rural livelihood improvements.

Project Rationale

Three major concerns of the world community presently include: (a) reducing poverty, of which a large part is rural poverty; (b) ensuring environmental sustainability, of which a large part is rural environmental sustainability; and (c) eliminating production-based rural subsidies accused of distorting international trade and negatively impacting the world environment and the incomes of rural producers in developing countries. In this regard, the concept of payments for ecosystem services (PES) has been gaining traction with many in the conservation and development movement touting PES schemes as the key to improve rural conservation and rural livelihoods as well as to transform harmful production subsidies into helpful payments for ecosystem services. At the same time, there has been increasing interest in and support for Integrated River Basin Management (IRBM). While institutional frameworks for IRBM have been established in a number of river basins around the world, there is still limited experience with financing actual implementation of integrated river basin management planning. The proposed project seeks to develop experience and learning on the role and contribution of PES to rural development and conservation in general, and to Integrated River Basin Management in major river basins in particular.

- **From ES to PES.** The proposed project begins with ecosystem services, not with payments for ecosystem services. That is to say, it begins with an understanding of the biodiversity values of the Danube basin, the challenges confronting them and a conservation strategy to overcome these challenges. This conservation strategy, which has been endorsed by all the affected country governments and many other key regional stakeholders, includes the restoration of flood plains along the “Lower Danube Green Corridor”, the restoration of wetlands and forests in several of the Danube tributaries, and support for low-impact traditional agriculture. PES schemes have a role to play particularly in the Lower and Middle Danube, where achieving many of these conservation goals requires providing farmers and other natural resource managers with the economic incentives that will encourage them to preserve, enhance or adopt environmentally-friendly land management practices.
- **Seizing a window of opportunity to scale-up PES.** The project focuses on seizing a window of opportunity created by the eastward enlargement of the European Union, the recent EU Water Framework Directive, plus the

ongoing reforms to the EU Rural Development Policy and the EU Common Agricultural Policy. For the first time in a major European international river basin all these changes will demand planning for integrated river basin management and will make available substantial funds to actually put these plans into practice.

In line with the EU Water Framework Directive, by 2009 River Basin Management Plans must be developed for the Danube as well as its sub-basins, including a Program of Measures that lays out the steps, including funding sources, that will be taken to achieve the Directive's overall aim of achieving good ecological quality for all water bodies in Europe by 2015. This requirement applies not only to Bulgaria and Romania and possibly other future EU member states such as Croatia and Serbia & Montenegro, but to all Danube countries as members of the International Commission for the Protection of the Danube River Basin. At the same time, recent reforms to the EU rural development and agricultural policy will direct substantial amounts of money towards promoting nature conservation and sustainable rural development. During 2007-2013, EU (and associated national) funds in the order of €8 billion for the 7-year period will be available for rural development and conservation in Bulgaria and Romania, with a mandate to devote at least 25% of these funds to environment and land management.

Then, even with these regulatory changes in place and financial resources available, little biodiversity conservation may happen in the Middle and Lower Danube if (a) countries fail to come up with credible rural conservation plans and programs to claim EU financial support; (b) if local farmers are not able and willing to sign up to conservation practices that qualify them to receive conservation payments; and (c) if there is no strong monitoring and evaluation system to assess the conservation pay-offs. Addressing these issues is at the core of this project that will work: (1) with the International Commission for the Protection of the Danube River Basin and relevant governments to include opportunities for payments for ecosystem services and sustainable financing mechanisms in the Programme of Measures for the River Basin Management plans; (2) with governments in the development of credible rural conservation plans and programs; (3) supporting conservation activities among farmers in selected demonstration areas; and, (4) monitoring and evaluating of the conservation outcomes. In a nutshell this project will help transform rural subsidies into effective payments for ecosystem services that can contribute substantially to achieving Integrated River Basin Management.

- **Breaking ground and seizing opportunities for replicability in neighboring countries.** Beyond Bulgaria and Romania, the efforts of neighboring countries to bring their legislation, policies and institutions into line with EU requirements presents an unprecedented opportunity to introduce and secure support for ecosystem services. The proposed project will share lessons and experience from the project with Serbia & Montenegro, Croatia, Ukraine and Moldova.
- **Looking ahead to combine public and private sources of payment.** National payments schemes have the potential to deliver not only in terms of rural conservation, but also in terms of re-establishing a partnership between city and countryside that is now embattled not only in Europe but also world-wide. Yet, public funds are not always available or available for all purposes, so it is important to look ahead and try wherever possible to supplement them with private or local PES arrangements. WWF has already begun brokering a few such privately-financed PES schemes in the Danube basin, particularly in the Tisza sub-basin in Romania and Hungary. Through this project, we will further develop and promote these fledgling schemes, and systematically explore and support implementation of additional opportunities in the Lower and Middle Danube basins in Romania and Bulgaria. We will also determine how such schemes can contribute to the Program of Measures of River Basin Plans for the Danube and sub-basins.
- **Delivering lessons and models for other major river basins.** The proposed project will have considerable relevance for areas beyond the Danube river basin. Many of the models and lessons that will come out of the Danube project will be methods and approaches relevant to a variety of countries and local situations – e.g. regarding opportunities to scale up PES, mainstreaming PES into river basin agencies, and combining public and private driven PES schemes. In recent years, the Danube – the most international river basin in the world – has come to the attention of river basin managers from the Yangtze to the Mekong, interested in the experience of international cooperation through the Danube river commission, the successful partnership between governments, international organizations and NGOs, initiatives for reducing pollutants and restoring wetlands, and especially its clear program for achieving Integrated River Basin Management, guided by the requirements of the EU Water Framework Directive. The project will link with river basin management initiatives in a number of these major river basins. Also, in the Lower and Middle Danube we will be working with some of Europe's lower income

countries, and the lessons gained there will surely be relevant to many middle income developing countries such as China, India, Brazil, and Mexico.

The Project’s Value Added

Since there are several GEF and non-GEF conservation initiatives ongoing in the Danube basin, it is appropriate to address the question: what is this project proposal’s added value? To answer this question, we should point out that it is only recently that an ecosystem services and a payment for ecosystem services perspective has been introduced in the conservation arena, so very few if any of the conservation projects currently at work in the Danube have this perspective on board. Furthermore, beginning in 2007, substantial EU funding will be moved away from production subsidies and towards payments for conservation, yet nobody knows how and if it will in fact work. This project’s added value lies then in seizing these new trends and focusing on new EU countries like Romania and Bulgaria that feature outstanding global ecological values and have few vested rural interests, so that they offer a unique opportunity to try to put in place large PES schemes for rural conservation and integrated river basin management that deliver in terms of in situ conservation as well as delivering lessons for the region and the world.

B - COUNTRY OWNERSHIP

1. COUNTRY ELIGIBILITY

All participant countries comply with GEF eligibility criteria relevant to this project as per the table below.

Table 1. Country Eligibility

Country	Ratified CBD	Eligible to borrow from IBRD/IDA	Eligible to receive UNDP Technical Assistance
FOCUS COUNTRIES			
Bulgaria	Yes	IBRD	Yes
Romania	Yes	IBRD	Yes

2. COUNTRY DRIVENNESS

2.1. Linkages to Danube countries priorities, action plans and programs

The proposed project fits major priorities related to environment and rural development of the focal countries Bulgaria and Romania, both of which are parties to the Convention on Biological Diversity.

For all Danube countries, the conservation of the Danube basin is an important environmental as well as socio-economic priority. The “Declaration on Environment and Sustainable Development in the Carpathian and Danube Region” that heads of state and other high officials signed at the Summit on Environment and Sustainable Development in the Danube-Carpathian Region in Bucharest in April 2001, acknowledges the “special economic and social importance of the Danube River and its tributaries as a major European river with multiple uses and functions, as well as its ecological significance and its value as a natural habitat for numerous wildlife species.” It declares the intention “to encourage and support, among other things, regional efforts and concrete measures in a common quest for the “... mobilization of financial resources for environment and sustainable development projects and programs in the Carpathian and Danube region and the use of existing mechanisms for this purpose, in particular EU funds and the Global Environment Facility.”¹

¹ Declaration on Environment and Sustainable Development in the Carpathian and Danube Region (signed by Heads of State and High Officials at the High-level Summit on Environment and Sustainable Development in the Carpathian and Danube Region, Bucharest, April 30, 2001)

Both Bulgaria and Romania are signatories of the Danube River Protection Convention and actively participate in the International Commission for the Protection of the Danube River Basin (ICPDR) and the implementation of its Joint Action Programme. Recognizing the socio-economic as well as ecosystem benefits of wetlands, floodplain and wetland protection and restoration are a priority for these countries. The Lower Danube Green Corridor Agreement, which was signed in 2000 by the governments of Bulgaria and Romania as well as Moldova and Ukraine, calls for the establishment of a network of protected and restored areas along the Danube from the Iron Gates to the Danube Delta. As parties to the International Commission for the Protection of the Danube River as well as future EU member states, both Romania and Bulgaria have also pledged to support and participate in implementing the EU Water Framework Directive in the Danube river basin and its sub-basins, with the goal of achieving good ecological quality of the rivers by 2015.

Both Romania and Bulgaria are expected to join the European Union in 2007 or latest by 2008. As EU accession countries, Bulgaria and Romania must adopt and implement the *acquis communautaire*, the core body of laws and standards that is needed to join the Union. Preparation for EU accession, including implementation of the EU Water Framework Directive, Habitats Directive (establishing the Natura 2000 network of specially protected sites), and programming for regional and rural development as well as agricultural support are all major priorities for these countries. Rural development is also a key priority for the countries, which have relatively large, and relatively poor, rural populations. For Bulgaria as for Romania, environmentally-friendly approaches to agriculture and rural development are seen as an important opportunity and priority for future development in rural areas. Agri- and aqua-environmental measures are included in the draft National Development Plans for both countries, which are expected to be completed in early 2006.

Financing for rural development on the one hand, and meeting EU requirements for nature conservation and environment on the other, poses major challenges for both Romania and Bulgaria. Costs of implementing the Natura 2000 network and the Water Framework Directive are expected to be significant. While no reliable cost estimates presently exist for either country, an indication is provided by the European Commission's conservative estimate of €6.1 billion, per year, for implementing the Natura 2000 network in the existing 25 EU member states.

Accession to the European Union can provide significant opportunities to address these challenges. Once in the EU, both countries will be eligible to receive EU agriculture, rural and regional development funds totaling ca. €8 billion for the seven-year period 2007-13, including possible support for ecosystem services related to the Danube river basin. Because the EU funds require co-financing from domestic sources of support, the EU funds that will be made available provide an incentive for countries to establish national payments systems for supporting ecosystem services – something that they otherwise might not provide.

In order to be able to draw on EU co-financing from their day of accession, both Romania and Bulgaria are currently in the midst of programming for use of the EU and national funds, a process that is expected to be completed by the end of 2006. It is already clear that the agriculture and rural development programs that are currently being developed will include substantial opportunities for supporting ecosystem services. However, the word *opportunity* must be emphasized here as there is neither a requirement, nor a guarantee, that the funds will actually be used to deliver ecosystem services. Indeed, the experience from most existing EU countries has shown that, to the extent that such funds have existed and have been tapped at all, they have often not been used effectively or efficiently². The great challenge then will be actual implementation of the programs to ensure effective targeting and delivery. There is a clear opportunity in these countries now to develop strong and effective funding schemes capable of delivering no small part of the financial support needed to secure ecosystem services related to the Danube.

Ensuring effective delivery of payments and the relevant ecosystem services will be important not only for the long-term sustainability of the environment and natural resources, but also rural communities in Bulgaria and Romania. Thanks to the leverage provided from EU funds, there now is a real opportunity to establish payments for ecosystem services in the two countries. But these arrangements will only be sustainable over the longer-term if political and other decision makers, and ultimately tax payers, can be convinced that the payments indeed provide real value for money, i.e. they pay for valued services, and do so both effectively and efficiently.

² WWF-EPO (2002), Land Use Policy Group, IEEP, et al (2002) "Europe's Rural Futures", Vol. I and II

This project close alignment with national conservation priorities in Bulgaria and Romania is well expressed in over a dozen letters of endorsement (in Annex A) from which we quote:

- “It will help integrate the Danube river basin conservation policy with the design of sustainable financing schemes to pay for it” (from Bulgaria’s GEF Focal Point)
- “Both conservation of the Danube basin and the design of sustainable financing schemes to pay for it are of paramount importance for our country conservation and rural development priorities, action plans and programs.” (from Romania’s GEF Focal Point)
- “We consider WWF initiative very relevant to our own activities, particularly for creating economic opportunities for sustainable rural development...” (from Romania’s Secretary of Rural Development)
- “We consider the proposed WWF initiative very relevant to our own activities, particularly on the nature conservation aspects of the rural development policy for the period 2007-2013 and the practical implementation of the proposed national agri-environmental schemes at local level” (from Bulgaria’s Ministry of Agriculture and Forestry)
- “The project that you are currently developing is very well shaped and we believe that it will be successful since it considers the interest of both nature conservation and local people managing the natural resources.” (from the Bulgarian Farmers Association)

2.2. Linkages to EU priorities, action plans and programs

The proposed project takes into account the priorities, action plans and programs of the European Union regarding the conservation of the Danube Basin, which the European Commission has recognized as the “single most important non-oceanic body of water in Europe” and a “future central axis for the European Union.”

Among the central priorities of the EU’s **Sustainable Development Strategy** from 2001 is halting the loss of biodiversity by 2010 and achieving sustainable use of natural resources. The EU’s current **Sixth Environmental Action Programme** follows these priorities by focusing on halting biodiversity loss and ensuring sustainable use of resources.

Of particular relevance for this project proposal are the following key pieces of EU legislation:

- The EU **Water Framework Directive** (WFD), an EU legally binding regulation adopted in 2000, has as a central aim the achievement of good ecological and chemical status of inland and coastal water bodies in Europe by 2015. In order to achieve this, the Directive promotes the integrated management of water resources to support environmentally sound development, and to reduce problems associated with excessive water abstraction, pollution, floods and droughts. The Water Framework Directive also calls for trans-boundary collaboration between European countries in order to tackle interconnectedness of different water and land uses, both up and down stream (even when it goes beyond EU borders). Particularly relevant for this project proposal is the fact that the EU Directive requires the completion of River Basin Management Plans by 2009, including a Program of Measures outlining specific steps that will be undertaken to achieve good ecological status on the water bodies by 2015. A chief aim of the proposed project is to investigate the potential for payments for ecosystem services and sustainable financing mechanisms to contribute to the implementation of the Water Framework Directive in the Danube and sub-river basins, and to make specific recommendations regarding these funding sources for inclusion in the Program of Measures for the river basin management plans. Furthermore, in Article 9, on recovery of costs for water services, the Directive sets the framework for an EU system of payments for watershed-related ecosystem services. For this project, *it is important to realize that all Danube countries, including those outside the EU, have agreed to implement and observe the basic principles of the Water Framework Directive in their portions of the Danube river basin.* While the Water Framework Directive is now established on paper, there is much left to be done to achieve practical implementation and enforcement of the Directive throughout Europe, and to integrate it into other major EU programs – a process that we expect this project to contribute to.
- The EU **Common Agricultural Policy** (CAP) has recently undergone several pro-environment reforms. For example, the EU has already decoupled some of its subsidies from production, and required cross-compliance with environmental laws prior to the receipt of payments. The outlines of a new European Agriculture Fund for Rural Development (EAFRD) have already been agreed for the period 2007-13, though the amount of funding allocated

to this fund has yet to be determined. In any case, EAFRD is expected to become a main potential source of funding for environmental management across Europe's countryside, helping to pay for rural environmental and social goods and services – which are at the core of this project. Whether this potential is realized – whether the money is in fact used for these purposes, and used well – will largely depend on decisions made at national levels.

- With the establishment of the EU's **Natura 2000** network of protected areas nears completion, attention is focusing on the issue of financing for the network. The European Commission has estimated that some €6.1 billion will be needed per year to achieve the aim of maintaining “favorable conservation status” of priority species and habitats across the 25 present EU member states, thus there is a clear interest among Natura 2000 stakeholders on PES and other sustainable financing alternatives.
- The EU's **European Neighborhood Policy** (ENP), which is especially relevant for this project with regard to Ukraine and Moldova, aims to build a zone of increasing prosperity, stability and security in the EU's neighborhood, in the interests of both the neighboring countries and of the EU itself. It offers partners a relationship that goes beyond cooperation to include closer political links and an element of economic integration, as well as assistance with reforms to stimulate economic and social development. While environment and sustainable development are included among the basic principles of the ENP, thus far they have been relatively low on the agenda. Nevertheless, there are good opportunities in the ENP framework to table environmental initiatives that encompass both EU and non EU members, as is the case in the Lower Danube and Danube Delta.

2.3. Linkages to ICPDR priorities, action plans and programs

This project proposal also takes into account the analysis, priorities, action plans, and programs of the International Commission for the Protection of the Danube River (ICPDR), the executive agency for the Danube River Protection Convention. Recall that the current Joint Action Programme for the Danube River Basin (2001-05), which guides the work of the ICPDR and member countries, includes among its general objectives: “to improve the living standard of the Danube River Basin population; enhance the economic development of the region; and **restore the region's biodiversity**” (bold added)

The so-called “Danube Declaration,” made on the occasion of the Ministerial meeting of the International Commission for the Protection of the Danube River in December 2004,³ and signed by the ministerial representatives of the focal countries for this project, calls more specifically for a number of things related to the proposed project, including:

- Implementation of the EU Water Framework Directive;
- Reduction of the total amount of nutrients entering the Danube and its tributaries to levels consistent with the achievement of good ecological status in the Danube river;
- Reversing the trend of the physical degradation of aquatic ecosystems by returning sections of the Danube and its tributaries to a more natural state inter alia by restoring floodplains, reconnecting wetlands and retention areas;
- Ensuring that the development of the agricultural sector in the Danube basin does not lead to a degradation in the environmental quality of the river and its tributaries and in this context, to avoid counter-productive subsidies and where applicable to use the instruments of the new EU Common Agricultural Policy; and
- Promoting the integration of regional priorities into national programs and facilitating the coordinated and efficient use of funding instruments at national, EU and international level in particular by providing a comprehensive and integrated vision of the priorities for environmental investments directed towards protection of the aquatic environment.

In practice, implementation of the Water Framework Directive provides the framework for a very significant portion of the ICPDR's present and future activities, laying out the specific steps that must be taken in order to achieve the goal of a good ecological status in the Danube River. Particularly relevant for this project, the Water Framework Directive calls for River Basin Management plans for the Danube and sub river basins to be completed by 2009. Each management plan must include a Program of Measures outlining the steps, including sources of financing, which are to

³ The Danube Basin – Rivers in the Heart of Europe (Danube Declaration) Convention on Co-operation for the Protection and Sustainable Use of the Danube River – Ministerial Meeting of the International Commission for the Protection of the Danube River, Vienna, December 13, 2004.

be taken in order to achieve the goals of the Water Framework Directive. In conversations held during the PDF-A phase of this project, the ICPDR director expressed particular interest in the potential of the proposed project to contribute to the design and testing of sustainable financing schemes that may be picked up in the basin's and sub-basins' Program of Measures (see attached letter of endorsement from Phillip Weller, director of the ICPDR).

2.4. Linkages to GEF priorities, action plans and programs

The GEF, together with other donors, has been a driver of the wave of studies and policy initiatives that in the second half of the 1990s resulted in the Danube River Protection Convention, the Strategic Action Plan for the Danube River Basin and its implementation plan, as well as the establishment of the International Commission for the Protection of the Danube River. In recent years, the GEF presence in the Danube river basin has been through the 2001-06 "Strategic Partnership on the Danube/Black Sea Basin" that includes (a) the Danube Regional Project (DRP), led by UNDP, that focuses on capacity building for environmental management in general and pollution control in particular; (b) a UNDP portfolio of country-based rural development and conservation projects, and (c) a World Bank/GEF portfolio of investments, mostly on pollution reduction, and to a lesser degree on biodiversity, wetlands conservation and mainstreaming environmental concerns into agricultural policies (recent World Bank/GEF grants in our focus countries include biodiversity conservation projects in Romania and Ukraine and agricultural pollution reduction projects in Bulgaria and Moldova).

WWF has been an active partner of GEF in the Danube region (e.g. participating in the UNDP/GEF Danube Regional Project, where WWF has undertaken evaluation of wetlands and floodplains as well as specific project components). During the preparation of this project proposal, we had extensive consultations with staff of GEF and its IA in the Danube and headquarters to ensure that we build on their findings, avoid duplications and benefit from opportunities for cooperation and collaboration. Some of the outcomes of these discussions are reflected below in Sections C.5 "Stakeholders involvement," E.2. and Annex C "Summary of Documents, Meetings and Workshops Undertaken during the PDF-A Phase of the Project."

2.5. Linkages to WWF priorities, action plans and programs in the Danube Basin

Last but not least, the proposed project is closely linked with the priorities, action plans and programs of the WWF Danube-Carpathian Program (WWF-DCPO) and its local partners. For over 12 years now, WWF has focused on the conservation and sustainable use of freshwater and forest resources of the Lower and Middle Danube River basins. Initiatives have included facilitation and support for implementation of the Lower Danube Green Corridor Agreement, which was signed by the governments of Romania, Bulgaria, Ukraine and Moldova in 2000. In the Tisza sub-basin, WWF and local partners are working in the river headwaters to identify and stimulate rural development activities that can contribute to better environmental management, increasing the sponge effect of wetlands and reducing the impact of future flooding. WWF-DCPO's 5-year strategy (2005-10) emphasizes three approaches for its work, including protection (protection and restoration of nature areas), policy support (especially focused on agriculture and rural development policy), and sustainable development (fostering economic mechanisms for conservation, including payments for ecosystem services).

C – PROGRAM AND POLICY CONFORMITY

1. PROGRAM DESIGNATION AND CONFORMITY

The project objective is to foster payments for ecosystem services (PES) and related sustainable financing schemes that support environmental conservation and improved rural livelihoods in large-scale international watersheds, with a focus on the Lower and Middle Danube river basins. Hence, the project is fully consistent with, and aims to make significant contributions to GEF Operational programs **OP 2: Biodiversity: Coastal, Marine and Freshwater Ecosystems** primarily, but also **OP 9: International Waters, Integrated Land and Water Multiple Focal Area Operational**.

More specifically, the project's Outcome 1 is fully consistent with GEF Strategic Priorities, **BD-2 "Mainstreaming Biodiversity in Production Landscapes and Sectors,"** and Outcomes 2 and 4 with GEF Strategic Priority **BD-4 "Generation and Dissemination of Best Practices for Addressing Current and Emerging Biodiversity Issues"**. It is also consistent with **IW-1 "Catalyzing Financial Resources for Implementation of Agreed Actions."**

Beyond being consistent with the goals of GEF Operational Programs and Strategic Priorities, the proposal approach, outcomes and outputs are also well aligned with many GEF principles, strategies and approaches outlined in the GEF Operational Strategy. For example:

- The project proposal is fully in line with the GEF mission and its GEF10 operational principles.
- The project proposal also addresses several of GEF’s strategic considerations, including “(a) Consistency with national and regional initiatives; (b) Strive to ensure sustainability of global environmental benefits; (c) Facilitate effective responses by other entities to address global environmental issues; and (d) be environmentally, socially and financially sustainable.” Regarding the latter GEF strategic consideration, this proposal is precisely about innovative financing approaches to secure the sustainability of biodiversity conservation.
- As called for by the GEF BD Operational Strategy, the proposed project “encompasses in an integrated manner two types of measures that are central to biodiversity: (a) long-term protection and (b) sustainable use” and is about “integration of biodiversity conservation and sustainable use objectives into land use and resource use management plans.”
- Again in line with the GEF BD Operational Strategy, the proposed project activities “seek to incorporate protected areas into larger landscapes...promoting sustainable development alternatives to ensure that livelihoods can be secured in and around protected areas.”
- Again in line with the GEF BD operational strategy, the project has a strong focus on the “introduction of innovative measures, including economic incentives for the conservation and sustainable use of biodiversity”.
- Two operational criteria for the GEF BD Enabling Conditions are closely related to the project approach. They refer to “Opportunism” and “Demonstrative Value.” The proposed project intends precisely to seize the opportunity for leveraging part of the multi-billion Euros rural development funds that will reach the lower Danube and Danube Delta beginning in 2007 in order to re-direct them toward the conservation of global environmental values. This, we expect, will have a high demonstrative value for other areas in the Danube, in Europe and in middle-income countries around the world.
- Regarding the GEF IW Operational Strategy, the proposed project approach conforms with the GEF approach described in the GEF Operational Strategy document as follows: “The GEF will play a catalytic role in assisting countries seeking to leverage co-financing in association with national funding, development financing, agency funding and private sector actions for different elements of a comprehensive approach of sustainable managing international waters”.
- Also regarding the GEF IW Operational Strategy, it should be noted that the proposed project follows on recommendations of the 1995 Danube Strategic Action Plan; the 1996 Action Plan Implementation Program; and the 2000 Joint Action Program and the 2005 Basin-wide overview, all of which have been developed with GEF IW support. In this regard, the proposed project fits into four of the five Action Plan Implementation Program’s activities, namely: sustainable land use; wetlands and nature conservation, sustainable use of water resources, and institutional capacity building.

2. PROJECT DESIGN

2.1. The Global Significance of the Danube Basin and the Ecosystem Services it Provides

The Danube is the most international river basin in the world. The river passes through ten countries on its 2,780 km journey from the Black Forest to the Black Sea, and drains a total area of 801,463 km² (10% of the European continent), including the territory of 18 countries⁴. Major tributaries of the Danube include the Tysa/Tisza/Tisa, Drau/Drava, Sava, Inn, and Prut.

⁴ The countries in the Danube River Basin include: Germany, Austria, Czech Republic, Slovakia, Hungary, Slovenia, Croatia, Bosnia-Herzegovina, Serbia & Montenegro, Romania, Bulgaria, Moldova, and Ukraine plus very small areas of Switzerland, Italy, Poland, Albania and Macedonia.

While large sections of the Upper Danube in Austria and Germany have been heavily regulated, the lesser-intervened areas of the middle and lower Danube and the Danube Delta feature a rich and unique biological diversity that has been lost in most other European river systems. The floodplains of the Lower and Middle Danube are outstanding landscapes that provide multiple ecosystem services, such as biodiversity conservation, water purification, pollution reduction, flood protection and support for socio-economic activities such as fisheries and tourism.

The **Lower Danube**, stretching from the Iron Gates between Romania and Serbia & Montenegro down to the Danube Delta and the Black Sea, and flowing for the most part along the Romanian and Bulgarian borders, is one of the world's most outstanding freshwater ecoregions. The Danube floodplain between the river bank and the flood protection dike has relics of oxbow lakes as well as flood channels (in parts temporarily dry) and depressions, islets (particularly the smaller islets with no human intervention), relics of wetlands and floodplain lakes in the disconnected floodplains, small water courses (particularly at the base of the terrace fed by groundwater) – all typical habitats for the Lower Danube and of particular importance from the ecological point of view, a number of them protected under the Ramsar Convention as well as the Annexes of the EU Habitats Directive. The species inventory of both terrestrial and aquatic habitats reveals an impressive number of species, many of them globally important: 55 species of aquatic macrophytes, 906 species of terrestrial plants, 502 species of insects, 10 species of amphibians, 8 species of reptiles, 56 species of fish, 160 species of birds, and 37 species of mammals.

The hydrological dynamics of the river, its erosion and sedimentation processes and periodic flooding, have determined the formation of numerous islets along the border in Romania (111 islands covering 11,063 ha) and Bulgaria (75 islets covering 10,713 ha). These islets host rich floodplain ecosystems including natural floodplain forest, sand banks, marshes and natural river channels. They are integral parts of the Danube migration corridor, essential for the distribution of many plant and animal species. The islets represent a very important feeding area for many threatened bird species: *Pelecanus crispus*, *Plegadis falcinellus*, *Nycticorax nycticorax*, *Ardeola ralloides*, *Phalacrocorax pygmaeus*, *Platalea leucorodia*, *Phalacrocorax carbo*, *Egretta garzetta*, *Egretta alba*, *Aythya nyroca*. In the woods, species like *Milvus migrans*, *Sylvia atricapilla*, *Strix aluco*, *Asio otus*, *Caprimulgus europaeus*, *Dryocopus martius* are nesting and on the muddy banks *Alcedo atthis* and *Riparia riparia*. *Haliaeetus albicilla* and *Falco cherrug* are also breeding in the old oaks from the islets.

From the original large floodplain area of the Lower Danube, about 72% has been cut off from the river and transformed into fish ponds or drained for agricultural use. Important functions of the floodplains have been reduced and many of what were once typical habitats no longer exist. Because of the loss of a large part of the floodplain areas, the remaining areas under influence of river dynamics (between the river banks and the flood protection dike and in particular the islets), the fish ponds and the floodplain lakes have become even more important for flora and fauna. The existing fish ponds and floodplain lakes preserve features of the former floodplain habitats and are important feeding, roosting, staging and breeding areas for many bird species. For example Pelicans (common and Dalmatian) breeding in the Danube Delta use these fish ponds to feed and rest in their migrating route.

At the mouth of the Lower Danube, the **Danube Delta** (80% Romania and 20% Ukraine) is the largest remaining natural wetland in Europe.⁵ It is an extensive fan-shaped area of river arms, lakes, reed-beds, dunes and salt marshes. Including its floodplains, watercourses and marine areas, the Danube Delta protected area adds up to 679,000 ha. The Delta includes the largest compact reed bed in the world (180,000 ha) and a complex of 30 types of ecosystems, starting with the three large river arms, floodplain forests, more than 600 natural lakes, natural and man-made channels, sand dunes and coastal biotopes. These areas form a valuable natural buffer zone, filtering out pollutants from the river, and helping to improve water quality in the vulnerable waters of the north-western Black Sea. The Danube Delta has globally important breeding, feeding and resting areas for pelicans and 300 other birds. For example it is a key habitat for 60% of the world population of Pygmy cormorant, 5% of the Palearctic population of White pelican and 90% of the world population of Red-breasted goose.

The Delta is also an important spawning and feeding area for sturgeons, the river otter and many other endangered species. Threatened fish species listed in the IUCN red list or in the Annexes of the Bern Convention are still present in

⁵ See maps in Annex E

the Danube Delta, including three species of migratory sturgeons or limnophilic species such as *Umbra kramery*, *Misgurnus fossilis*, *Carassius carassius* and *Tinca tinca*, which indicate the international importance of this wetland for fish. From the point of view of species richness, the Danube Delta occupies the third place in the world, after the Amazon and the Nile Delta. The international importance and significance of the Danube Delta is underlined, by its status as:

- A “World Natural Heritage Site,” listed under the World Heritage Convention (since 1990);
- A Ramsar Convention wetland zone of international importance, especially as habitat for water birds (since 1990);
- A “Biosphere Reserve,” listed by UNESCO (since 1990).

The significance of the Danube does not end at its delta. The river is the most important tributary of the **Black Sea** and has a key impact on the ecology of this remarkable water body, which is shared by 6 countries and 160 million inhabitants. Because the sea is virtually cut off from the world’s oceans, pollutants from the Danube are relatively trapped in the water body, so that the environmental quality of the Danube water is a major determinant of the state of the Black Sea environments.

The **Middle Danube Basin**, which is a secondary focus for this project, covers a large area reaching from the Gate of Devin near Bratislava to the impressive gorge of the Danube at the Iron Gate between Serbia & Montenegro and Romania. This section of the Danube is confined by the Carpathian Mountains in the north and east, and the Karnic Alps and the Karawankas, the Julian Alps and the Dinaric Mountains in the west and south. It includes the Tisza River Basin, which flows from Romania and Ukraine through Hungary to the Danube. Indirectly relevant for this project are the areas in Croatia and Serbia & Montenegro, which are the focus of information sharing activities. The Middle Danube River Basin contains a number of outstanding wetland areas. **Kopacki Rit** (in Croatia) with some 30,000 ha between the Drava and the Danube, is one of the richest and most dynamic floodplains of the Danube River Basin. The area, which has extended floodplain forests (willow, poplar and oak), floodplain lakes, ponds, extensive reed beds and marshes, has been designated as a Ramsar Site and Nature Park (IUCN category Ib and V). It has also been proposed as part of a trans-boundary Biosphere Reserve along the Drava and Mur rivers. A hundred days flooding per year and the abundance of food and underwater vegetation makes Kopacki Rit, after the Danube Delta, the most important fish-spawning ground along the entire Danube. Just opposite Kopacki Rit lies the wetland complex of **Gornje Podunavlje** (Serbia and Montenegro) with 19,648 ha of floodplain habitats. This mosaic of water, marsh, swamp, meadows, and bush and forest ecosystems is characterized by a high biodiversity and significant number of threatened, rare, endemic and relict species. The middle and lower **Drava-Mura wetlands** (Slovenia, Croatia, Hungary) forming an intact bio- and landscape corridor of 380 km from the alpine foothills up to the Pannonian Lowlands on the Danube. The floodplain covers 60,000 ha and forms a unique living space especially for migratory freshwater species and alpine pioneer species living on sand, gravel bars and islands as well as for forest species and mammals such as river otter and beaver.

2.2. Key Threats to Danube Ecosystems of Global Significance

As can be expected, the environmental quality of the Danube River Basin is greatly affected by the activities of the over 81 million people living in it. Until the end of the 18th century, the Danube was a wide-branching river with an extensive network of tributaries and backwaters. Since then, drastic interventions, especially extensive regulation, have resulted in the loss of most of the basin wetlands and a severe reduction in habitats and biodiversity. More than 80% of the length of the Danube has been regulated, and over 700 dams and weirs have been built along its main tributaries. In the Northern and Western parts of the watershed, the rapid economic growth of the 19th and 20th centuries further reduced the basin’s biodiversity, eroding lands, cutting down forests, and polluting waters. Only in the last 30 years has conservation begun to gain priority in the basin and resources and policies have been devoted to environmental restoration.

The history of the Lower and Middle Danube, flowing through Central and Eastern Europe, is different. There, slower economic growth before and during the communist period, coupled with little concern for the environment, resulted in some cases of egregious pollution and loss of natural resources, but overall many natural areas remained relatively intact and to this day feature a biodiversity that is unparalleled in areas further upstream. Since the fall of Communism, the countries of Central and Eastern Europe have undergone a transitional process that has included privatization of natural resources and other assets, emergence of market-based economies, development of political democracies and integration into, or closer relations with, the EU. These changes have opened enormous opportunities for social and

environmental improvements, but also pose important challenges for the conservation of natural environments and the livelihoods of weaker social groups. As the region becomes increasingly integrated into the European Common Market and the global economy, traditional, and often extensive landscape uses are coming under increasing pressure. According to a recent analysis by the European Environmental Agency, this is leading, on the one hand, to abandonment of marginal farming areas; and on the other hand to the intensification of farming practices, including use of pesticides, fertilizers, and heavy machinery in the most fertile areas. Both processes do not bode well for the environment, as they are leading to the significant loss of High Nature Value Farming areas – areas with unique meadow ecosystems that are habitats for rare species of flora and fauna.

In the last ten years, many analyses, including most recently the ICPDR's Danube Basin Analysis (published in 2005), have agreed on the diagnosis of the main threats to the environment of the Middle and Lower Danube. They include:

- (a) Past and current loss of wetlands and floodplains that have reduced the biodiversity and stability of ecosystems, and have aggravated flooding. For instance, there is a consensus that the floods of 2002, which caused €14.4 billion of damage in Germany, Austria, the Czech Republic and Slovakia, were made worse by river regulation and the loss of natural floodplains.
- (b) Eutrophication and pollution (e.g. Cadmium, Lead, Mercury, DDT, Lindane and Atrazine) of the watercourses and groundwater due to agriculture, industry and household discharges that endanger environment and people alike. The excessive nutrients and pollution in the Danube are not only affecting the basin but also the Black Sea into which the Danube spills.
- (c) Inadequate financial and technical resources to support conservation, and to make it more attractive to rural and urban dwellers;
- (d) Potential loss of remaining stretches of high ecological value as a result of careless infrastructure development, including navigation and tourism infrastructure.

Increasing nutrient concentrations of the Danube River, coming from the whole Danube River basin, have led to the intensification of eutrophication phenomena in the Danube Delta lakes after the 1980s, and to important changes in the structure of the flora and fauna communities. Sensitive fish species have declined or even become extinct as a result of the reduced water transparency.

Studies undertaken in the frame of the Danube Environmental Program suggest that about half of the nutrient load discharged internally in the basin comes from agriculture (diffuse sources of pollution), slightly more than one quarter from domestic sources, an additional larger share comes from industry and the remainder from “background” sources.

According to the ICPDR, some 80% of the historical floodplains in the Danube basin have been lost over the last 150 years. Among the remaining 20% the areas along the Lower Danube between Bulgaria and Romania and in the Danube Delta are among the largest and more ecologically valuable. They play an important role in hydrological processes, in particular in flood protection, recharging of groundwater as well as for habitat and species diversity. Many of these wetlands are under pressure from navigation, infrastructure development and agriculture. Future impacts from agriculture are especially important in Romania and Bulgaria. Use of chemical fertilizers and pesticides, and with it nutrient run-off into the Danube and its tributaries, plummeted following the collapse of the former planned economy around 1990, but is projected to recover and increase in future as the agriculture economy recovers and becomes increasingly integrated into the European Common market and global economy. Intensification of farming in highly productive areas and abandonment of extensive farming practices in marginal ones could lead to significant biodiversity loss in both countries.

2.3. A Strategy to Protect Globally Significant Biodiversity and Ecosystem Services in the Danube

Romania and Bulgaria, other Danube countries, the basin agencies, and many other stakeholders, including WWF and its partners, are working to address the environmental threats listed above, mainly through (a) programs to reduce nutrient loads and pollution from municipal, industrial and rural sources; (b) wetland and flood plain restoration programs; (c) biodiversity conservation programs; and (d) support for the sustainable use of rural environments so as to reduce non-point source pollution, natural resource depletion and natural hazards. In the case of the Lower and Middle Danube Basin, WWF has focused its long-term conservation strategy on the following, inter-related issues:

- Wetland protection and restoration, focused principally on implementation of the Lower Danube Green Corridor Agreement as well as the protection of outstanding wetland areas in Croatia, Serbia & Montenegro, Hungary, Ukraine and Moldova (Kopacki Rit, Tisza, Drava, and Prut sub-basins, Danube Delta).
- The protection and restoration of forested areas, particularly in the upper watersheds of several major Danube tributaries, including the Tisza sub-river basin (shared by Romania and Hungary) and the Prut sub-basin (shared by Romania and Ukraine).
- Promoting frameworks for sustainable resource management, including sustainable forestry as well as sustainable agriculture and rural development policies.
- Supporting the development of sustainable livelihoods along the Lower and Middle Danube, including fostering new economic opportunities for local stakeholders such as development of local products and tourism; and developing payments for ecosystem services that benefit local stewards of the environment.
- Supporting timely and effective implementation of the EU Water Framework Directive in the Danube river basin.

It is important to underline that these goals are shared by government agencies, the ICPDR and other watershed agencies and most other major regional stakeholders; they are part of the Joint Action Program 2001-2005 of the International Commission for the Protection of the Danube River; and more specifically, the wetland restoration strategies mentioned above have been endorsed by the governments of all riparian countries in the 2001 Summit on the Environment and Sustainable Development in the Danube Carpathian Region.

While there is considerable agreement regarding what should be done to conserve Danube ecosystems and their capacity to deliver ecosystem services, the fact remains that due to lack of money, many initiatives may never go beyond the “pilot” phase or will be at risk as soon as the initial funds dry up. As stated in a GEF report,

“The lack of appropriate financing mechanisms at the national as well as the regional level is perhaps the largest deterrent to the implementation of pollution reduction measures” *Source: Wanninger (1999) “Financial Mechanisms in the Danube River Basin Countries” Danube Pollution Reduction Programme, UNDP/GEF*

Unsustainable financing may hamper any type of environmental program, but it is particularly pervasive in the case of rural conservation programs that expect farmers and other natural resource managers to adopt environmentally-friendly practices without devising ways to compensate them for the extra costs they may incur in so doing.

The need to put in place sustainable financing mechanisms to support conservation-friendly land uses Romania and Bulgaria, and the wider Danube basin dovetails well with the international interest in “ecosystem services” and payments for ecosystem services. Payments for Ecosystem Services (PES) is the generic name of a variety of arrangements whereby governments, and/or businesses and/or consumers pay farmers and other water and land managers, for conservation activities that deliver ecosystem services. In the case of a watershed like the Danube basin, these ecosystem services may include flood control, erosion control, sedimentation control, water quality control, maintenance of aquatic habitats, and maintenance of dry season flows. To the extent that watershed protection is achieved by keeping or restoring vegetation and natural landscapes, other ecosystem services may arise, including forest conservation, biodiversity conservation, carbon sequestration, landscape beauty, etc.

There is an increasing interest in water management, conservation and rural development circles alike regarding the ability of PES to deliver biodiversity and water conservation and at the same time to become a new source of income for small farmers and rural communities. Yet, until now, the fact remains that, on the one hand, most private-driven PES schemes have been of limited scale and have delivered relatively little in terms of conservation and rural incomes, while, on the other hand, public-driven PES have at times been quite large but their conservation and social pay offs remain uncertain. Hence, many questions linger: How to scale-up payments for ecosystem services? How to ensure that PES schemes deliver significant environmental and rural development benefits? How to bring PES to an international watershed and mainstream it in integrated river basin management schemes? This project proposal is based in the understanding that in the Lower and Middle Danube there are real opportunities to answer many of these questions and at the same time put in place a large-scale system of payments for ecosystem services – large in

geographical coverage, in the amount of resources mobilized, and in the lessons of global significance that it delivers. To help this process happen is the ultimate goal of the proposed project.

2.4. Objectives, Outcomes, and their Rationale

In line with the above discussion and the Logical Framework Analysis presented below, the **overall development objective** of the project here proposed is:

To secure global environmental benefits by mainstreaming payments for ecosystem services (PES) and sustainable financing (SF) schemes in integrated river basin management for large-scale international watersheds.

Our more specific **project objectives** are:

- 1. To demonstrate and promote PES and other sustainable financing schemes in the Lower and Middle Danube river basins.*
- 2. To derive lessons of relevance for the Danube basin at large and for other international watersheds*

Over a four-year period, we expect to achieve the following three **outcomes**:

OUTCOME 1: PES and SF schemes that reward the maintenance, improvement or adoption of conservation-friendly land uses are contributing to integrated river basin management and rural livelihoods in the Lower and Middle Danube.

For OUTCOME 1, the proposed project will have the following objectively verifiable indicators:

- By 2009, PES and sustainable financing schemes are integrated into the Danube River Basin Management plan.
- By 2010, nationally-supported PES and sustainable financing schemes are implemented in Bulgaria and Romania and are beginning to deliver in terms of conservation and improved rural livelihoods.
- By 2010, PES and sustainable financing schemes are demonstrated at local level (5 public- and private-sector driven schemes implemented in Romania and Bulgaria)

To deliver on Outcome 1, the proposed project will focus on seizing the window of opportunity that arises from the eastward enlargement of the EU, implementation of the recent EU Water Framework Directive in the Danube river basin, plus the ongoing reforms to the EU Rural Development Policy and the EU Common Agricultural Policy and their implementation for the first time in Romania and Bulgaria.

The EU Water Framework Directive, which all of the Danube countries – including those outside of the EU – have pledged to implement in the Danube river basin, requires the development of comprehensive River Basin Management Plans for all river basins by 2009. Here the proposed project will develop, demonstrate and evaluate the potential for PES and sustainable financing schemes to contribute to the achievement of good ecological and chemical status of water bodies in the Danube river basin, as called for by the Directive. In this way, the project activities will feed into the Program of Measures that basin and sub-basin authorities must develop as part of the river basin management plans. These activities will be equally relevant for river basin management planning in Bulgaria and Romania as in other Danube countries and the river basin as a whole. Thus, the Romanian Presidency of the ICPDR in 2007 will be used as an opportunity for experience sharing regarding contributions of PES and sustainable financing schemes to river basin management planning across the Danube River Basin.

A chief opportunity for PES and sustainable financing mechanisms that will be evaluated and developed will be national funding programs, especially those co-financed by the EU. During the period 2007-2013, substantial EU and associated national funds will be made available for rural development and conservation, including investment in landscape management related to integrated river basin management. In addition to evaluating and drawing up recommendations for including these funds among the financing resources of the Program of Measures for the Danube and sub-basin management plans, the proposed project will undertake several on-the-ground demonstration PES

projects for integrated river basin management in Romania and Bulgaria. In the two countries, which are expected to join the European Union by 2008, rural development support is expected to total some €8 billion for the 2007-2013 seven-year period, of which at least 25% should be allocated for landscape management and conservation. Even with these funds available, little biodiversity conservation may happen in these countries if (a) the countries fail to develop effective rural conservation plans and programs to claim EU financial support; (b) these programs are not effectively implemented, both in terms of targeting and delivery; (c) local farmers are not willing and able to sign up to conservation practices that qualify them to receive conservation payments; and (d) there is no strong monitoring and evaluation to assess actual conservation pay-offs.

The first step, namely the approval of national rural development plans in Bulgaria and Romania, is already ongoing and is expected to be completed by the end of 2006. Though final decisions have yet to be made, all signs are that these national plans will indeed include substantial opportunities for financing landscape management related to integrated river basin management. Helping deliver on the other three steps above will be at the core of our project. In both countries, rural development payment in general, and agri-environmental and other nature-related payments in particular, are very new and are now being introduced for the first time, so ensuring their effective implementation is both a challenge and an opportunity that will have implications for future use of such funds as well as conservation and resource management more generally. The project will work with governments in the development of credible rural conservation plans and programs, supporting conservation activities among farmers in selected demonstration areas, and monitoring and evaluating of the conservation outcomes.

The greening of EU rural payments is probably the only short and medium-term opportunity to really scale-up PES in the Danube and elsewhere in Europe, and it has the potential to deliver not only in terms of rural conservation but also in terms of re-establishing a partnership between city and countryside that is now embattled not only in Europe but also across the world. Ensuring that public payments do deliver tangible biodiversity benefits in an effective manner will be important for convincing tax payers and their elected officials to continue funding these programs in the future.

Even so, public funds are not always available, nor do they cover all needs. So, wherever possible, it is important to supplement public funds with private or local PES arrangements. WWF has already begun brokering a few such private-sector PES schemes in the Danube basin (in Hungary's Tisza sub-basin), and through this project we will systematically explore additional opportunities for private-sector driven and local PES schemes both in the Upper Tisza River Basin in Romania and along the Lower Danube in Romania and Bulgaria. In addition to these demonstration projects, we plan to establish a regional Business-Environment Forum to promote awareness and understanding of ecosystem services among businesses as well as by engaging them in developing the market for ecosystem services and exploring other SF schemes.

OUTCOME 2: Key Stakeholders in the wider Danube river basin, particularly in the Middle and Lower Danube are aware of ecosystem services, PES and SF mechanisms, and are considering adapting them to their river basins and situations.

For OUTCOME 2, the proposed project will have the following objectively verifiable indicator:

- By project end, all key stakeholders relevant to management of the Danube and sub-river basins have learned from the project, are aware of opportunities for PES and sustainable financing schemes and lessons gained in this project and are considering adapting them to their needs and conditions.

Outcome 2 is all about capacity building and training for key stakeholders in Bulgaria and Romania on the one hand, and sharing of project experience and expertise within the Danube river basin more generally. Key stakeholders will include river basin managers; authorities responsible for water management as well as related issues, especially agriculture, rural development and nature conservation; along with NGOs and other interested parties that are active in river basin management.

Capacity building and training will be provided to river basin managers and other relevant stakeholders in Bulgaria and Romania on ecosystem services and development of payments for ecosystem services and sustainable financing schemes through a mixture of training workshops, technical assistance, and study tours. This will be reinforced by broader communications and media activities targeted at the same people involved in river basin management and a

wider audience of decision makers and stakeholders relevant to river basin management, ecosystem services, and payments and financing mechanisms.

Project experience will also be transferred to other stakeholders throughout the Danube River Basin and its sub- river basins. Through a series of workshops, project experience will be shared with river basin managers and other key stakeholders in Serbia & Montenegro, Croatia, Moldova and Ukraine. These countries not only share the Middle and Lower Danube River Basins with the project focal countries Bulgaria and Romania, but also are in a special position to benefit from the project experience given their ongoing efforts to draw closer to the European Union. For each of the countries, approximation of their national legislation, policies, and institutional frameworks to those of the EU is a central priority, including approximation to key pieces of EU environmental legislation and policies such as the Water Framework Directive, nature conservation policies (e.g. Habitats and Birds Directives) as well as agriculture and rural development policies, all of which open opportunities for promoting and integrating payments for ecosystem services and sustainable financing schemes into relevant legislation and programming. For all of these countries, closer ties to the EU and eventual EU accession are a top priority. While Croatia and Serbia & Montenegro are moving toward EU accession, at present neither Ukraine nor Moldova have been given the prospect of eventual EU membership. Instead, both Ukraine and Moldova have been offered a framework for relations through the EU's European Neighborhood Policy, which aims to build a zone of increasing prosperity, stability and security in the EU's new and expanded neighborhood. It offers partners a relationship that goes beyond cooperation to include closer political links and an element of economic integration, as well as assistance with reforms to stimulate economic and social development. It is still unclear how current efforts of both Ukraine and Moldova to draw closer to the EU will develop, and what implications this will have for integrating support for PES and sustainable financing into the regulatory and programmatic framework of both countries as well as implementing concrete projects on the ground.

Finally, communications and media activities, focused especially on specialty publications in the Danube River Basin, will spread project experience and expertise to key stakeholders and broader audiences in the wider Danube River Basin.

OUTCOME 3: The project has made significant contributions to the conservation community's knowledge of how to scale-up PES and SF schemes, as well as how to incorporate them in integrated river basin management so that they deliver significant conservation and rural livelihood improvements.

For OUTCOME 3, the proposed project will have the following objectively verifiable indicators:

- By project end, key stakeholders in at least three other major river basins are aware of the Danube experience with PES and SF and are considering adapting it to their river basins and situations.
- By project end, key staff in at least 30 conservation, freshwater management and/or rural development organizations are aware of opportunities regarding Payments for Ecosystem Services and sustainable financing mechanisms and the lessons gained in this project and are considering adapting them to their needs.

In support of Outcome 3, the project will undertake an active program of exchanges and engagement through which we expect to bring the Danube PES project lessons and models to the attention of managers and stakeholders in other watersheds around the world, particularly in developing countries. We will also put in place an ambitious communications and outreach program both through electronic and print media as well as through staff participation at major watershed management and PES/SF events.

We expect the proposed project to have considerable relevance for areas beyond the Danube river basin. Many of the models and lessons that will come out of the Danube project will be methods and approaches relevant to a wide variety of countries and local situations – e.g., regarding opportunities to scale up PES, mainstreaming PES into river basin planning, and combining public and private driven PES schemes. While there is growing number of PES schemes working in small watersheds, to date there is little or no experience in scaling this up to larger watersheds such as the Danube. At the same time, there is a growing consensus around the world on the merits of Integrated River Basin Management (IRBM) and a substantial number of IRBM institutional structures are already in place. But there is still very limited experience with actual implementation, including financing for relevant measures within an IRBM framework. Considerable attention around the world is being paid to implementation of the EU Water Framework Directive, which provides perhaps the most comprehensive and clearest framework for implementing Integrated River

Basin Management and achieving sustainable use of water resources. Yet here, too, actual implementation of the Directive is at the beginning, with attention only now really turning to the practical steps that need to be taken, including arrangements for financing. Although a PES scheme based on EU/government payments may be a far cry from what is feasible among the group of least developed countries, it surely is feasible – in fact, it is currently at work – in many other countries, including China, India, Brazil, and Mexico. In many of these countries, as in Europe, the question is not so much where the money for these payments can come from, but rather how to ensure that they deliver significant environmental as well as social benefits.

We have identified four major river basins for possible involvement in this project: the Yangtze, the Mekong the Amazon and the Zambezi. Each of these river basins is the focus of major ecoregion conservation programs of WWF, and the three first ones include middle-income countries similar in many respects to Eastern Europe countries.

For example, among the specific opportunities for sharing this project experience in China we will take advantage of the twinning relationship that is developing between the river basin management authorities responsible for the Yangtze in China and the Danube River Basins in Europe. Also in China, beginning in 2006, WWF will be working with local and international partners assessing experience and opportunities for PES schemes in the Upper Mekong basin in Yunan Province. At a country-wide level, WWF-China and several local and international partners are evaluating the Chinese government's experience with the "Grains for Green" program and looking for more effective ways to pay farmers for conservation activities. Participants in all of these programs have already expressed their interest in learning from the Danube PES initiative.

In the case of Vietnam, beginning in 2006 WWF-Vietnam will act as WWF-East Asia anchor office for PES development and three sites have been already short listed as having high PES potential: Lam Dong, the Perfume River and Quang Nam. In the first two cases, private business may be major buyers of ecosystem services, while in the third case the public power company may be the leading buyer. In initial discussions, the participants in all these programs have realized the benefits of exchanging experiences and learning from the Danube initiative.

We also have well-developed relations with basin agencies and major stakeholder in all Amazon countries and are already exchanging information and experiences with experts in Brazil, Peru and Colombia. Regarding the Zambezi, where WWF has a major ecoregion conservation program we expect that the Danube PES experience may be of relevance for lower middle-income countries such as Botswana.

THE VALUE ADDED: Since there are several GEF and non-GEF conservation initiatives ongoing in the Middle and Lower Danube basin, it is appropriate to address the question: what is this project proposal value added? To answer this question, we should point out that it is only recently that an ecosystem services and a payment for ecosystem services perspective has been introduced in the conservation arena, so very few if any of the conservation projects currently at work in the Danube have this perspective on board. Furthermore, beginning in 2007 substantial EU funding will be moved away from production subsidies and towards payments for conservation, yet nobody knows how and if it will work. This project value added lies then in seizing these new trends and focusing on new EU countries like Romania and Bulgaria that feature outstanding global ecological values and have little vested rural interests, so that they offer a unique opportunity to try to put in place large PES schemes for rural conservation and integrated river basin management that do deliver in terms of in situ conservation and in terms of regional and world-wide lessons.

2.5. The Project Logical Framework Outputs and Activities

This section presents the Project Logical Framework, including the development objective, project objectives, outcomes and outputs in a table format, including objectively verifiable indicators, sources of verification, risks and assumptions. A discussion of outputs and activities and their rationale follows.

TABLE 2. DEVELOPMENT OBJECTIVE, PROJECT OBJECTIVES AND PROJECT OUTCOME

	Logframe/Intervention logic	Objective verifiable indicator	Sources of verification	Risks, assumptions
Develop. Objective	To secure global environmental benefits by mainstreaming payments for environmental services (PES) and sustainable financing (SF) schemes in integrated river basin management for large-scale international watersheds.	At least 3 large-scale international watersheds with PES schemes adopted or under consideration.	Baseline established at project inception; Post-project evaluation of PES in Danube and other large-scale international watersheds.	There is a world-wide drive to (a) reduce rural poverty; (b) secure the provision of ecosystem services and (c) eliminate rural production subsidies that distort international trade. Paying for ecosystem services is one of the few instruments that may deliver on all three goals.
1	Project Objective 1: To demonstrate and promote PES and other sustainable financing schemes in the Lower and Middle Danube river basin.			
2	Project Objective 2: To derive lessons of relevance for the Danube river basin at large and for other major watersheds.			
Outcome 1	PES and SF schemes that reward the maintenance, improvement or adoption of conservation-friendly land uses are contributing to integrated river basin management and rural livelihoods in the Lower and Middle Danube.	By 2009, PES and SF mechanisms integrated into Danube River Basin Management plan. By 2010, national PES schemes in Romania and Bulgaria. By project end, 5 local demonstration projects set-up in Romania and Bulgaria.	River Basin Management Plans for Danube and sub-basins (2009); mid-term reports of relevant funding programs (2010); Post- project independent evaluation.	Societal changes in CEE and EU have opened a window of opportunity for payments for rural conservation practices connected with integrated river basin management. Rural development programs include substantial opportunities for financing land management and conservation.
Outcome 2	Key stakeholders in the wider Danube river basin, particularly in the Lower and Middle Danube, are aware of PES and SF mechanisms, and are considering adapting them to their sub river-basins and situations.	By project end, all key stakeholders relevant to management of the Danube and sub-river basins have learned from the project, are aware of PES/SF opportunities and lessons gained in this project and are considering adapting them to their needs and conditions.	Qualitative surveys among project participants and key stakeholders in Danube to be conducted at project inception and as part of post-project evaluation.	Interest from key players in Danube. Lessons from and basic approaches developed in the project are useful in other areas of the Danube. Ongoing integration and approximation of Serbia & Montenegro, Croatia, Ukraine and Moldova to the European Union continues.
Outcome 3	The project has made significant contributions to the conservation community's knowledge of how to scale up PES and SF schemes as well as how to incorporate them in integrated river basin management so that they deliver significant conservation and improved rural livelihoods.	By project end, key stakeholders in at least three other major river basins are aware of the Danube experience with PES and SF and are considering adapting it to their river basins and situations. Key staff in at least 30 conservation, freshwater management and/or rural development institutions are aware of PES/SF opportunities and lessons gained in this project and are considering adapting them to their needs.	Qualitative surveys among project participants and key stakeholders in selected major river basins as well as among staff of conservation and rural development institutions, to be conducted at project inception and as part of post-project evaluation.	Interest from key players in other major river basins. Lessons from, and basic approaches developed in the project are useful in other major river basins. Interest in SF and PES among conservation and rural development organizations remains high.

Table 2: PROJECT OUTPUTS LEADING TO PROJECT OUTCOMES (CONTINUATION)

1.1.	PES and other sustainable financing mechanisms are integrated into Danube River Basin and sub-basin management plans	By 2009, relevant agri-environmental payments and other public and private-driven PES and SF mechanisms are identified and included in the Program of Measures for the Danube River and sub-basin Management Plans.	Evaluation at project inception and independent assessment at project end; official implementation guidelines, statistics.	Completion of River Basin Management Plans by 2009, in accordance with the EU Water Framework Directive. Interest and cooperation of relevant authorities and ICPDR/River Basin Management working group.
1.2.	National PES schemes in Romania and Bulgaria effectively reward provision of Danube-related ecosystem services	By 2010, Danube-related national payments schemes reward effective and efficient delivery of ecosystem services; full uptake by farmers and land users; efficiency in meeting environmental targets.	Official documents related to 2010 mid-term review of relevant funding programs, including implementation reports, guidelines, and statistics.	Bulgaria and Romania join the EU in 2007 or latest 2008.
1.3.	Demonstration of local-level implementation of public payments for Danube-related ecosystem services	By project end, at least 3 demonstration projects in Romania and Bulgaria involving public funded PES and SF schemes.	Independent assessment at project end.	Interest and willingness of local partners to participate.
1.4.	Private sector involvement and support for PES schemes demonstrated	By project end, at least 2 demonstration projects in Romania and Bulgaria involving private-funded PES and SF schemes.	Independent assessment at project end.	Interest and willingness of business leaders to participate.
Outputs leading to OUTCOME 2				
2.1.	Capacity building and training in PES/SFs for key stakeholders in Romania and Bulgaria	By project end, at least 80 river basin managers and other key stakeholders in BG and RO are trained in PES and sustainable financing schemes; all relevant stakeholders in BG and RO are aware of ecosystem services and opportunities for PES and sustainable funding schemes.	Records of/participation in training activities and participant evaluations; Survey among key stakeholders in Danube conducted at project inception and as part of post-project evaluation.	Interest of participants and willingness to participate.
2.2.	Information and experience exchange for key stakeholders in Danube and sub river basins	By project end, project experience and expertise shared with 80 river basin managers and other key stakeholders in Croatia, Serbia & Montenegro, Ukraine and Moldova; all river basin managers and other key stakeholders in the wider Danube river basin are aware of the project and lessons related to PES and SF.	Participant evaluations of workshops; Survey among key stakeholders in Danube conducted at project inception and as part of post-project evaluation.	Interest of participants and willingness to participate. Serbia & Montenegro, Croatia, Ukraine and Moldova continue moving toward closer integration with the EU.
Outputs leading to OUTCOME 3				
3.1.	Experience exchange with stakeholders in selected major river basins.	By project end, project experience and expertise transferred to key stakeholders in at least 3 major river basins.	Survey among project participants and key stakeholders in major river basins conducted at project inception and as part of post-project evaluation.	Interest of key stakeholders in selected major river basins. Lessons from and basic approaches developed in the Danube are useful in other contexts too.
3.2.	Best practices and lessons learned are documented, distributed and discussed with the conservation and international community.	Project experience and expertise shared with at least 30 key institutions in the conservation, freshwater management and rural development communities.	Mid- and end of project evaluation. Survey among users of publications and websites. Survey among staff of key conservation and rural development institutions.	Lessons from and basic approaches developed in the Danube are relevant and useful in other contexts too.

Outputs and Activities leading to OUTCOME 1:

Output 1.1: PES and other sustainable financing mechanisms are integrated into Danube river basin and sub-basin management plans.

For Output 1.1, the proposed project will have the following objectively verifiable indicators:

- By 2009, relevant agri-environmental payments and other public- and private-driven PES and Sustainable Financing mechanisms are identified and included in the Program of Measures for the Danube River and sub-river basin management plans.

The following activities lead to this output:

- *Activity 1.1.1.: Review land and other natural resource use needs for implementation of the Water Framework Directive in the Danube River Basin.*
- *Activity 1.1.2.: Analyze potential of agricultural funds and PES to support implementation of the Water Framework Directive in the Danube River Basin and sub-basins.*
- *Activity 1.1.3.: Identify and/or propose Best Practice and guidelines for use of national agricultural and other payments for implementation of the Water Framework Directive in the Danube River Basin.*
- *Activity 1.1.4.: Develop recommendations for public and private-driven payments for ecosystem services and sustainable financing mechanisms to be incorporated into the program of measures for the River Basin Management Plans for the Danube and sub-basins.*
- *Activity 1.1.5.: Integrate recommendations into planning process for Danube and sub-basin management plans.*
- *Activity 1.1.6.: Organize 2 workshops to integrate outcomes into River Basin Management Plans in Bulgaria and Romania*

The aim of Output 1.1 is to ensure that opportunities to put in place PES and other sustainable financing schemes are assessed and integrated into the Danube river basin and sub-basin management plans. According to the EU Water Framework Directive, which all signatories to the Danube Convention have agreed to implement, the River Basin Management Plans must be completed by 2009 and must include a program of measures that outlines the specific steps that will be taken to achieve the overall objective of good ecological status for the river. These Management Plans are expected to include not only the technical actions but also the sources of financing for those actions.

Although the focus of this project is on Bulgaria and Romania and the Lower and Middle Danube, the work that will be done here to identify and evaluate PES and sustainable financing schemes and integrate them into the program of measures in support of the implementation of the Water Framework Directive will also be relevant for other countries in the Danube river basin and its sub-basins. For example, Activities 1.1.1 through 1.1.3 include a survey of experience with use of national agricultural, rural and regional development funds for implementation of the Water Framework Directive across EU countries, especially in the Danube River Basin. While Bulgaria and Romania are now preparing for the first time national payments systems with the potential for supporting provision of ecosystem services, countries like Germany and Austria have collected considerable experience with national payments systems that provide important lessons, including best practice and recommendations. The survey will include recommendations for use of national payments for achieving the objectives of the Water Framework Directive, including measures to be used, design of national guidelines and delivery mechanisms. The survey will be led by WWF-DCPO with support from the WWF-European Policy Office as well as external expertise.

The recommendations of these surveys will be reviewed and discussed by national experts, relevant authorities and key stakeholders at an international seminar, organized if possible under the aegis of the Romanian Presidency of the International Commission for the Protection of the Danube River in 2007, then worked into a document with best practices and recommendations which will be distributed to relevant authorities and key stakeholders throughout the Danube River Basin and sub river-basins (Activities 1.1.3 and 1.1.4).

All activities in support of Output 1.1 build on an extensive body of work that has been done by WWF and partners, particularly regarding EU agriculture, rural and regional development funding as well as analysis of previous support schemes.⁶ We expect to draw on many of the technical experts who have been involved in developing these previous analyses, including experts on agriculture and regional development as well as freshwater conservation and river basin management experts from the WWF-European Policy Office in Brussels, the WWF Danube-Carpathian Program, WWF-Hungary, and WWF-Germany, government agencies, national NGOs and national academic centers (see below section C “Stakeholders Involvement”). The results of this and other activities under Output 1.1 will also be relevant to the work focused on national payments schemes to be undertaken for Output 1.2.

Incorporating the recommendations developed under the previous activities into relevant policy and planning processes at the national as well as river-basin levels will require follow-up (Activities 1.1.5 and 1.1.6), including transmitting the results to relevant stakeholders and bodies through communication activities and meetings as well as participation in relevant committees and working groups, e.g. the River Basin Management and sub-basin groups (e.g. for Tisza river basin) of the ICPDR. In Bulgaria and Romania, we will seek to incorporate the recommendations developed into Danube sub-basin management plans. In addition to communications activities and personal meetings, we plan to organize 2 national workshops (1 in each country) to present to and discuss the recommendations with river basin management authorities and other key stakeholders. This work will be undertaken largely by the WWF-DCPO freshwater officers in Bulgaria and Romania, with support from communications staff.

Output 1.2.: National PES schemes in Romania and Bulgaria effectively reward provision of Danube-related ecosystem services.

For Output 1.2, the proposed project will have the following objectively verifiable indicators:

- By 2010, Danube-related national payments schemes reward effective and efficient delivery of ecosystem services (to be evaluated on the basis of official documents and reports as well as independent assessment).
- By 2010, full uptake of Danube-related national payment schemes by farmers and other resource users (evaluated on the basis of official documents for Mid-Term Evaluation of relevant funding programs and reports).

The following activities will lead to this output:

- *Activity 1.2.1.: Evaluate needs for farm-related ecosystem services in Danube basin of Bulgaria and Romania.*
- *Activity 1.2.2.: Evaluate programming documents for EU and national funds and identify relevant funding opportunities for Danube-related ecosystem services.*
- *Activity 1.2.3.: Survey experience with EU funds for conservation and Integrated River Basin Management across EU countries, especially in the Danube river basin*
- *Activity 1.2.4.: Assist the design of guidance and delivery mechanisms to reward delivery of Danube-related ecosystem services.*
- *Activity 1.2.5.: Assist outreach and communications to farmers and other land users regarding payments for Danube-related ecosystems services in Bulgaria and Romania*
- *Activity 1.2.6.: Evaluate results of actions, including in demonstration areas, as input for mid-term evaluations in Bulgaria and Romania*

Both Romania and Bulgaria are expected to join the European Union by 2008. Once in the EU, both countries will be eligible to receive EU agriculture, rural and regional development funds, including possible support for ecosystem services related to the Danube. Because the EU funds require co-financing from domestic sources of support, the EU funds that will be made available to both countries provide an incentive for countries to establish national payments systems for supporting ecosystem services – something that they otherwise might not provide.

The proposed project will draw on experience from other countries to assist relevant authorities, including Ministries of Agriculture and Environment and Water, to ensure effective design of measures, and targeting them in such a way as to reward farmers and other resource users for land and resource management that delivers specific ecosystem services related to the Danube. Though clear in principle, this connection between on the one hand payments and on the other hand delivery of specific ecosystem services is often unclear in practice. Hence this project proposal will pay particular attention to design, monitoring and evaluation mechanisms that assure that the system delivers both ways.

That is why, beyond mainstreaming PES into the national agriculture and rural development programs, this project will seek to ensure actual delivery of the measures to the farmer or other resource user. Working with relevant authorities and stakeholders, including especially Agriculture Ministries, but also agriculture extension services, farmers associations, and conservation authorities, the project will assist in the development of mechanisms for raising awareness among farmers and other resource stewards regarding funding schemes as well as training on how to use them effectively. Conservation authorities will be involved in these activities throughout in order to ensure proper targeting and delivery of the schemes.

Output 1.3: Demonstration of local-level implementation of public payments for Danube-related ecosystem services.

For Output 1.3, the proposed project will have the following objectively verifiable indicators:

- By project end, at least 3 local demonstration projects in Romania and Bulgaria involving public-funded PES and sustainable financing schemes (to be evaluated by an independent assessment at project mid-term and end).

The following activities will lead to this output:

- *Activity 1.3.1.: Conduct feasibility studies and select at least 3 demonstration projects to be further developed in Romania and Bulgaria.*
- *Activity 1.3.2.: Identify and engage key stakeholders for each project in the selected sites in Romania and Bulgaria.*
- *Activity 1.3.3.: Training and awareness raising for local stakeholders on national and other funding sources available for Danube-related ecosystem services in Romania and Bulgaria.*
- *Activity 1.3.4.: Design, develop and assist implementation of PES schemes with national financing.*
- *Activity 1.2.5.: Awareness raising among local stakeholders regarding value of ecosystem services.*

At least three local demonstration projects will be supported during the project four years span, two in Romania and one in Bulgaria, to demonstrate and learn from the practical implementation of public-funded PES schemes. The demonstration projects will work with local authorities, farmers associations and other local natural resource users to help them actually implement the land use changes that would qualify them to receive payments under the fresh water, agriculture and rural development national plans that are the focus of Outputs 1.1 and 1.2. Our aim is to show *in practice* how national payments schemes can help deliver ecosystem services while at the same time supporting and even generating rural livelihoods.

Many of the stakeholders that were consulted during the PDF-A phase of this project felt strongly that such demonstration projects are of critical importance to the success of the project. The very idea of public payments for ecosystem services is still very new to this part of the world; to most people here, agricultural activities actually enhancing the environment, and generating rural incomes at the same time, seems implausible – both from the perspective of environmentalists as well as land users. There are still very few practical examples of public payments mechanisms in general, and even fewer, if any, connected specifically to watershed protection.

The demonstration projects will provide important feedback for the policy and programming activities undertaken under Outputs 1 and 2, and also provide focal points for some of the training and capacity building activities undertaken under Outputs 2.1 and 2.2. They will also be the focus of extensive communications activities to promote ecosystem services and opportunities to generate incomes for rural populations. Finally, we expect that most if not all of the private-sector driven PES schemes that are to be developed under Output 1.4 will take place in connection with the public sector-driven schemes to be developed here.

During the PDF-A phase of preparation of this project and through discussion with national agencies and local stakeholders, we have short-listed several locations for demonstration projects in Romania and Bulgaria. In order to be able to better target the local demonstration projects to needs and opportunities presented by ongoing programming for use of rural and regional development funds at the national level (a process that is expected to be largely completed toward the end of 2006), we have purposefully not selected the final list of sites. As a first activity of the project, a more thorough feasibility study will be undertaken for each of the candidate sites in light of developments in the national programming. The results will be consulted with national stakeholders and a minimum of three projects finally selected for actual implementation.

All of the sites that have been pre-selected are ones where WWF has been working for a number of years already and is in close contact with local authorities and stakeholders. For each of these local areas we have collected basic ecological, economic and social information and have had initial discussions with local authorities, farmers and fisherman associations to ensure their interest in participating in the project (a summary of this information is included below, with a more detailed description contained in Annex D) Among the criteria used for the selection of the current shortlist we have considered:

- Potential to succeed – to get off the ground and make a difference within the 3-4 year life of the project
- Diversity of environments and ecosystem services (including e.g., extensive fish ponds, agriculture)
- Diversity of payments schemes (national payments, municipal or other public-sector schemes)
- Priorities and interests of relevant national authorities
- Local stakeholders willingness and ability to work with the project
- Previous WWF experience and interest in the area

Maramures Plateau and Ecedea Marshes, Northern Romania

The upland mountain plateau, Oas Gutai, in Maramures in northern Romania is characterized by mixed grassland and forest habitats (50% each), a network of high altitude wetland and peatland “sponges,” an intact megafauna (brown bear, wolf, lynx) and significant but unprotected biodiversity, surrounded by 13 small communities and the large city of Baia Mare (population 150,000). The tributaries of the plateau run into the Tisza River, a major tributary of the Danube, and down to the Hungarian border, where they form the Ecedea/Ecsed marshes before spilling further down the Tisza toward the Danube. The Ecedea marshes that straddle the Romanian-Hungarian border were formerly a wetland area rich in biodiversity, but were significantly drained and turned to agriculture in the 19th century.

From the perspective of river basin management, the area is especially interesting in terms of water and flood management – it is from here that the potent cocktail of cyanide and heavy metals entered the Tisza in 2001, wiping out life in the river; and it is from here and neighboring areas of Ukraine that the floodwaters originated in 2001 that put large parts of Hungary under water. For both these reasons, the area of Maramures and neighboring part of Ukraine has been the focus of significant international attention. The area has a high potential to serve as a positive model for both the Danube basin as well as the Carpathian Mountains.

WWF has been working in Maramures for a number of years now, especially focused on developing economic mechanisms for conservation and sustainable development. Working together with local and regional officials as well as civil society, WWF has initiated a visioning process for the future development of the Maramures area that has been formally endorsed by all governmental and non-governmental stakeholders at a Visioning Workshop (Baia Mare, February 2005), and is now being worked into the official country-level planning procedure through the Maramures Sustainable Development Strategy. The partners have been developing a number of promising initiatives that could be carried forward or complemented by activities undertaken through the proposed project.

They include:

- Baia Mare Municipality, Water Authority, and County government (Romania) approach the Hungarian Government in order to elaborate a flood management concept and financial mechanism, including payments for ecosystem services provided by the Romanian stakeholders and benefiting downstream communities in Hungary.
- Payments and investments by city of Baia Mare and Water Management Authorities (Romania) to farmers and other land users on Maramures plateau (Romania) to avoid sedimentation, soil erosion, and water treatment costs.

In the Ecedea/Ecsed marshes, there is a good opportunity to promote a switch from failed lowland, subsidy-driven monoculture agriculture to a mixed land-use mosaic of wetland management (for flood-waters retention) together with new economic uses focused on grazing, fishing, tourism, recreation, and wetland products harvesting. At the same time, the area could mark the first ever cross-border wetland project between Romania and Hungary. The Hungarian government has selected the area as the first of its flood retention zones under the innovative Vaserhelyi flood management plan. WWF-Hungary has already begun working with local communities to turn the Vaserhelyi plan together with new payments from agriculture and rural development funds into a real opportunity to restore the valuable wetlands in the area and the livelihoods that they once supported. The proposed project could draw on the Hungarian experience with such locally- and nationally-based PES schemes and promote similar approaches and schemes across the border in Romania.

Lower Danube, Romania

On the Lower Danube in Romania, we have identified two possible project sites within the former Danube floodplain in Calarasi County, located within the Lower Danube Green Corridor. In this area much of the former mosaics of wetlands and natural channels, reed beds and patches of natural floodplain forest have been lost, but some remain, especially around the fish ponds that are a possible focus for this proposed project. The fish ponds are among the most productive along the Lower Danube. They are also valuable in biodiversity terms, for the birds and other species of fauna and flora, many of which are listed on the Bern Convention, EU Birds and Habitats Directives.

Maintaining, and even increasing the biodiversity around the fish ponds, while at the same time continuing their productive function would require upgrading current natural resources management practices and introducing new ones. For example, limiting vegetation removal to strict limits and scheduling it after the breeding season, correlating the refilling of ponds with the breeding seasons for waders, etc. Both existing and new natural resource management practices can yield a variety of ecosystem services related to maintenance and improvement of wetlands, including hydrological (water storage, flood retention, ground water recharge); biogeochemical (nutrient retention, filtration capacity); and ecological (habitat for flora and fauna – spawning, breeding, nesting, feeding; reservoir for biodiversity, productivity – food web). In addition to increasing the flow of ecosystem services, conservation friendly NRM practices can deliver economic benefits in the form of increased fish, reeds and other wetland products and also new tourism and bird watching opportunities.

Payments for the provision of ecosystem services from these areas is potentially available from a number of sources, including national payments that are expected to be made available for extensive fish farming practices (aqua-environmental measures co-financed by the European Fisheries Fund and the European Agricultural Fund for Rural Development). Support for fish farming is expected to be included as a priority within the Romanian National Development Plan, which is now being completed. Additional support for these ecosystem benefits could be made available through other mechanisms, including local water pricing as well as private-sector arrangements related to tourism as well as marketing of “green” products to the nearby city of Calarasi and beyond. A successful demonstration of extensive fish pond management in Calarasi could have application for the many other fish ponds along the Lower Danube, in Romania as well as Bulgaria, Moldova and Ukraine, many of which, like Calarasi, are valuable wetland areas whose benefits extend far beyond fish production.

Lower Danube, Bulgaria

On the Lower Danube in Bulgaria, we have identified two possible sites for demonstration projects: the area of Rusenski Lom, in the vicinity of Rusenski Lom Nature Park near the town of Ruse; and the lower sections of the

Vit and Osam Rivers in Pleven County in north-central Bulgaria. Both possible project sites are located within the designated area of the Lower Danube Green Corridor.

Possible activities and issues in the area of Rusenski Lom are focused on maintaining and enhancing the biodiversity values of Rusenski Lom Nature Park, maintaining existing High Nature Value Farmland, including pastures and meadows; converting some of the arable land along the Rusenski Lom River to grassland; and implementing sustainable forestry management in the park forests. Possible funding mechanisms to support these activities include national payments schemes as well as levies from tourists visiting the area.

Potential activities on the Vit and Osam Rivers focus on restoration of the original river beds, which were significantly regulated in the middle of the 20th century and converted to arable land. Similar to the previously discussed case of the Ecedea/Ecsed marshes on the Romanian/Hungarian border, the conversion of the wetlands to arable lands has proven a relative failure: the water table has dropped significantly as a result of the regulation, decreasing the productivity of the agricultural lands, and affecting availability of water for drinking and other uses. At the same time, the level of biodiversity in the area has declined; including fish and other fauna and flora used for economic purposes, and flood management has been negatively affected. The project would build on ongoing efforts to restore the two rivers to their original river beds, supporting this development by providing complementary payments to local farmers and other land and resource users for the provision of ecosystem services associated with these natural resources management changes. Here too, a major source of support can be expected to come from national payments schemes, but other sources may also be available, including e.g., levies from water payments (the planned restoration would recharge groundwater aquifers improving water abstraction).

Output 1.4.: Private sector involvement and support for PES schemes demonstrated

For Output 1.4, the proposed project will have the following objectively verifiable indicators:

- By project end, at least 2 demonstration projects in Romania and Bulgaria involving private-funded PES and sustainable financing schemes (to be evaluated by an independent assessment at project mid-term and end).

The following activities will lead to this output:

- *Activity 1.4.1: Local-level demonstration of private sector-driven PES schemes in Romania and Bulgaria.*
- *Activity 1.4.2: Business-Environment Forum*

This output and the related activities focus on developing practical demonstrations of private sector-driven payments for Danube-related ecosystem services and promoting private sector PES and sustainable financing schemes more generally.

The proposed project will demonstrate at least 2 private sector-driven PES schemes (Activity 1.4.1). A detailed feasibility study will be undertaken at the beginning of the project to identify sites and mechanisms to be further developed. Those selected are expected to build on, coincide with and complement as well as bring forward the activities focused on public-payment schemes undertaken for the demonstration projects under Output 1.3, in the area of Maramures and the Ecedea Marshes in the Middle Danube river basin in Romania as well as in the demonstration projects along the Lower Danube (Calarasi, Rusenski Lom, Vit and Osam Rivers). By focusing the demonstrations of both the public- and private-driven payments schemes in the same areas, we expect not only to achieve synergies and greater impact, but also be able to demonstrate the opportunities – and needs – for combining the two approaches. While public payments can for example support development of “green” products (e.g., organic food), private involvement and initiative is needed to ensure that they are actually brought to market and purchased by consumers. In this case, as in many others, the private initiative is necessary to secure the overall sustainability of the mechanism supporting ecosystem services.

Examples of private-sector schemes that have been pre-selected for possible future development and promotion through this project include:

- Work with a mineral water company in the Maramures area to protect the watershed from which the company draws its water, including possible payments for ecosystem services to local farmers and other land users.

- Work with fish producers in the Calarasi area to develop and market “green” fish that can be sold at a premium price to support extensive environmentally-friendly fisheries management.
- Work with agricultural producers in all potential project sites and retailers to develop and market “green” agricultural products that can be sold at a premium price and thus reward related ecosystem services.
- Work with local stakeholders in all potential project sites and tourism companies to develop and market environmentally friendly tourism products – e.g., related to bird watching in the Calarasi area, tourism in Rusenski Lom Nature Park or the Ecedea marshes on the border between Romania and Hungary.
- Work with forest owners and managers to introduce certified sustainable forestry management (FSC) on the Maramures plateau, enabling them to charge a premium price that rewards the ecosystem services that they safeguard. This activity is already ongoing through a partnership between WWF and IKEA (brought in partly because IKEA procures 40% of all Maramures timber products).

The proposed project will also promote awareness among business leaders of essential ecosystem services, and seek to involve them in maintaining and enhancing these services in the Danube River basin. The main instrument for this will be a Danube Business-Environment Forum (Activity 1.4.2). Through the forum, the project will engage local, regional and international businesses in a discussion on ecosystem services in the Danube that addresses issues including:

- 1) Raise awareness of the need for such ecosystem service approaches from the local to the international scale;
- 2) Raise awareness of the need for upstream/downstream analysis and investigation (scientific foundation for flood/land-use assertions; additional market research on products and services; economic analysis of costs and benefits from different flood management strategies etc);
- 3) Advance the role of the private sector in marketing ecosystem services in the Danube;
- 4) Identify opportunities to put in place PES schemes in the Danube;
- 5) Support and participate in local level demonstration of private-driven PES in the Danube River basin.

The Business-Environment Forum will build on WWF’s considerable experience and existing partnerships with businesses in the Tisza basin, particularly in Romania and Hungary. Here the project will be able to use already identified opportunities and “incentives,” including prevention of flood damage, which in the Tisza river basin in recent years has been very considerable; nature-based products; support for biomass production; as well as national payments schemes, etc., and make a strong business case for a healthy – ecologically functioning – Tisza river basin as a necessary condition for continued or enhanced business activities. The focus on the Tisza sub-basin will be used as a first step toward possibly developing a similar Business-Environment Forum for the Danube River Basin as a whole.

Participating businesses in the Business-Environment Forum could include major WWF corporate partners like IKEA and Wienerberger as well as members of WWF-Hungary’s Corporate Club, e.g. AES (an energy company that is working with WWF-Hungary to develop environmentally-friendly biomass production in the Tisza floodplain). There is also a host of smaller operators who also have an interest in seeing the vision of a sustainable Tisza implemented, including the Maramures mineral water company mentioned under Activity 1.4.1, tourism companies, animal husbandry companies, etc. Also involved would be chambers of commerce and business associations, e.g. from Baia Mare in Romania, as well as relevant governmental agencies, e.g. Romanian State Forest Administration as well as water management authority.

The forum (conference) will be followed up by smaller meetings to agree on a longer-term program for pushing forward PES mechanisms, both at river basin, regional, and local scales; publication of business-accepted PES framework for the Tisza; as well as communications activities highlighting the business-nature partnerships anticipated. To implement these activities in Romania, WWF-DCPO will carry forward its existing close partnership with WWF-Hungary in the Tisza River basin.

Outputs and Activities leading to OUTCOME 2:

Output 2.1: Capacity building and training in PES and sustainable financing schemes for key stakeholders in Romania and Bulgaria

For Output 2.1, the proposed project will have the following objectively verifiable indicators:

- By project end, at least 80 river basin managers and other key stakeholders in Bulgaria and Romania are trained in PES and sustainable financing schemes;
- By project end, all stakeholders relevant to decision making on river basin management in Bulgaria and Romania are aware of ecosystem services and opportunities for PES and sustainable funding schemes.

The following activities will lead to this output:

Activity 2.1.1. Identify and survey key stakeholders and their needs related to PES and sustainable financing schemes

Activity 2.1.2. Training for watershed managers and other key stakeholders from Bulgaria and Romania on PES and SF mechanisms (workshops).

Activity 2.1.3. Consulting support to watershed managers in Bulgaria and Romania.

Activity 2.1.4. Organize 3 study tours for PES practitioners to study existing PES schemes in the Lower and Middle Danube basin.

Activity 2.1.5. Communications and media work related to ecosystem services and PES in Bulgaria and Romania

The proposed project will provide basic training in payments for ecosystem services and sustainable financing schemes for a minimum of 80 watershed managers and other relevant key stakeholders, and provide technical assistance for supporting identification and development of PES and sustainable financing schemes in the Danube and sub-basin watersheds in Romania and Bulgaria. In addition, through the program all key stakeholders involved in watershed management in the Danube and sub- river basins in the two countries will be aware of ecosystem services related to the river basins and potential opportunities for generating financial support for these services from both public and private sources.

The first step (Activity 2.1.1.) will provide the basis for most of the training, awareness raising, networking and information activities that will be undertaken as part of this project. The list of key stakeholders that were identified and contacted during the PDF-A phase of this project will be reviewed and added to, and a database of contacts established. A survey will then be made of all of these stakeholders regarding their interests and needs related to payments for ecosystem services and sustainable financing mechanisms in general and regarding this project in particular. The results of this survey will be used in the design of subsequent activities as well as serve as a baseline for evaluating some of the program achievements.

Four 2-day training workshops (Activity 2.1.2.) will be organized for a total of 90 or more people involved in watershed management in the Danube river basin, including representatives of river basin management authorities and government officials charged with overseeing water policy. The workshops will provide an introduction to payments for ecosystem services and sustainable financing mechanisms, including experience from the Danube region and other parts of the world, and explore opportunities for their application in the Danube basin, and will loosely draw on similar workshops that have already been organized by WWF-MPO and WWF-DCPO, e.g. in October 2005 in Sofia. The workshops will be organized by the WWF Danube-Carpathian Program with support from the WWF-MPO.

The training workshops will be followed up by a total of 60 days of technical assistance to identify and develop potential PES and sustainable financing schemes (Activity 2.1.3.). The support will be made available to Watershed Management Authorities from experts on payments for ecosystem services and sustainable financing from WWF-MPO, WWF-DCPO as well as external experts.

There are a handful of fledgling PES schemes under development within the Danube basin, including some with WWF participation in the projects in the area of Maramures and the Tisza river basin that were discussed above. The proposed project will take advantage of these projects plus the project own activities to provide inspiration and

learning to stakeholders from other areas and basins in Romania and Bulgaria. To this end we will organize a total of four study tours (Activity 2.2.4.).

Output 2.2.: Information and experience exchange for key stakeholders in Danube and sub river basins.

For Output 2.2, the proposed project will have the following objectively verifiable indicators:

- By project end, project experience and expertise shared with 80 river basin managers and other key stakeholders in Croatia, Serbia & Montenegro, Ukraine and Moldova (evaluated on the basis of participation and participant evaluations in exchange activities);
- By project end, all river basin managers and other key stakeholders in the wider Danube river basin are aware of the project and lessons related to PES and sustainable financing schemes (to be evaluated on the basis of surveys undertaken at project inception and end).

The following activities will lead to this output:

- *Activity 2.2.1.: Identification of key stakeholders and needs related to PES and SF in Danube River Basin.*
- *Activity 2.2.2.: Information and experience exchange for watershed managers from across Danube River Basin (workshops)*
- *Activity 2.2.3.: Communications and media work related to project, ecosystem services and PES across the Danube River Basin*

In Output 2.2., the proposed project will extend experience and expertise with PES and sustainable financing mechanisms to other countries in the wider Danube River Basin.

A particular focus for these efforts will be the neighboring countries of Bulgaria and Romania in the Lower Danube Green Corridor, namely Ukraine and Moldova, as well as Serbia & Montenegro and Croatia in the Middle Danube River Basin. In focusing on these countries, the project will take advantage of the unique opportunities presented by these countries' efforts to approximate their legislation, programming and institutional structures to those of the EU.

Through a total of 4 national workshops, project experience and expertise will be shared with at least 80 river basin managers and other key stakeholders in Croatia, Serbia & Montenegro, Moldova and Ukraine. In Ukraine, information sharing will be focused on the Odessa Oblast, which is responsible for the Ukrainian areas of the Lower Danube and Danube Delta. WWF has been working closely with relevant stakeholders, including the Oblast (provincial) government, water authorities, and Danube Delta Biosphere Reserve for a number of years to first develop and now implement a vision for the protection and sustainable development of the Danube Delta.

Communications and media work will be undertaken to raise awareness of the project and its lessons related to PES and sustainable financing schemes among river basin managers and other key stakeholders across the Danube River Basin. Detailed communications plans will be developed at the beginning of the project, based in part on the stakeholder analysis and survey (Activity 2.2.1). Target groups in the Danube include watershed management authorities and officials; NGOs; authorities and stakeholders involved in agriculture and rural development; idem regarding nature conservation; business, particularly businesses related to natural resources, and the public at large. Communications tools used will include publications produced under Activity 3.2.2, professional publications and other specialized media devoted to the target groups (e.g. the ICPDR's *Danube Watch*) as well as regional media outlets.

Outputs and Activities leading to OUTCOME 3:

Output 3.1: Exchange of information and experience with stakeholders in selected major river basins.

For Output 3.1, the proposed project will have the following objectively verifiable indicators:

- By project end, project experience and expertise is transferred to key stakeholders in at least 3 major river basins (to be evaluated through surveys among project participants and key stakeholders in major river basins conducted at project inception and as part of post-project evaluation).

The following activities will lead to this output:

- *Activity 3.1.1: Three regional workshops (one each in Asia, Latin America and Africa) to present experiences and lessons of the Danube project.*
- *Activity 3.1.2: Staff exchanges and visits for practitioners from Africa, Asia and Latin America.*

An important motivation for this project – and for WWF’s work on the Danube in general – is to provide models, experience and expertise for work on other major river basins across the world. In addition to being the most international river basin in the world, the Danube is also in many respects the most advanced, with relatively well-developed institutional arrangements, including the ICPDR and a detailed program for integrated river basin management (that follows the Water Framework Directive requirements). This institutional development is why WWF’s global freshwater program considers the Danube as pioneering new models for IRBM that may be of relevance to the management of other major river basins across the globe.

Through Output 3.1. Lessons learned and experience from the project will be provided to key stakeholders from other major river basins across the world. Four river basins in particular have been identified for possible involvement in this project: the Yangtze, the Mekong, the Amazon and the Zambezi. Each of these river basins is the focus of major ecoregion conservation programs of WWF, and the first three basins include middle-income countries similar in many respects to Eastern Europe countries. Also, in all four basins WWF has major ongoing ecoregion conservation programs.

Two main activities will be used to deliver this output: (1) a program of staff exchanges and study tours for a minimum of 9 persons will be organized to support extended visits to the Danube project for staff from other major river basins (Activity 3.1.2.); and (2) three regional workshops will be held on selected major river basins, with one each in Asia, Africa and Latin America (Activity 3.1.1). The workshops will be organized with the support of the WWF world-wide network of country programs and will be targeted not only to NGOs but to key river basin stakeholders in government, businesses and watershed management authorities (60+ participants).

Output 3.2.: *Best practices and lessons learned are documented, distributed and discussed with the conservation and international community.*

For Output 3.2, the proposed project will have the following objectively verifiable indicators:

- By project end, project experience and expertise is shared with at least 30 key institutions in the conservation, freshwater management and rural development communities.

The following activities will lead to this output:

- *Activity 3.2.1: Outreach to three audiences: (a) technical; (b) major international development agencies, donor and NGOs s, and (c) major international environmental agencies, donors and NGOs.*
- *Activity 3.2.2: Production and dissemination of publications documenting the project experiences, lessons learned and manuals on How to and best practices.*

Worldwide there is an active process of experimentation and debate regarding the potential of PES and related sustainable financing schemes, both to deliver global ecosystem services and improved rural livelihoods. Through Output 3.1, we expect to bring lessons and models from the Danube project to bear in these discussions.

Regarding activity 3.2.2, as the references in Annex F show, WWF is already established as a center of knowledge and documentation regarding sustainable financing schemes and payments for ecosystem services, and is a major broker of public and private resources for conservation in Europe and worldwide. With this project, we expect to attain further levels of capability and outreach, now focusing on the production of no less than 12 medium-sized materials targeted to practitioners and delivering best practices and lessons learned as well as models for sustainable financing and payments for ecosystem services in large international watersheds.

Activity 3.2.1 will include outreach and communication via electronic media as well as traditional face to face discussions targeted to three key groups: (a) practitioners, including staff from watershed management agencies, water and conservation experts as well as academics and policy researchers from institutions such as CIFOR and

other members of CGIAR, Forest Trends, the Katoomba Group, IIED and the Conservation Finance Alliance; (b) staff from development agencies, donors and NGOs, including development banks, UN agencies, bilateral donor agencies, private foundations and social-focused NGOs; and (c) staff from conservation agencies, donors and NGOs, including UNEP, IUCN, The Nature Conservancy, Conservation International, and others.

2.6. Global Environmental Benefits

To a considerable extent, the global environmental benefits expected from this project have already been tabled in the previous sections, particularly in sections C.2.1. “The Global Significance of the Danube Basin and the Ecosystem Services it Provides” and section C.2.2, “Key Threats to Danube Environments of Global Significance.” We expect this project to deliver global environmental benefits not only through improved and sustainable conservation in the Lower and Middle Danube, but also through scaling up and replication in other areas of the Danube basin and indeed the world. In a nutshell, we expect that this project will contribute local/national, regional, and worldwide global environmental benefits as follows:

- Improved national frameworks for PES and demonstration projects in the lower Danube that will develop and deliver sustainable financing for the conservation of critical Danube environments, including areas of world biodiversity value along the Lower and Middle Danube.
- Working with watershed agencies, including the ICPDR, engaging other WWF national offices, and through basin-wide dissemination activities, we expect that the models and lessons of this project will help develop similar schemes in other areas of the Danube for the conservation of other regional watersheds of global environmental significance.
- Through an active program of capacity building and exchange with staff from agencies and NGOs in a number of major global watersheds (e.g. the Mekong, Yangtze, and Amazon), we expect that the models and lessons developed in this project will trigger an interest and eventually the adoption of similar PES schemes in other major watersheds of global environmental significance.

2.7. Incremental Justification for GEF Financing

The project cost figures are detailed below in section D. They show that the requested co-financing from GEF is \$975,000, i.e. less than 50% of the project total costs. According to GEF bylaws, its funds should be used to pay for the “incremental costs... associated with transforming a project with national benefits into one with global benefits”. In fact, not all project activities – not only those financed through GEF – are devoted to fostering delivery of global environmental benefits that go beyond what national and regional agencies and stakeholders would achieve on a “baseline scenario.”

The “baseline scenario” is a “business as usual” one, where Romania and Bulgaria will: (a) become increasingly integrated into the European Union; (b) improve their economic performance; and (c) devote national funds and funds available through the EU toward economic and social development. In this scenario, it can be expected that (d) investments in ecosystem services will be limited and, where they occur, they may be relatively ineffective; (e) at river basin level, management plans do not make full use of opportunities for financing integrated river basin management, both from public and private sources; and (f) among key stakeholders and the public at large, there is little awareness of and appreciation for Danube-related ecosystem services and the opportunities for developing sustainable financing for them.

The “alternative scenario” shares the 3 initial characteristics of the baseline scenario, but differs from it in the following respects: (d) due to the cumulative impact of this project and other similar and related initiatives in the Lower Danube and the Danube Delta as well as in other parts of Europe, both urban and rural stakeholders have an increased recognition of the importance of securing the flow of ecosystem services; (e) have an increased willingness to pay for them, with regional EU funds, national budgets, local arrangements and private driven arrangements; (f) at river basin level, management plans take advantage of these opportunities and are increasingly mainstreaming PES schemes in their management practices.

It is in the direction of this alternative scenario that this project is based. The focus of the proposed project is to promote PES schemes in the lower Danube and Danube Delta through a 3-prong strategy, namely (1) helping direct EU Rural Development payments towards high conservation value activities; (2) fostering opportunities for private

based and locally based PES arrangements; and (3) training, capacity building, and communication on ecosystem services and payments for ecosystem services.

Far from spending the project money on what the countries themselves or the EU should pay for, we are investing modest funds to leverage large EU, national and private resources to be invested, through PES schemes in delivering global environmental benefits. The proposed project focuses on an area of great global environmental values and is tailored to take advantage of the window of opportunity opened by economic, environmental and political changes unfolding in Eastern Europe.

3. SUSTAINABILITY (INCLUDING FINANCIAL SUSTAINABILITY)

3.1. Sustainability of the Project Outcomes

As the project title makes clear, “Promoting Payments for Ecosystem Services (PES) and Related Sustainable Financing Schemes in the Danube Basin”, the proposed project is about sustainability in general and financial sustainability in particular, the core idea of payments for ecosystem services being to bring long-term financing sustainability to the conservation enterprise.

The project is designed to initiate, develop and promote the long-term sustainability of all its outcomes through a combination of policy, institutional and financing mechanisms including: integration of project outcomes into existing policy and institutional frameworks; establishment of practical arrangements and mechanisms for sustainable financing and PES schemes; involvement of relevant institutions, agencies and stakeholders at river basin, national and local levels in project development and execution; and capacity building for relevant stakeholders both within the Danube and other river basins. All this can be seen in relation to the project’s 3 outcomes, as follows.

OUTCOME 1: PES and SF schemes that reward the maintenance, improvement or adoption of conservation-friendly land uses are contributing to integrated river basin management and rural livelihoods in the Lower and Middle Danube.

The proposed project will promote and deliver sustainable financing arrangements at a variety of levels within the Danube River Basin, including:

- Project outputs that will contribute to and be integrated into the existing and ongoing policy process and framework for establishing river basin management plans, which will be taken forward by relevant authorities, including the ICPDR and other relevant watershed agencies and authorities, all of which will be closely involved in this project. The basic approach of Integrated River Basin Management, which is at the core of this activity, is finding increasing application in river basins across the globe.
- Ensuring targeting and delivery of national payments to support ecosystem services in Bulgaria and Romania. Here too, the project outputs will contribute to and be integrated into existing and ongoing policy process, in this case regarding national payments systems in Bulgaria and Romania. Relevant institutions –especially Ministries of Agriculture and agricultural extension services– will benefit from capacity building and will be directly involved in execution of this project. The national payments schemes that are the focus of this project will be in place at least for the duration of the financial period 2007-13. The project is designed not only to ensure the effectiveness of national payments in supporting ecosystem services, thus justifying their continued existence past 2013, but also to raise awareness among policy makers and the general public regarding the value of ecosystem services and the need for continued financing from public support.
- Supporting local level projects that will demonstrate the on-the-ground working of PES schemes, both government-driven as well as private-sector driven. The project will invest in the development and creation of financing mechanisms, which, once they are established, should be sustainable. The local schemes will be developed and implemented in close partnership with relevant local stakeholders who will maintain and benefit from the schemes in future.

OUTCOME 2: Key stakeholders in the wider Danube river basin, particularly in the Lower and Middle Danube, are aware of ecosystem services, PES and sustainable financing mechanisms, and are considering adapting them to their sub-basins and situations.

A variety of communications and training activities will promote awareness and understanding of opportunities for developing sustainable financing mechanisms for ecosystem services among watershed managers and other key stakeholders: firstly, in the other Lower Danube countries, i.e. Moldova and Ukraine, and in Middle Danube countries, especially Croatia and Serbia & Montenegro; secondly, among other Danube countries; and finally, among stakeholders in other major river basins; all of which should lead to support for existing as well as development of new sustainable financing mechanisms.

OUTCOME 3: The project has made significant contributions to the conservation community's knowledge of how to scale up PES and sustainable financing schemes as well as incorporate them in Integrated River Basin Management so that they deliver significant conservation and improved rural livelihoods.

Through the project contribution of PES schemes and approaches to stakeholders in other major watersheds, and through the engagement with the rural conservation and development community to discuss and develop sustainable financing arrangements in general and PES in particular, the project will be building a sustainable base of knowledge for this and similar projects.

3.2. Sustainability of WWF PES work in the Danube and beyond

The **WWF Danube-Carpathian Programme** has a long-term, strategic interest in developing its capacity to promote Payments for Ecosystem Services and Sustainable Financing mechanisms throughout the Danube and Carpathian ecoregions, and to serve as a center of experience and expertise on these issues for the WWF program across Eurasia. In cooperation with the WWF-MPO and with financial support from the Swedish International Development Agency (SIDA), WWF-DCPO has recently established a three-year regional program for capacity building and networking on PES and sustainable financing for the WWF network in Europe and the NIS. This builds on some of the work related to economic mechanisms for conservation, e.g. in Maramures in northern Romania, that contribute to the proposed project and are described in greater detail elsewhere in this project proposal. In terms of organizational development, implementation of the proposed project will help build the capacity of existing staff and partners of WWF-DCPO regarding economic mechanisms for conservation. The project coordinator, who will be based at WWF-DCPO, would be a new hire who is expected to help spearhead the organization's work in this area beyond the life of the project. We expect that implementation of this project will also enhance the ability of WWF-DCPO to promote sustainable financing mechanisms for conservation after the life of this project.

The WWF Macroeconomic for Sustainable Development Program (WWF-MPO) is a WWF resource to address the interaction between economic development and the environment, hence WWF-MPO long term interest in sustainable financing for conservation and rural development in general and its interest in PES in particular. In the last 5 years, WWF-MPO has established itself as a center of excellence on SF/PES issues, with an active program of policy research, training, publications and support for WWF on-the-ground SF/PES projects development, of which this Danube PES proposal is one example. In this regard, WWF-MPO is well positioned to help ensure the sustainability of the Danube PES project and also to disseminate the Danube PES lessons and models among WWF country offices around the world.

The WWF European Policy Office (WWF-EPO), WWF focal point for relations with the EU authorities, has also a long term strategic interest in the expansion of SF/PES schemes in Europe and elsewhere in the world, and has built this issues into several of its regular programs, particularly its Agriculture and Rural Development Program, its Water Program and its Forest Programs, all of which that look after European environments, as well as into its Development Cooperation Program that focus on the relation of the EU with developing countries.

4. REPLICABILITY AND SCALING-UP

Replicability, including the potential for scaling-up and transferring lessons and models, has been a key consideration in designing the proposed project, and is present throughout the three project outcomes, as follows:

OUTCOME 1: PES and SF schemes that reward the maintenance, improvement or adoption of conservation-friendly land uses are contributing to integrated river basin management and rural livelihoods in the Lower and Middle Danube.

- Work in several local-scale PES demonstration projects that will open opportunities for scaling-up through replication, primarily in the Danube basin, but with due adaptations, also in other watersheds in Europe and elsewhere.
- Work with several national agencies to develop rural conservation plans and institutions that are supportive of PES schemes. This work will also deliver scaling up potentials, this time by streaming-up PES work.
- Work with watershed management agencies, especially the International Commission for the Protection of the Danube River at Danube-basin level, but also sub-basin management bodies (Sava Commission, possible future Tisza Commission) and national authorities, to include PES into the program of measures that must be developed by 2009 as part of each River Basin Management Plan. This work will increase opportunities to scale up PES schemes through mainstreaming.
- Engaging selected private firms in a discussion of private business insights regarding marketing ecosystem services, at the same time as we explore opportunities for business driven PES in the Lower Danube and Danube Delta. This work will increase opportunities of replication through demonstration.

OUTCOME 2: *Key Stakeholders in the wider Danube river basin, particularly in the Lower and Middle Danube, are aware of ecosystem services, PES and sustainable financing mechanisms, and are considering adapting them to their sub-basins and situations.* The activities leading to Outcome 2 all have a strong focus on replicability, through successively larger circles.

- In the first circle, we will work in the other Lower Danube countries, i.e. Ukraine and Moldova, and Middle Danube countries, i.e. Croatia and Serbia & Montenegro, helping national authorities to mainstream SF and PES into their natural resources management frameworks and training key stakeholders to replicate and adapt the project experiences of PES developments in Bulgaria and Romania
- In the second circle we will reach out to watershed management authorities and key stakeholders in these and other Danube Countries, with the purpose of rising awareness about SF and PES potentials, help mainstream them in regulatory and management instruments and support replication and adaptation in the broader Danube basin.

OUTCOME 3: *The project has made significant contributions to the conservation community's knowledge of how to scale up PES and sustainable financing schemes as well as how to incorporate them in Integrated River Basin Management so that they deliver significant conservation and improved rural livelihoods.*

The importance for replicability purposes of Outcome 3 and the activities it includes is essentially the same made above when discussing sustainability. Adding to the knowledge base regarding sustainable financing and payments for ecosystem services is adding to the replicability not only of this but also of other SF/PES initiatives around the world. Some of the activities that we will undertake here include

- The project will provide capacity building and exchange experiences for stakeholders of several watersheds in developing countries. The goal here is not to achieve mechanical replication of the Danube PES experience, but rather to inspire as well as foster interest and capacities to adapt SF and PES schemes to the different realities of the countries.
- Developing a web site and a monthly electronic bulletins on Payments for Ecosystem Services and Sustainable Financing mechanisms, sent by WWF-MPO to the WWF network and other interested parties around the world;
- Producing a series of 12 medium-size publications targeted to practitioners in government, agencies and NGOs with guidelines, best practices, and lessons learned regarding PES and sustainable financing schemes;
- Dissemination of project information and reports available for download via the WWF website (www.panda.org);
- Presentations in international, regional and national conferences and seminars devoted to payments for ecosystem services and sustainable financing mechanisms, conservation, rural development and river basin management.

The total budget related to replication activities is **\$564,400**, i.e. over 26% of the total project budget (total amount related to Outcomes 2 and 3).

5. STAKEHOLDER INVOLVEMENT

5.1. Stakeholders Consultations during the PDF-A stage

During the PDF activities, through workshops, small groups meetings, phone conferences and personal interviews we held discussions with more than 200 persons from an array of governmental and non-governmental organizations and businesses (see in Annex C a detail of documents, meetings and workshops undertaken during the PDF A phase of the project; activities and in Annex A copies of letters of endorsement and/or expression of interest). In the initial months of the project implementation, these discussions will be extended to other stakeholders, more detailed “divisions of labor” will be designed and project agreements will be further developed into contractual agreements when necessary.

Among the main consultation events organized during the PDF-A, WWF-DCPO hosted a regional consultation workshop to gather input for the project and its proposed methodology. The workshop was held in Bucharest in September 2005, and was attended by some 30 participants from Romania, Bulgaria, Ukraine and Moldova, including representatives of government (Ministry of Environment, Ministry of Agriculture), relevant authorities (Protected Area managers), and NGOs.

The project and the ideas behind it were also presented by WWF-DCPO and WWF-MPO to participants of a number of fora, including a seminar organized by the United National Economic Commission for Europe in Geneva in October 2005, and an October 2005 workshop on Payments for Ecosystem Services and their application in Europe, which was organized by WWF-DCPO and WWF-MPO in Sofia, Bulgaria, and attended by some 35 participants. Besides presentations from WWF staff, we brought to this workshop outside experts from Latin America, U.K. Germany and USA to discuss PES experiences from the world around.

In addition, WWF-MPO, WWF-DCPO and WWF-EPO conducted small groups and one-on-one consultations with a range of stakeholders at international, national and local levels. Discussions were especially intense at national level in Bulgaria and Romania, where the project organizers had several rounds of meetings with relevant officials and authorities from the Ministries of Environment, Ministries of Agriculture, and Protected Areas authorities, regarding the project proposed activities both at national and, local levels. Similarly, WWF-DCPO staff held intense discussions with local stakeholders in each of the potential local demonstration sites. In meetings with river basin authorities, the director of the ICPDR expressed his interest and support for our project proposal, and was particularly interested in the activities that could contribute to the Program of Measures for the Danube River Basin Management Plan.

Meetings were also held with representatives from the private sector, including large water companies, chambers of commerce, and smaller firms who expressed interest in the issue of payments for ecosystem services and on exploring opportunities for future cooperation. A number of consultations were held with representatives of projects and agencies of relevance for the project, including UNEP, UNDP the World Bank and the European Commission, several of which will be discussed in more detail in sections 5.2 and 5.3 below.

In addition, development of the project proposal involved extensive consultations between staff and partners from WWF-DCPO in Bulgaria, Romania, Ukraine, Serbia & Montenegro, Hungary and Austria as well as WWF-EPO in Brussels and WWF-MPO in Washington, D.C.

As a summary of these consultations, most stakeholders agreed that the issue of Payments for Ecosystem Services and Sustainable Financing schemes was very relevant to their needs and priorities, and that the proposed project had the potential to contribute to the development and promotion of PES and sustainable financing schemes in the Danube river basin in particular but also more widely. The project is aligned with international (including Danube river basin), national, and local priorities. Stakeholders that are most directly relevant for support and implementation of this project, including ministries of environment and agriculture as well as local companies and authorities, express their interest to participate in and support the project (see letters of endorsement and/or expression of interest in cooperation in Annex A).

Many stakeholders stated that there is only limited experience in Central and Eastern Europe regarding economic mechanisms for conservation in general, and virtually none regarding Payments for Ecosystem Services in

particular. Even if national payments schemes for environment, e.g. agri-environmental measures, are now being developed, for many people, including many conservationists, the whole notion of “agri-environment” continues to be an oxymoron. There is still little awareness of ecosystem services, let alone the idea of paying for their introduction or maintenance. Yet the stakeholders consulted acknowledged that the need for payments for ecosystem services is especially great in a part of Europe where ecosystem services are still relatively intact but under increasing pressure, and where rural incomes are low. There are no developed examples of private-sector payments for ecosystem services.

Finally, most stakeholders considered the next several years would be decisive for determining the future of existing ecosystem services and land and resource uses in the Lower and Middle Danube, and that therefore there is a window of opportunity now to make a difference. Among the stakeholders consulted, those with an interest and involvement in EU issues also acknowledged that the project could contribute more broadly to ongoing development of relevant EU policies, including implementation of the Water Framework Directive, agriculture and rural development support and financing for biodiversity conservation, especially with an eye to the mid-term evaluations for many of the EU (as well as relevant national) programs that are scheduled to take place in 2010-11. Among recurring issues that were raised during these consultations:

- The need for **demonstration projects** – payments mechanisms, both public and private, must be practically demonstrated. This was seen as especially important for the focal countries for this project, where there is generally skepticism concerning foreign experience – what works in the “West” is not necessarily applicable in Southeastern Europe.
- The need for **awareness raising**, starting with ecosystem services themselves – most policy makers and professionals in the region, let alone local people, lack understanding and appreciation of what are the region’s ecosystems services and their value, including their value in economic terms.
- The need for **training**, especially for watershed managers on payments for ecosystem services and other sustainable financing mechanisms.
- **Applicability to other areas**, especially major watersheds. The general conclusion was that experience from the project might not be applicable in the poorest countries, but would be certainly relevant in lower- to middle-income countries such as China, Vietnam, Botswana, India and Brazil.
- The need for **on-the ground education on PES/SF** For example, in some stakeholders’ discussions there was confusion about what is or is not a PES scheme, partly reflecting the fact that definitions of PES vary considerably among practitioners. Most of the confusion was dispelled when discussion focused on concrete activities, at local, national or international levels.
- A number of people also raised concerns regarding **the too wide scope of the original project proposal**, and recommended limiting the number and range of project activities.

Some of the changes that these consultations brought to this project proposal are:

- Inclusion of local demonstration projects to deliver on-the ground-proofing;
- The number of focus countries for the full range of activities was reduced to 2: Bulgaria and Romania;
- In a second-tier of countries, namely Croatia, Serbia & Montenegro, Ukraine and Moldova, the project will undertake a much more limited set of activities focusing on capacity building and support for initial breakthroughs; and
- A stronger emphasis on awareness raising and training within the Danube River Basin as well as abroad.

5.2. Stakeholder Involvement in Project Implementation

Because of its purpose and the number of countries involved, the proposed project will engage a large number of stakeholders that can be classified in four main groups as follows:

1. Participant WWF program offices
2. Stakeholders that will be actively involved in the project
3. Recent and ongoing conservation programs and projects in the Danube Basin, with which we hope to actively network

4. Institutions and experts active on sustainable financing and payments for ecosystem services issues

5.2.1 Participant WWF Programs

- The **WWF Danube-Carpathian Program Office** (WWF-DCPO), with headquarters in Vienna and offices or delegations in all participant countries, will coordinate the whole project and directly or through sub-contacts will undertake a majority of the project activities, particularly those within the Danube river basin, at country and local levels.
- The **WWF-Macroeconomic for Sustainable Development Program Office** (WWF-MPO), based in Washington, D.C., will lead training, capacity building, monitoring and evaluation as well as outreach activities, particularly international level ones.
- The **WWF-European Policy Office** (WWF-EPO), based in Brussels, will lead the project relations with the European Commission and other relevant EU institutions; update the project on relevant EU development; and bringing the Danube project advances and lessons to the attention of EU institutions.
- **WWF Global Freshwater Program.** Though not formally involved in the project, the WWF Global Freshwater Program (especially Deputy Director Derk Kuiper) has been closely involved in project conceptualization, and will play an important role particularly with regard to guiding and facilitating capacity building and transfer of experience from the project to other major river basins around the world (Outcomes 2, 3).

Section E presents a more detailed discussion of WWF background and experiences and the arrangements for project execution and division of labor among WWF programs and offices.

5.2.2 Stakeholders that will be involved in the project

WWF already has well-established working relations and dialogue with most of the stakeholders we will be directly working with during the 4 years of project implementation, including Danube basin agencies, the participant countries' environmental and natural resource agencies, businesses, businesses associations, and farmers associations. In the demonstration project areas relations are established with local authorities, local farmers associations and businesses associations. Based on discussions undertaken before and during the PDF A phase of the project, a number of key stakeholders have been identified and we have discussed with them their support and active involvement, as summarized below.

International / River Basin

- **International Commission for the Protection of the Danube River** (ICPDR) – Responsible for leadership and coordination of activities related to the implementation of the Danube River Convention, and thus a key partner for activities related to river basin management in the Danube and sub-river basins. Due to lack of staff, capacity as well as its very specific mandate, the ICPDR will not be directly involved in the project itself, but is especially interested in contributions the project can make for development of the program of measures for River Basin Management plans. (See in Annex A letter of support from Phillip Weller, ICPDR director).
- **European Commission** – The European Commission will also not be directly involved in the project, but has expressed interest in benefiting from project results, which can provide models for financing EU conservation as well as feedback on EU programs, particularly in the run-up to mid-term evaluations in 2010-11. (See in Annex A letter of endorsement from Timo Makela, Director of Sustainable Development and Integration, DG-Environment).

Bulgaria

- **Bulgarian Ministry of Environment and Water – Danube River Basin Directorate.** Involvement in evaluating and integrating Payments for Ecosystem Services and sustainable financing in River Basin Management plans (Output 1.1) as well as ensuring delivery of Danube-related ecosystem services by national payments (Output 1.2). Also involvement in training and capacity building for selected staff and river basin managers (Outcome 2). (See in Annex A letter of support from Tzvetanka Dimitrova, Director, Danube River Basin Directorate).

- **Bulgarian Ministry of Agriculture and Forestry – Rural Development and Investment Directorate.** Involvement in evaluating national payments as potential support in River Basin Management planning (Output 1.1) as well as implementation of national payments schemes for farmer (Output 1.2). See in Annex A letter of cooperation from Miroslava Georgieva, director).
- **Bulgarian National Agriculture Advisory Service.** Cooperation in planning as well as implementation of national payments schemes for farmers (Output 1.2).
- **Bulgarian Farmers Association.** Involvement in design and delivery of Output 1.2 regarding national payments schemes for farmers in Bulgaria. (See in Annex A letter of cooperation from Stefan Stefanov, president).
- **Bulgarian Industrial Chamber.** Cooperation in developing and especially promoting private-sector PES schemes.
- **Directorate of Nature Park “Rusenski Lom”.** Possible involvement in demonstration project (Output 1.3, 1.4) if area is selected during feasibility study. (See in Annex A letter of support from Milko Belberov, director).
- **Association of Danube Municipalities.** Possible involvement in demonstration projects (Output 1.3, 1.4).

Romania

- **Ministry of Agriculture, Forests and Rural Development of Romania.** Involvement in evaluating national payments as potential support in River Basin Management planning (Output 1.1) as well as implementation of national payments schemes for farmers (Output 1.2). (See in Annex A letter of support from Danut Apetrei, Secretary of State for Rural Development).
- **Ministry of Environment and Waters of Romania.** Involvement in: evaluating and integrating Payments for Ecosystem Services and sustainable financing in River Basin Management plans (Output 1.1); ensuring delivery of Danube-related ecosystem services by national payments (Output 1.2); training and capacity building for selected staff and river basin managers (Outcome 2).
- **Romanian National Agriculture Advisory Service.** Cooperation in planning as well as implementation of national payments schemes for farmers (Output 1.2).
- **Romanian Farmers Association.** Involvement in design and delivery of Output 1.2 regarding national payments schemes for farmers in Romania.
- **Danube Delta Biosphere Reserve of Romania.** Involvement in training and capacity building (Outcome 2).
- **Agency for Environmental Protection – Calarasi.** Involvement in design and implementation of demonstration project in Calarasi County. (See in Annex A letter of support from Ionut Dorian Groapa, director).
- **Ferma Piscicola – Ciocanesti (Piscicola-Ciocanesti fish farm).** Possible involvement in demonstration project (Output 1.3, 1.4) if fish farm is selected during feasibility study. (See in Annex A letter of support from Manu Hodorogu, director).
- **Bioanu Ciocanesti Fish Farm.** Possible involvement in demonstration project (Output 1.3, 1.4) if fish farm is selected during feasibility study.
- **Municipality of Baia Mare.** Possible involvement in demonstration project if selected during feasibility study (Outputs 1.3, 1.4).

The following institutions will be particularly important for knowledge sharing activities pursuant the project’s Outcome 2:

Serbia & Montenegro

- **Ministry for Protection of Natural Resources and Environment**

Croatia

- **Ministry of Environmental Protection, Physical Planning and Construction.**

Ukraine

- **Ukrainian Ministry of Environment**, Directorate of Biotic, Land, Water Resources and Econet.
- **Odessa Oblast** (Regional Government – including area of Lower Danube/Danube Delta)
- **Danube Delta Biosphere Reserve**

Moldova

- **Ministry of Ecology and Natural Resources**

5.3. Cooperating with and Learning from other Conservation Programs and Projects in the Danube

There are a number of ongoing and recently finished conservation programs and projects in the Danube, whose work is relevant to the present proposal, particularly the programs and projects undertaken by the 3 GEF agencies, UNEP, UNDP and the World Bank. Also relevant are conservation initiatives supported by the EBRD/GEF Environmental Credit Facility and other EU conservation-related programs and projects in the Danube basin, including those supported through the PHARE, LIFE, CARDS, and TACIS programs.

WWF has ongoing relations with most of these agencies and their programs in the Danube, and has been involved in a number of GEF-financed projects.

GEF-supported programs of particular relevance to the proposed project are discussed below.

- **UNDP/GEF: Danube Regional Project.** Certainly the most relevant is the Danube Regional Project, a full-sized project that has been pushing forward much of the cooperation and implementation around the Danube River Protection Convention. The overall objective of the Danube Regional Project is to complement the activities of the ICPDR required to provide a regional approach and global significance to the development of national policies and legislation and the definition of priority actions for nutrient reduction and pollution control with particular attention to achieving sustainable trans-boundary ecological effects within the DRB and the Black Sea area. Phase 1 of the project (2001-03) prepared and initiated basin-wide capacity building activities, which have been carried forward and consolidated in the second phase (2003-06).

Project components include:

- 1) Creation of sustainable ecological conditions for land use and water management;
- 2) Capacity building and reinforcement of trans-boundary cooperation for the improvement of water quality and environmental standards in the Danube River Basin;
- 3) Strengthening of public involvement in environmental decision making and reinforcement of community actions for pollution reduction and protection of ecosystems;
- 4) Reinforcement of monitoring, evaluation and information systems to control trans-boundary pollution, and to reduce nutrients and harmful substances.

The proposed project builds on a number of the activities of the Danube Regional Project, including:

Activity 1.2: Reduction of nutrients and other harmful substances from agricultural point and non-point sources through agricultural policy changes.

Activity 1.3: Development of pilot projects on reduction of nutrients and other harmful substances from agricultural point and non-point sources.

Activity 1.4: Policy development for wetlands rehabilitation under the aspect of appropriate land use.

Activity 4.3: Monitoring and assessment of nutrient removal capacities of riverine wetlands.

Activity 4.4: Danube basin study on pollution trading and corresponding economic instruments for nutrient reduction.

WWF-DCPO is an NGO partner for both phases of the Danube Regional Project and has been directly involved in implementing Activities 1.4 and 4.3, and is informed of project activities 1.2, 1.3 and 1.4. Particularly Outputs 1.1 and 1.2 of the proposed project, focused on national payments schemes, build on the above Activities of the Danube Regional Project, moving from the development of national payments to actual implementation, and bringing these together with private-funded schemes into the Programs of Measures for the Danube and sub-basin Management Plans

UNDP/GEF work on PES or PES related issues. While the Danube Regional Project has included work with the private sector to reduce pollution, e.g. through promotion of Best Available Technology, it has not included private-driven payments for ecosystem services. The potential for implementing a pollution trading scheme on the Danube was investigated in Danube Regional Project above (under activity 4.4) and the results of that investigation will be taken into account in the recommendations made in Output 1.1 of the proposed project for the Program of Measures for the Danube and sub-basin Management Plans. More recently UNDP has begun a suite of PES related projects in the Lower Danube but at the time of our last discussions with UNDP staff – November-December 2005, very little information was available, on account of those projects being in a design stage. Nevertheless it looked as if there were going to be good opportunities for cooperation between the UNDP and projects and this proposal in us much as the UNDP portfolio is more oriented to develop local capacities for implementing PES schemes for sustainable or “green” agriculture, and this WWF project is more oriented to develop national and multinational capacities for implementing PES schemes for conservation and integrated river basin management.

- **UNDP/GEF: Danube Pollution Reduction Programme (1997-99).** The precursor to the Danube Regional Project, the project included an investigation of financial mechanisms for pollution reduction, which concluded that a Danube Environmental Fund was neither practical nor realistic, and recommended the establishment of a Project Management Task Force to facilitate financing from different sources.⁷ Based on this recommendation, the proposed project focuses primarily on the development of payments for ecosystem services at national and local levels, with coordination and guidance for these efforts at international/river basin level provided through processes for River Basin Management planning.
- **World Bank/GEF project: Bulgaria Wetlands Restoration and Pollution Reduction (WRPRP) (2002-08).** The project is implemented by the Bulgarian Ministry of Environment and Water (MoEW). The primary objective of the WRPRP is to restore critical priority wetlands in the Danube river basin and make use of the wetlands in riparian zones as nutrient traps as well as to promote protected areas management and the sustainable use of natural resources. The project has three main components (1) Wetlands Restoration, (2) Protected Areas Management, and (3) Project Coordination, Management and Monitoring.

In order to promote transition to environmentally-friendly agricultural practices and activities compatible with the conservation objectives of the protected areas over the long-term, the Wetlands Restoration and Pollution Reduction Project established a Farmer Transition Support Fund. The Fund provides one-off grants to support farmers to convert to sustainable, environmentally-friendly agricultural practices and nature resource management activities in the two protected areas – Persina Nature Park and Kalimok-Brushlen Protected Site. Farmers are given a menu of options of compatible activities and are encouraged to apply for this funding. The first applications were received and evaluated in summer 2005.

In discussions with the staff of this World Bank/GEF project we agreed to share experience and expertise since both are aiming at protecting the Danube River by supporting improved land-use practices. The WRPRP has a few years of implementation already, however the fund supporting the conversion to environmentally-friendly practices is just starting and there is potential for mutual benefits and complementary effects on both projects. The project manager Marietta Stoimenova participated in the WWF-organized workshop on PES (Sofia, October 2005) and expressed interest in testing PES potential in their project areas. Furthermore, WWF-DCPO Bulgarian staff has non-voting membership in the WRPRP Steering Committee, thus furthering cooperation and collaboration between the projects.

- **UNDP/GEF Project: Conservation of Globally Significant Biodiversity in the Landscape of Bulgaria’s Rhodope Mountains (2004-09).** The implementation agency is the Bulgarian Ministry of Agriculture and Forestry. The goal of the UNDP/GEF Rhodope Project is to protect globally significant biodiversity and to promote its sustainable use in the Rhodope Region. This goal is to be obtained by: 1. effectively introducing landscape conservation in Eastern and Western Rhodope Landscape Nature Parks, and 2. Stakeholders integrating biodiversity concerns into resource management and economic development policy and practice.

The Project Management Unit stated its interest in the possibility of developing PES schemes in Bulgaria as well as its willingness to collaborate on the issue of generating incomes for rural people while at the same time complying with the biodiversity conservation requirements. The Project Manager Alexander Bardarov

⁷ Danube Pollution Reduction Programme, *Financial Mechanisms in the Danube River Basin Countries: Summary Report* (June 1999).

participated in the WWF-organized training workshop on PES that took place in Sofia in October 2005. WWF-DCPO staff in Bulgaria is already in close cooperation with the Project Management Unit on the issues of sustainable forestry management and Forestry Stewardship Certification (FSC), management of protected areas and Natura 2000 designation as well as on agriculture and rural development and high nature value farmlands.

- **UNDP/GEF Project: Conservation of Globally Important Biodiversity in the Grasslands of Bulgaria through Support for the Traditional Local Economy.** This project is still in the preparatory phase (PDF-A) to develop a medium-size project in the area of grassland biodiversity conservation in Bulgaria. The implementation of the full grant project is envisaged from 2006 through 2009. The implementing body in Bulgaria is the Bulgarian Society for the Protection of Birds. The project will address the root causes of grasslands abandonment and subsequent degradation in order to achieve its conservation objective. Lessons learned in project implementation will be transferred to other similar grassland areas in Bulgaria.

The project implementation period coincides with the implementation period of our proposed Danube PES project and in discussions with the UNDP staff we have agreed to be in close contact especially in the areas of overlap such as the use of agri-environmental schemes for the benefit of biodiversity and local livelihoods. Although the focal local areas differ (the UNDP focus is on mountain areas while our demonstration projects in Bulgaria are in the lowlands), we believe that there will be many opportunities to achieve synergies rather than duplicating the efforts of the project teams.

- **UNDP/GEF Project: Financial Sustainability of the National Systems of Protected Areas in Six Countries.** The project is focused on 6 countries, with Bulgaria as the only European participant. The implementing body in the country is the Bulgarian Society for the Protection of Birds. The overall goal is to assure the improved long-term financial sustainability of protected area systems. The purpose of the project is to develop and demonstrate model mechanisms, institutional frameworks and capacities for long-term financial sustainability of national protected area systems worldwide based on the experience gained in six pilot countries. Planned project outcomes include: legal, policy and institutional frameworks that encourage sustainable financing for protected areas are in place and operational; financial and business planning and cost-effective management at system and site level are reinforced; diversified revenue generation mechanisms are developed and implemented; awareness of protected area values and knowledge about sustainable financing mechanisms is increased and influences policy and practice in other sites, countries and sectors. As of October 2005, this project was still under preparation and in initial contacts with its implementation agency we have agreed to further explore and develop collaboration when the projects begin implementation. The consultant developing the Bulgarian project activities attended the WWF-organized workshop on PES that took place in Sofia in October 2005.

5.4. International Sources of expertise on PES and Sustainable Financing Schemes

Our last group of stakeholders is composed of institutions and experts that, although not having a direct involvement in the Danube basin, are nevertheless an important source of experience and knowledge on sustainable financing, PES and/or watershed management issues. An incomplete list would include:

- The Conservation Finance Alliance (CFA)
- The International Institute for Environment and Development (IIED - UK)
- Forest Trends / Katoomba Group (USA)
- CIFOR (Indonesia)
- IUCN – International Union for the Conservation of Nature
- The Nature Conservancy (USA)
- Conservation International (USA)
- GTZ (German Agency for Technical Cooperation - PES working group)

WWF in general and WWF-MPO in particular have close relations with all of the institutions listed above. For example, during the PDF-A stage of this project we held consultation meetings with staff from CFA, Forest Trends and Conservation International. Also staff from IIED-UK and GTZ participated in the project development workshops.

Throughout the life of the project, we expect to have close interaction with these institutions and similar other institutions to benefit from their advice and know-how as well as to inform them of lessons learned from the

project. Interaction will include inviting some of the partner organizations to participate in the project Advisory Group; (b) coordinating and collaborating whenever possible; (c) involving staff of these institutions in activities related to the project outputs 2 and 3; and, (d) including them among the recipients and discussants of the project lessons.

6. MONITORING AND EVALUATION

One of the project first activities will be to put in place a monitoring and evaluation component (activities code “4.x” in tables in Section D) This M&E component will entail the following steps, activities and organizational arrangements:

1. **Preparing a detailed ToR for the M&E:** The project’s coordination unit will prepare detailed terms of reference (ToR) for the M&E activities, following: (a) this project proposal, (b) its logical framework, and (c) all applicable UNEP/GEF M&E guidelines. These ToR will be consulted with the UNEP task manager and the project’s Advisory Board, and will include, inter alia, the procedures for:
 - a. **Developing a baseline:** Establishing a quantitative/qualitative baseline to support the project M&E as per the objective verifiable indicators and the sources of verification proposed in the project’s logical framework. One of the major problems in trying to monitor and evaluate complex projects is the lack of a reliable baseline. We will address this problem by assembling a reliable suite of baseline information from the project inception.
 - b. **Administrative/accounting/reporting procedures:** Here we will make sure that the project executing agencies’ standards for internal performance, monitoring and reporting (e.g., accounting, procurement, disbursement, management, audit, reporting, etc.) meet or exceed UNEP/GEF requirements.
 - c. **M&E deliverables and deadlines:** We foresee that the M&E component will include (1) bi-annual project monitoring and reporting; (2) a mid-term review; and (3) a final project evaluation. These three types of deliverables are briefly discussed below. Furthermore the detailed ToR will make sure that the work plan for the M&E activities includes the timely deliverable of all other M&E reports that UNEP/GEF may request for a MSP grant.
 - d. **Organizational arrangements:** The ToR will identify all internal and external responsibilities for the M&E tasks. The project manager will have overall responsibility for the M&E component, assisted by the project coordination unit. The executing agency’s existing administrative units will perform accounting and administrative monitoring and reporting. The project coordination unit will provide substantive inputs to the bi-annual and mid-term monitoring and reporting activities. External consultants may be retained to develop the project baseline and to collaborate in the mid term review. The final review will be contracted with an external consultant. The detailed ToR will ensure that all organizational arrangements comply with UNEP/GEF requirements.
2. **Bi-annual project monitoring and reporting exercises:** the bi-annual monitoring and reporting will review (1) all the internal financial and management performance (2) the advance of the project activities as per the project work plan; Additionally the end-of-year bi-annual M&E report will consider (3) feedbacks from the on-the ground project staff regarding the project advances, challenges opportunities and suggestions for improvement (4) Feedbacks and suggestions from the coordination unit, from the project steering committee, and from UNEP task manager.

The project manager will be responsible for ensuring that the bi-annual monitoring and report exercise is timely done and that its findings are shared with the project coordination unit, the steering committee and the project staff. He will also be responsible of ensuring that the M&E report suggestions are integrated into the project management plan. UNEP/GEF will receive the bi-annual report in a timely manner and UNEP task manager will be invited to participate in substantive discussions and/or add his suggestions to the report.

3. **Mid- term review:** the mid term review will be scheduled for the end of the project second year. Its focus will be in assessing (a) how well the project is performing in all fronts, (b) what are the prospects of the project delivering all its outputs; (c) what are the prospects for the outputs delivering the outcomes as predicated in

the project log frame; and (d) what are the corrections if any that should be implemented during the project's second half, in order to enhance its outcomes. Besides reviewing all relevant materials the mid-term review will consider: (d) feedbacks from the on-the ground project staff regarding the project advances, challenges, opportunities and suggestions for improvement; (e) feedbacks from the on-the ground project stakeholders regarding the value of the project advances thus far, challenges, opportunities and suggestions for improvement. The project manager and the project coordination unit will be directly involved in the mid-term review, and will solicit inputs from UNEP task manager.

The Project manager will be responsible for sharing the mid-term review findings with the steering committee, the project staff in general, and for integrating the review suggestions into the project management plan. UNEP/GEF will receive the mid-term review report in a timely manner, and UNEP task manager will be invited to participate in the review and/or in the substantive discussions of the review's findings.

4. **Independent final evaluation:** The independent final evaluation, performed at the end of the 4 years project, will consider the project actual outcomes against the project log frame's objectives, outcomes and outputs; taking into account the adjustments done to the latter during the project implementation. An initial list of indicators and benchmarks against which this project success will be assessed is provided in columns 2 and 3 of the project log frame (table 2). More detailed indicators and a workable baseline will be developed as per activity 1.a above. Based in the assessment of the project activities, outputs, outcomes and objectives the independent final evaluation will be derive lessons of relevance for participating organizations and major stakeholders.

Detailed ToR for the independent final evaluation will be developed by the project M&E unit in discussion with the UNEP task manager and will cover all UNEP/GEF project review criteria. We will integrate the final evaluation conclusions into the lessons learned, to be submitted as part of the project final report;

5. **Monitoring beyond project completion** One conundrum of project by project M&E is that, on the one hand, the end of project evaluation may come too soon to be able to assess the project's real impact, but, on the other hand, several years after a project's end there is neither the information, nor the will or the money to conduct a "down the road" evaluation. In this project we have taken care of the first of these three limitations, and have included among the tasks of the M&E unit to prepare the terms of reference and the background documentation for a post-project evaluation that we hope the participant institutions may be interested in conducting 5 years after the project's end.⁸
6. **M&E budget:** As shown in the budget tables (see section D), the project has earmarked for M&E activities over \$90,000 over 4% of the project total costs.

⁸ The cost of a such 5+ year evaluation is not included in this project budget, but we are optimistic that the executing agency and other stakeholders may be willing to pick up the task when the deadline approaches

D – FINANCING

1. FINANCING PLAN

We attached below a tables 3,4,5,6 and 7 that give a full overview of the project budget at output and activity level, sources of financing and yearly distribution. Table 8, actually the master table from which all the others tables have been generated is in a separate Excel file (and is in euros that have been converted at the rate of 1,2 dollars= 1 euro).

Table 3. Summary of Costs per Output and Source of Financing, in US Dollars

(Does not include the \$50,000 PDF – A Budget)

Activity Code	Output Description	Total cost of Activity	GEF co-finance	WWF co-finance	Other co-finance	GEF %	WWF %	Other %	Total %*
1.1.	PES and other sustainable financing mechanisms are integrated into Danube River Basin and sub-basin management plans	\$199,805	\$92,332	\$94,274	\$13,200	46%	47%	7%	100
1.2.	National PES schemes in Romania and Bulgaria effectively reward provision of Danube-related ecosystem services	\$189,511	\$121,496	\$64,415	\$3,600	64%	34%	2%	100
1.3	Demonstration of local-level implementation of public payments for Danube-related ecosystem services	\$273,110	\$105,434	\$102,876	\$64,800	39%	38%	24%	100
1.4.	Private sector involvement and support for PES schemes demonstrated	\$264,848	\$102,368	\$126,480	\$36,000	39%	48%	14%	100
2.1.	Capacity building and training in PES/SF for key stakeholders in Romanian and Bulgaria	\$153,266	\$98,841	\$54,425	\$0	64%	36%	0%	100
2.2.	Information and experience exchange for key stakeholders in Danube and sub river basins	\$134,129	\$32,813	\$101,316	\$0	24%	76%	0%	100
3.1.	Experience exchange with stakeholders in selected major river basins	\$119,303	\$73,391	\$45,912	\$0	62%	38%	0%	100
3.2	Best practices and lessons learned are documented, distributed and discussed with the conservation and international community.	\$157,676	\$50,992	\$106,684	\$0	32%	68%	0%	100
4	Project Monitoring and Evaluation	\$196,157	\$55,664	\$135,092	\$5,400	28%	69%	3%	100
5	Project management and coordination	\$451,671	\$241,658	\$210,013	\$0	54%	46%	0%	100
	Grand Total	\$2,139,476	\$974,990	\$1,041,487	\$123,000	46%	49%	6%	100

* Percentages may not add evenly to 100% due to rounding.

Table 4. Costs per Output, Activity and Source of Financing, in US Dollars
(Des not include \$50,000 PDF-A budget)

Output and Activity Code	Output and Activity Description	Total cost of Activity	Total cost of activity + contingency (4%)	GEF co-finance	Total WWF co-finance	Total other co-finance
1.1.	PES and other sustainable financing mechanisms are integrated into Danube River Basin and sub-basin management plans					
1.1.1	Review land and resource needs for implementation of the Water Framework Directive in the Danube River Basin	\$25,229	\$26,239	\$16,609	\$8,429	\$1,200
1.1.2.	Analyze potential of agricultural funds and PES to support WFD in Danube basin and sub-basins	\$28,523	\$29,664	\$10,741	\$18,923	\$0
1.1.3.	Identify and/or propose Best Practice and guidelines for use of national agricultural and other payments to support implementation of the Water Framework Directive in the Danube River Basin	\$39,048	\$40,610	\$18,410	\$18,600	\$3,600
1.1.4.	Develop recommendations for integrating public and private-driven PES and sustainable financing schemes into Danube River Basin and sub- river basin plans.	\$64,199	\$66,767	\$39,167	\$24,000	\$3,600
1.1.5.	Information sharing and experience exchange with ICPDR and Danube countries regarding integration of PES into Danube River Basin Plan	\$20,578	\$21,401	\$823	\$20,578	\$0
1.1.6.	Organize 2 workshops to Integrate outcomes into Sub-River Basin Management Plans in Bulgaria and Romania	\$14,544	\$15,126	\$6,582	\$3,744	\$4,800
	Subtotal	\$192,121	\$199,805	\$92,332	\$94,274	\$13,200
1.2.	National PES schemes in Romania and Bulgaria effectively reward provision of Danube-related ecosystem services					
1.2.1.	Evaluate needs for farm-related ecosystem services in Danube basin of Romania and Bulgaria	\$4,721	\$4,910	\$540	\$3,169	\$1,200
1.2.2.	Evaluate programming documents for EU and national funding programs and identify relevant funding opportunities for Danube-related ecosystem services.	\$2,498	\$2,598	\$348	\$2,250	\$0
1.2.3.	Survey experience with EU funds for conservation and IRBM across EU countries, esp. Danube river basin	\$28,800	\$29,952	\$6,084	\$21,468	\$2,400
1.2.4.	Assist design of guidance and delivery mechanisms for national payments schemes to reward delivery of Danube-related ecosystem services	\$23,052	\$23,974	\$11,428	\$12,546	\$0
1.2.5.	Assist outreach and communications to farmers and other land users regarding payments available for Danube-related ecosystem services in Romania and Bulgaria	\$98,170	\$102,096	\$90,096	\$12,000	\$0
1.2.6.	Evaluate results of actions, including in demonstration areas, as input for mid-term evaluations.	\$24,982	\$25,981	\$12,999	\$12,982	\$0
	Subtotal	\$182,222	\$189,511	\$121,496	\$64,415	\$3,600

1.3	Demonstration of local-level implementation of public payments for Danube-related ecosystem services					
1.3.1.	Conduct feasibility studies and select at least 3 demonstration projects to be further developed in Romania and Bulgaria	\$26,737	\$27,807	\$20,782	\$4,625	\$2,400
1.3.2.	Identify and engage key stakeholders for each project in the selected sites in Romania and Bulgaria	\$21,353	\$22,207	\$10,158	\$9,649	\$2,400
1.3.3.	Training and awareness raising for local stakeholders on national and other funding sources available for Danube-related ecosystem services in Romania and Bulgaria	\$58,978	\$61,337	\$37,337	\$24,000	\$0
1.3.4.	Design, develop, and assist implementation of PES schemes with national financing	\$134,256	\$139,626	\$27,138	\$52,488	\$60,000
1.3.5.	Awareness raising among local stakeholders regarding value of ecosystem services	\$21,282	\$22,133	\$10,019	\$12,114	\$0
	Subtotal	\$262,606	\$273,110	\$105,434	\$102,876	\$64,800
1.4.	Private sector involvement and support for PES schemes demonstrated					
1.4.1.	At least 2 local-level demonstrations of private sector-driven PES schemes	\$217,462	\$226,160	\$76,160	\$114,000	\$36,000
1.4.2.	Business-Environment Forum	\$37,200	\$38,688	\$26,208	\$12,480	\$0
	Subtotal	\$254,662	\$264,848	\$102,368	\$126,480	\$36,000
2.1.	Capacity building and training in PES/SFs for key stakeholders in Romania and Bulgaria					
2.1.1.	Identify and survey key stakeholders and their needs related to PES and sustainable financing schemes in Bulgaria and Romania	\$1,306	\$1,358	\$122	\$1,236	\$0
2.1.2.	Training for watershed managers and other key stakeholders from Bulgaria and Romania on PES and SF mechanisms (workshops).	\$33,888	\$35,244	\$5,244	\$30,000	\$0
2.1.3.	Consulting support to watershed managers in Bulgaria and Romania.	\$36,188	\$37,636	\$37,636	\$0	\$0
2.1.4.	Organize 3 study tours for PES practitioners to study existing PES schemes in the Lower and Middle Danube basin.	\$47,189	\$49,076	\$37,888	\$11,189	\$0
2.1.5.	Communications and media work related to ecosystem services and PES in Bulgaria and Romania	\$28,800	\$29,952	\$17,952	\$12,000	\$0
	Subtotal	\$147,371	\$153,266	\$98,841	\$54,425	\$0
2.2.	Information and experience exchange for key stakeholders in Danube and sub river basins					
2.2.1.	Identify and survey key stakeholders and their needs related to PES and sustainable financing schemes in Danube River Basin	\$1,306	\$1,358	\$122	\$1,236	\$0
2.2.2.	Information and experience exchange for watershed managers from across Danube River Basin (workshops)	\$38,572	\$40,114	\$10,114	\$30,000	\$0
2.2.3.	Communications and media work related to project, ecosystem services and PES across the Danube River Basin	\$89,093	\$92,657	\$22,577	\$70,080	\$0
	Subtotal	\$128,970	\$134,129	\$32,813	\$101,316	\$0
3.1.	Experience exchange with stakeholders in selected major river basins.					
3.1.1.	Three regional workshops (one each in Asia, Latin America and Africa) to present experiences and lessons of the Danube project	\$47,203	\$49,091	\$34,691	\$14,400	\$0
3.1.2.	Staff exchanges and visits for practitioners from Africa, Asia and Latin America.	\$67,512	\$70,212	\$38,700	\$31,512	\$0
	Subtotal	\$114,715	\$119,303	\$73,391	\$45,912	\$0

3.2.	Best practices and lessons learned are documented, distributed and discussed with the conservation and international community.					
3.2.1.	Outreach to three audiences: (a) technical; (b) major international development agencies, donor and NGOs s, and (c) major international environmental agencies, donors and NGOs.	\$70,684	\$73,511	\$32,827	\$40,684	\$0
3.2.2.	Production and dissemination of publications documenting the project's experience, lessons learned and manuals on how to and best practice.	\$80,928	\$84,165	\$18,165	\$66,000	\$0
	Subtotal	\$151,612	\$157,676	\$50,992	\$106,684	\$0
4	Project Monitoring and Evaluation					
4.1.	Advisory board meetings	\$27,720	\$28,829	\$23,429	\$0	\$5,400
4.2.	Perform bi-annual monitoring and reporting of all activities	\$142,409	\$148,105	\$17,696	\$130,409	\$0
4.3.	Perform mid project and end-of project evaluation and reporting	\$18,484	\$19,223	\$14,539	\$4,684	\$0
	Subtotal	\$188,612	\$196,157	\$55,664	\$135,092	\$5,400
5	Project management and coordination					
5.1.	Project manager and coordination unit	\$361,445	\$375,903	\$219,544	\$156,359	\$0
5.2.	National technical coordination (BG, RO/MD, UA, FNM/CR)	\$44,054	\$45,817	\$20,962	\$24,854	\$0
5.3.	Project coordination meetings	\$28,800	\$29,952	\$1,152	\$28,800	\$0
	Subtotal	\$434,299	\$451,671	\$241,658	\$210,013	\$0
	GRAND TOTAL	\$2,057,189	\$2,139,476	\$974,990	\$1,041,487	\$123,000

Table 5. Costs per Output per Year, in US Dollars

(Des not include \$50,000 PDF-A budget)

Code	Output Description	Costs - YEAR 1	Costs YEAR 2	Costs - YEAR 3	Costs - YEAR 4	Total Costs
1.1.	PES and other sustainable financing mechanisms are integrated into Danube River Basin and sub-basin management plans	\$96,512	\$103,293	\$0	\$0	\$199,805
1.2.	National PES schemes in Romania and Bulgaria effectively reward provision of Danube-related ecosystem services	\$86,958	\$25,524	\$25,524	\$51,505	\$189,511
1.3.	Demonstration of local-level implementation of public payments for Danube-related ecosystem services	\$70,459	\$89,121	\$66,988	\$46,542	\$273,110
1.4.	Private sector involvement and support for PES schemes demonstrated	\$114,075	\$75,387	\$75,387	\$0	\$264,848
2.1.	Capacity building and training in PES/SF for key stakeholders in Romania and Bulgaria	\$27,701	\$62,783	\$62,783	\$0	\$153,266
2.2.	Information and experience exchange for key stakeholders in Danube and sub river basins	\$24,522	\$43,221	\$43,221	\$23,164	\$134,129
3.1.	Experience exchange with stakeholders in selected major river basins	\$0	\$0	\$84,197	\$35,106	\$119,303
3.2.	Best practices and lessons learned are documented, distributed and discussed with the conservation and international community	\$21,041	\$45,545	\$45,545	\$45,545	\$157,676
4	Project Monitoring and Evaluation	\$46,636	\$46,638	\$46,636	\$56,247	\$196,157
5	Project management and coordination	\$110,422	\$110,422	\$115,414	\$115,414	\$451,671
GRAND TOTAL		\$598,326	\$601,933			