



## PROJECT IDENTIFICATION FORM (PIF) Medium-sized Project

**GEFSEC PROJECT ID:** 2617  
**IA/ExA PROJECT ID:** 3339  
**COUNTRY:** Hungary, Romania, Serbia, Slovakia and Ukraine  
**COUNTRY ELIGIBILITY:** All countries are eligible for GEF funding  
**PROJECT TITLE:** Improving resilience of the Tisza River basin to fluctuating climatic regimes through development and adoption of a Strategic Action Programme  
**GEF IA/ExA:** UNDP  
**OTHER PROJECT EXECUTING AGENCY(IES):** UNOPS  
**PROJECT DURATION:** 36 months  
**GEF FOCAL AREA:** International Waters  
**GEF-4 STRATEGIC OBJECTIVES:** Strategic Objective 2 & 3  
**GEF OPERATIONAL PROGRAM:** OP 9 Integrated Land and Water  
**ESTIMATED STARTING DATE (project type):** March 2007  
**ESTIMATED STARTING DATE (PDF, if planned):**  
**PROJECT CONTACT:** Vladimir Mamaev, RTA, vladimir.mamaev@undp.org; Tel:421-2-59337-267  
**DATE OF SUBMISSION:** November 2006

FINANCING PLAN (\$)		
	PDF	Project
GEF	A	
	B	999,972
	C	
<b>GEF Total</b>		999,972
<b>Co-financing</b>		
<b>GEF IA/ExA</b>		200,000
Government		<b>400,000</b>
Others		297,572
<b>Co-financing Total</b>		897,572
<b>Total</b>		1,897,544

### PART I - PROJECT IDENTIFICATION

#### A - PROJECT SUMMARY

The Tisza river system is an internationally significant river system, which is extensively degraded and continues to be threatened. The river and its tributaries flow from the Carpathian Mountains and represents a 157,200 square kilometer river basin which is home to some 14 million people. It begins in the territories of Ukraine with the White and Black Tisza. This river with its tributaries is the only water source for Transcarpathia region of Ukraine since 98% of its territory belongs to the Upper Tisza catchment area. It also flows from Romania and Slovakia via number of smaller tributaries fed by mountain streams and flows into the Great Plain of eastern Hungary and then south into Serbia where it joins the Danube. This river is the main water source for Hungary, a significant source for Serbia and an important source for western Romania and southern Slovakia. The floodplains of the river extend to some 30 thousand square kilometer, the majority of which can be found in the Hungarian Great Plain and the adjoining plains in Western Romania and Serbia.

The Tisza River Basin is in need of a coordinated regional effort to develop harmonized national and regional policies for integrated land and water management. This project will address the issues of flooding, pollution, loss of biodiversity, adaptation to climate change, and the need for sustainable development in the Tisza River Basin. The project Establishment of Mechanisms for Integrated Land and Water Management in the Tisza River basin will address these issues through the preparation of a scientifically based Transboundary Diagnostic Analysis (TDA) which will form the basis for the development of coordinated National Integrated River Basin Management Plans (NIRBMPs) which support a regional Integrated River Basin Management Programme (IRBMP) (equivalent to SAP and NAPs in GEF terminology). Both will establish regional and national priorities and coordinate policies as well as implementation mechanisms throughout the region. Development and implementation of small scale demonstration projects will support these efforts towards environmental governance reform strategies and serve as a learning experience for other larger scale pilot projects to be conducted as the IRBMP is implemented.

This project will build on what has already been achieved through the EU accession process and the EU and GEF

support of the International Commission for the Protection of the Danube River (ICPDR) in particular the implementation of the Danube River Protection Convention (DRPC) and the EU Water Framework Directive (WFD), with regard to the existing ad hoc Tisza Group of the ICPDR and the Tisza- Memorandum of Understanding (MoU) "Towards a River Basin Management Plan for the Tisza River supporting sustainable development of the region" signed by all riparian countries in 2004. It will also build upon the numerous UNDP sustainable development initiatives and GEF biodiversity projects in the basin, and it will link with activities of the newly established interim secretariat of the Carpathian Convention. It will take the concept of Integrated River Basin Management beyond the water sector and co-ordinate the development, management and conservation of land and water resources, and embed rather than retrofit conservation and environmental policy into the national and regional planning framework.

A major product will be the development of a regionally owned Integrated Tisza River Basin Management Programme (equivalent of Strategic Action Plan), which will be incorporating a Flood Prevention and Risk Management Strategy. The River Basin Management Programme will also address the concerns of water availability (resulting from droughts) and include steps to ensure equitable use of water between users and protecting the environment with minimum flows. At the same time the Programme will address wider sustainability issues in the water, agriculture, energy, industry and navigation sectors, highlighted by the work of the UNDP in their Tisza Basin Sustainable Development Strategy.

#### **B – PROJECT OBJECTIVE**

The project long-term objectives are:

- To ensure that the integrated land and water management throughout the Tisza River Basin meets the short and long-term requirements for optimum ecosystem function as well as the needs of the communities using the river adapting to the stress of fluctuating climatic conditions in the region.
- To ensure realization of a long-term Flood Prevention and Risk Management Strategy
- A subsidiary long-term objective is to reduce the nutrient load into the Danube and Black Sea and improve its water quality.

#### **C – PRIORITY THREATS/ROOT CAUSES AND BARRIERS TO BE ADDRESSED**

##### Major Threats

##### Flooding

The Tisza waters are impacted by seasonal flooding, which in turn increases water pollution from industrial, mining, and agricultural sources. These flooding events are triggered by snowmelt and/or heavy rainfalls and influenced by detrimental human interference such as deforestation and human development in floodplains. Where river floodplains traditionally supported flood tolerant grasses, water meadows and fishponds, modern agricultural production demands low and tightly regulated water levels and protection from seasonal inundation. Flood risks and urban building have also increased within drained floodplains due to inadequate land use leading to the loss of uncultivated land and deforestation, especially within the buffer zone of headwater streams, as well as due to the raising of damage potential in the floodplains. Human settlements built within the floodplains also impact the Tisza waters with industrial and municipal wastes, increasing the amount of nutrients, heavy metals and organic pollutants. Flooding in the cultivated floodplains washes pesticides, herbicides and fertilizers into the river and contributes to the eutrophication of the Danube and Black Sea, and their long-term health.

##### Deforestation and Loss of Biodiversity

Deforestation in the Tisza basin, especially in the tributaries endangers the water quality of the Tisza, impacts the diverse biodiversity of this region and exacerbates the flooding problem. The loss of forests encourages soil erosion and loss of absorptive capacity during heavy rains. Deforestation in mountainous areas increases the propensity for landslides endangering human settlements. Forestry practices vary from country to country and are often not addressed in conjunction with water management issues, despite the very close linkages within an integrated ecosystem management framework.

In addition to deforestation the loss of biodiversity in the region is a significant threat. Despite its degraded condition, the Tisza is still one of the most natural river systems in the Danube, and all of Europe, and therefore worth preserving.

## Pollution

There are four main causes of water pollution in the Tisza: agricultural runoff; industrial effluents, mining activities and abandoned tailing ponds, and municipal wastes. During the second half of the 20th Century the use of heavy applications of fertilizers, pesticides and herbicides was known as the “Green Revolution”. Still, the Tisza waters suffer from high nutrient loading and relatively high pesticides levels and the agricultural pollution load is among the highest of all tributaries of the Danube.

Another crucial problem in the Tisza region is the continued use of outdated industrial technology that allows effluents to be discharged into the river waters. Mining activities in the upper Tisza combined with deforestation in the Carpathian Mountains has further jeopardized the Tisza waters especially during heavy seasonal rains as evidenced by the January 2000 Baia Mare cyanide spill. Municipal wastes are sometimes not properly treated in many parts of the Tisza basin. Rural areas and smaller communities in some countries lack the infrastructure and revenues to install primary treatment facilities. Also agricultural facilities, specifically stock yards, discharge wastes and nutrients into the river waters.

Underlying Causes: the above threats to the Tisza environment have many underlying causes that will be addressed by the project, including:

- Lack of attention to fully integrated land and water resource management
- Weakness in formal policy recognition of the value of biodiversity conservation for current and future generations
- Weak public (stakeholder) participation at levels of decision-making and weak public awareness (under-developed civil society) of environmental issues
- Multiple initiatives occasionally working at cross purposes
- Lack of a framework for a sub-basin cooperation
- Lack of experience with economic models that feature sound sustainable development principles
- Weaknesses in existing policy, legal, and regulatory institutional frameworks to address specific problems of the Tisza basin
- Low enforcement of existing laws and regulations
- Weakness in analysis of socio-economic factors

## **D – GLOBAL ENVIRONMENTAL BENEFITS EXPECTED**

THE MAIN IMPACTS OF THIS PROJECT ARE EXPECTED TO INCLUDE:

- REDUCTION OF NUTRIENT AND TOXIC SUBSTANCE POLLUTION ENTERING THE TISZA RIVER AND HENCE REDUCE LOADS TO THE DANUBE AND BLACK SEA.
- PREPARATION OF ADAPTATION PLANS TO RESPOND TO EXTREME WEATHER EVENTS AS A RESULT OF CLIMATIC FLUCTUATIONS.

BOTH THESE KEY TARGET IMPACTS WILL BE ACHIEVED THROUGH THE DEVELOPMENT OF AN INTEGRATED RIVER BASIN MANAGEMENT PROGRAMME (EQUIVALENT TO SAP) FIVE NATIONAL IWRM PLANS AND FOUNDATION FOR ITS SUBSEQUENT IMPLEMENTATION.

## **E – FIT WITH FOCAL AREA STRATEGY**

The programming context and the design of the present project is directed by the GEF Operational Programme #9 which states: “these projects focus on integrated approaches to the use of better land and water resource management practices on an area-wide basis. The goal is to help groups of countries utilize the full range of technical, economic, financial, regulatory, and institutional measures needed to operationalize sustainable development strategies for international waters and their drainage basins (para 9.2).” The present project proposal meets these requirements and will assist the countries of the Tisza River basin in meeting their obligations under various global conventions relating to biological diversity and climate change.

The project responds to concerns on fluctuating climatic conditions (in this region this refers to flood events in particular but also draughts) by implementing an integrated river basin management plan (IRBMP) that is built on an agreed transboundary diagnostic analysis of the basin. The TDA and SAP implementation (through a IRBMP) will also focus on actions (national policy, legal, institutional reforms etc.) to reduce land-based sources of nitrogen, phosphorus and oxygen depleting substances.

The proposed project is consistent with the new GEF International Waters Focal Area- Strategic Objectives:

IW 2 - The project will produce an agreed Transboundary Diagnostic Analysis with priority transboundary concerns/causes; regionally agreed Integrated River Basin Management Programme and National ministerially agreed Integrated River Basin Management Plans with reforms/investments; regional agreements/protocols. The project will use an integrated approaches across GEF focal areas where multiple benefits will be generated, especially in adapting to drought/floods and other climatic fluctuations.

IW 3 - A focus of the project will be placed on integrated water resources management that will contribute to WSSD POI. Several demonstrations for areas affected by water scarcity/competing uses and highly dependent on groundwater will be developed and implemented during the project that would assist countries with meeting WSSD targets

The project will play a catalytic role in bringing together five Tisza river basin countries for the purpose of transboundary integrated river basin management. Previous water resource projects in the region funded by UNDP, the World Bank, EU, and other sources have focused more on water resource and environmental issues, without full attention to the integrated land and water use component.

The importance of the GEF MSP project is recognized by the international community and has already, even at the preparation stage, attracted coordination efforts within the ICPDR, through the EU WFD RBMP and through the UNDP Danube Regional Project.

During this project the countries will develop a Regional Integrated River Basin Management Programme (IRBMP) to address priority transboundary problems in the Tisza basin, supported by five National Integrated River Basin Management Plans which will serve as the implementation instruments for the IRBMP at the national level. The IRBMP will be developed using the standard GEF TDA-SAP methodology for international waters projects and will be carried out in accordance with the guidelines developed under the GEF Train-Sea-Coast programme. The Transboundary Diagnostic Analysis (TDA) will identify major transboundary problems and threats and fill the gaps in information. To maximize co-funding potential, key donors such as WB, EBRD, USAID, TACIS, and other donors will be invited to participate in the TDA-IRBMP process and help shape and later support IRBMP implementation. National Integrated River Basin Management Plans (NIRBMP) will be created to harmonize priorities and actions throughout the region.

**F – POTENTIAL RISK AND MITIGATION**

The potential barriers to the successful implementation of the project include:

- Sufficient financial support for non-EU countries;
- Unwillingness of communities to accommodate the natural process of river basins;
- Effectiveness of national support and inter-sectoral co-operation
- Ability to make noticeable improvements in the time-frame of the project;
- Economic short-term interests overriding environmental concerns; etc.

**G – ADDITIONAL COMMENTS**

**PART II - FINANCING PLAN**

1) ESTIMATED PDF MANAGEMENT BUDGET (IF PLANNED)

Component	Estimated Staff weeks	GEF(\$)	Other Sources (\$)	Project Total (\$)
Locally Recruited Personnel				
Internationally recruited consultants				
Training				

Office equipment				
Travel				
Miscellaneous				

2)- TIMETABLE FOR THE PROJECT

	PDF		Project	
	Start Date	Completion Date	Start Date	Completion Date
Implementation			March 2007	February 2010

**PART III - PROPOSAL APPROVAL** (for GEFSEC Use only)

<b>Proposal submitted for funding to</b>	GEF Trust Fund		(\$000)
	SCCF Trust Fund		(\$000)
	LDC Trust Fund		(\$000)
<b>GEF Program Manager</b>	(name)		Review Date
<b>GEF Team Leader</b>	(name)		Clearance Date
	Yes	No	Signature
	Feedback:		
<b>GEF CEO</b>	Yes	No	Date
			Signature
	Feedback:		