

The Global Environment Facility: Forging Partnerships and Fostering Knowledge Transfer to Sustain Transboundary Waters in Europe, Central Asia and Around the World

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Introduction

Formed in the aftermath of the 1992 Earth Summit in Rio, the Global Environment Facility (GEF) has since emerged as the world's largest single investor in international environmental management. The GEF focuses resources from a triad of international Implementing Agencies – the United Nations Development Programme (UNDP), the United Nations Environmental Programme (UNEP) and the World Bank – to catalyse multi-country, multi-sectoral partnerships for global environmental benefit.² Within its International Waters (IW) Focal Area, the GEF helps recipient countries to work together and with donor countries to manage their shared water resources.³

The GEF's International Waters Focal Area

Countries sharing water resources often face complex water-related environmental problems. To be successful in addressing these transboundary problems, the GEF Operational Strategy, adopted in 1995, recognized that a series of international waters (IW) projects may be needed over time to:

1. Build capacity and political commitment of countries to work together;
2. Jointly understand and set priorities based on assessments of environmental conditions in waterbodies;
3. Identify actions to address the highest priority transboundary problems; and
4. Implement agreed regional and national policies, legislative and institutional reforms and attract the investments needed to address them.

The GEF's US\$465 million investment over the past decade has leveraged a total of US\$1.05 billion in support of 57 approved IW projects.⁴ Another 29 GEF IW projects are in preparation. Funds support nations sharing transboundary basins or marine ecosystems to –

1. Cooperate in assessing sources of degradation, establishing priorities (Transboundary Diagnostic Analysis, TDA);
2. Determine and adopt policy, legal and institutional reforms (via a Strategic Action Programme, SAP); and
3. Test feasibility of investments to address conflicts and reverse degradation.

In essence, this comprehensive approach requires a set of relatively straightforward projects that collectively cover complex situations and activities. This breaks complex challenges up into manageable pieces and fosters action at three institutional levels: multilateral (*i.e.*, multi-country); inter-ministerial; and sub-national (*i.e.*, essentially provincial and community) levels. Judicious utilization of funding demands an internal GEF programme strategy to ensure that all the necessary institutions are involved and resources are available over timescales consistent with progressively increasing country commitments. In addition, a “coordinating mechanism” is needed among the GEF Implementing Agencies (IAs) and the GEF Secretariat (GEFSEC) to ensure that the identification of priorities and appropriate sequencing of interventions actually occurs.

The GEF Operational Strategy⁵ and Operational Programs⁶ in the International Waters Focal Area were established based on an understanding that fewer resources would be devoted to this Focal Area than to those of biodiversity and climate change. This understanding was reflected in notional funding allocations to the initial ten Operational Programs. It might, correspondingly, be reasonable for the expectations of the

overall results within the International Waters Focal Area to be lower than those from the other focal areas. Thus, if International Waters activities had been expected by GEF Council to achieve results more rapidly and thoroughly in relation to economically important cases of serious transboundary ecosystem degradation, more resources would have to be devoted to specific geographic areas to leverage the political commitments and to accelerate the enormous sectoral changes required. If comparatively lower funding was the dominant priority of the Council, only light-touch catalytic interventions could logically be expected with concomitantly low expectations for reversing environmental degradation.

The GEF's Waterbody-based program (Operational Program 8) incorporates the objective of testing whether the comparative advantages of each of the three Implementing Agencies could achieve a reversal in degradation trends in a single geographical area.⁷ In other words, could the assignment of increased resources to a single geographical area through the collective involvement of the three IAs accelerate the achievement of measurable environmental improvement as a test case with limited resources? This would be an important learning activity for the world community, namely, whether complex cases of degradation could really be reversed within a modest timeframe. In Europe and North America, such reversals have taken 20-25 years to achieve. It would test whether the GEF could utilize the lessons learned and help focus donors' development assistance to reducing this time by perhaps 50% in recipient countries. Thus, OP 8 essentially set an objective for GEF to program sufficient resources in a single geographical area to implement the GEF Operational Strategy in an accelerated manner.

Testing the Geographically Based Programmatic Approach

Through discussions within the GEF's International Waters Task Force⁸ (IWTF), the Danube River and Black Sea region was chosen as a test geographic area. The selection of this region was based on: (a) the history and maturity of progressive GEF and donor involvement; (b) expressed recipient government commitments to making necessary reforms and investments in support of waterbody-specific conventions; and (c) the availability of historical monitoring information to provide a baseline against which to gauge improvements. In the CEO's address at the GEF Retreat in Baltimore in 1998, he welcomed the development of programmatic approaches and this provided increased incentives for the IWTF and the IAs to implement the programmatic approach specified in the Operational Strategy. Moreover, the CEO's January 1999 policy initiatives message advocating that the GEF focus on results and impacts spurred the IWTF to move to develop the Danube River and Black Sea basin programmatic approach and to discuss it with the 17 participating countries during 2000. By the time of the Istanbul Stocktaking meeting on the programmatic approach in June 2000, the three IAs and the GEFSEC had achieved the development of the approach within the three-year timeframe specified in OP 8.

Danube/Black Sea Basin Strategic Approach

The seventeen countries in the drainage basin of the Black Sea face a variety of shared environmental problems that are largely transboundary in nature. Through a series of GEF-assisted projects, these countries have determined that excessive releases of nutrients from agricultural, municipal and industrial sources are the highest priority transboundary water problem that they share. Excessive fluxes of nitrogen and phosphorus in rivers create polluted conditions in the Danube Delta and the Black Sea that have seriously compromised resources and amenities and biological diversity. Beginning in the GEF Pilot Phase, the Danube Basin countries and the six countries surrounding the Black Sea decided to work together with support from the European Union and the GEF on a series of international waters projects. A series of small projects has supported in progressive fashion increased country commitments to action. The projects resulted in the countries learning to work together, assigning priorities to transboundary problems and mutually agreeing on interventions needed to address the highest priority problems through "Strategic Action Programs" (SAPs).

The Danube Basin SAP and the Black Sea SAP are now ready for implementation by the countries consistent with GEF Operational Program 8 of the International Waters Focal Area. Incremental cost financing is needed to resolve the priority transboundary issues. To accelerate implementation of the SAPs, a geographically based programmatic approach was developed among the IAs, the 17 countries and the GEFSEC. The approach includes a variety of interventions, including two final regional projects through UNDP (with the assistance of UNEP in one of them) for Black Sea and Danube basin countries to support

incremental costs of policy/legal/institutional reforms and a novel “Partnership Investment Fund” with the World Bank on nutrient reduction (principally nitrogen focused) in the agricultural, municipal and industrial sectors. The GEF Council approved the first tranche in May 2001. The second tranche of the Partnership Investment Fund is currently before the GEF Council for its approval at its May 15-17, 2002 meeting.

The Strategic Partnership represents the World Bank’s commitment to assist the 15 recipient countries in the basin in implementing the two SAPs addressing, as the highest transboundary priority, nutrient reduction. This partnership is designed to mobilize at least \$210 Million non-GEF funding for on-the-ground nutrient reduction investments. The investment produces a leverage of 3:1 through the provision of \$70 Million to the World Bank in three tranches over a 6-year period. The CEO has delegated approval authority to speed implementation of sub-projects under the Partnership. This would be done by: (a) incorporating in the dialogue with each of the 15 GEF-recipient countries policies that address nutrient reduction in the agricultural, municipal and industrial sectors; (b) promoting inclusion of Danube/Black Sea restoration issues in the ongoing Country Assistance Strategy (CAS) development processes; and (3) using the convening powers and comparative advantage of the World Bank to mobilize funding and engage other donors/partners to achieve an overall contribution of \$3 from other sources for each \$1 contributed by the GEF for nutrient reduction measures. Replication of demonstration projects would be expected through country requests to the World Bank and other sources.

This programmatic approach is relatively simple. As suggested by the countries, there would be two final regional international waters projects to assist the Danube basin and Black Sea countries respectively in focusing on implementing the reforms and, where necessary, building capacity to enact the reforms consistent with the basin conventions the countries have signed and the SAPs the countries have adopted. The two regional projects, led by UNDP but in one case having components under the responsibility of UNEP, would complement the separate, already approved, Dnipro basin project also being led by UNDP (third component). The fourth component in this approach is a proposed GEF/World Bank Partnership Investment Fund for Nutrient Reduction. This translates the multilaterally-agreed priority of nutrient reduction (especially nitrogen loading reductions) into single country World Bank operations that help to leverage additional funding and accelerate the implementation of investments for nutrient reductions in the agricultural, municipal and wetland restoration areas. Various other activities through EU accession contribute to this approach, which essentially helps address country commitments under the GPA and the ECE Transboundary Convention. Finally, GEF has programmed a number of other complementary projects in the Black Sea, Danube and Dnipro basins that can help contribute to this globally significant test. If successful, the GEF Council may wish to consider expanding this to other areas in the future.

GEF International Waters Projects in Europe and Central Asia

Table 1 provides a summary of the different GEF projects that have been completed, are underway, or under preparation in the ECE region. Note the concentration of different small projects in the Danube/Dnipro/Black Sea basin that reflects this one Council-authorized test of such a programmatic approach. Across Europe and Central Asia, the GEF is supporting a dozen projects currently under development or implementation. Their focus spans lakes (e.g., Lake Peipsi and Lake Ohrid), rivers (e.g., Danube River and Dnipro River Basin), large marine ecosystems (e.g., Baltic Sea, Black Sea, Caspian Sea and Mediterranean Sea) and the Arctic Ocean.⁹

Project development generally begins with conducting a Transboundary Diagnostic Analysis (TDA) of the waterbody’s priority transboundary environmental challenges and their root causes. The TDA effort contributes to formulation of a Strategic Action Programme (SAP), detailing how countries will cooperate in undertaking policy/legal/institutional reforms regionally and individually and investments to address these transboundary priority challenges. Through this process, the GEF IW projects build stakeholder commitment and coordination among riparian countries, both essential to implementing the SAP. Project development also often includes one or more demonstration activities involving local, national and/or international partnerships. Successful demonstrations may be sustained, enlarged or replicated during a project’s implementation phase. The GEF aims for implemented projects to generate sufficient momentum to eventually become self-sustaining.

Table 1. GEF International Waters Projects in the ECE Region.

Project Title	GEF Financing	Participating Countries	Implementing Agency
I. Danube/Black Sea Basin Programmatic Approach			
Black Sea Environmental Programme (BSEP)	\$349,920.	Bulgaria, Georgia, Romania, Russian Federation, Turkey, Ukraine	UNDP, UNEP
Black Sea Strategic Action Programme (BSSAP)	\$1,798,000.	Bulgaria, Georgia, Romania, Russian Federation, Turkey, Ukraine	UNDP
Building Environmental Citizenship to Support Transboundary Pollution Reduction in the Danube: A Pilot Project in Hungary and Slovenia	\$750,000.	Hungary and Slovenia	UNDP
Control of Eutrophication, Hazardous Substances and Related Measures for Rehabilitating the Black Sea Ecosystem: Phase I	\$4,350,000.	Bulgaria, Romania, Georgia, Russian Federation, Turkey, The Ukraine	UNDP, UNEP
Danube Regional Project: Strengthening the Implementation Capacities for Nutrient Reduction and Transboundary Cooperation in the Danube River Basin	\$750,000.	Bosnia & Herzegovina, Bulgaria, Croatia, Czech Republic, Hungary, Moldova, Romania, Slovakia, Slovenia, Ukraine, Federal Republic of Yugoslavia	UNDP
Danube River Basin Environmental Management	\$8,500,000.	Austria, Hungary, Slovenia, Czech Republic, Slovakia, Bulgaria, Romania, Moldova, Ukraine, Germany	UNDP
Developing the Danube River Pollution Reduction Programme	\$4,190,000.	Bosnia & Herzegovina, Bulgaria, Croatia, Czech Republic, Hungary, Moldova, Romania, Slovakia, Slovenia, Ukraine, Federal Republic of Yugoslavia	UNDP
GEF Strategic Partnership for the Danube/Black Sea Basin	\$16,000,000.	Bulgaria, Georgia, Romania, Russian Federation, Turkey, Ukraine	UNDP, UNEP
Nutrient Reduction Project - Strategic Partnership for Nutrient Reduction in the Danube River Basin and the Black Sea	\$7,500,000.	Hungary	World Bank
Nutrient Reduction Programme – Regional Project for the Black Sea	\$349,920.	Bulgaria, Georgia, Romania, Russian Federation, Turkey, Ukraine	UNDP, UNEP, World Bank
Black Sea Agricultural Pollution Control Project	\$5,500,000.	Romania	World Bank
Danube Pollution Reduction Programme - Financing Pollution Projects by Local Financial Intermediaries	\$87,000.	Slovenia	World Bank

Project Title	GEF Financing	Participating Countries	Implementing Agency
Transfer of Environmentally Sound Technology (TEST) in the Danube River Basin	\$990,000.	Bulgaria, Croatia, Hungary, Romania and Slovakia	UNDP
Dnieper (Dnipro) River Basin Strategic Action Programme	\$7,000,000.	Belarus, Russian Federation and Ukraine	UNDP
II. Baltic Sea Large Marine Ecosystem			
Baltic Sea Regional Project	\$5,850,000.	Estonia, Latvia, Lithuania, Poland, Russian Federation	World Bank
Rural Environmental Protection Project (REPP)	\$3,000,000.	Poland	World Bank
III. Mediterranean Large Marine Ecosystem			
Priority Actions for the Further Elaboration and Implementation of the Strategic Action Programme for the Mediterranean Sea	\$6,240,000.	Albania, Algeria, Bosnia and Herzegovina, Croatia, Egypt, Lebanon, Morocco, Slovenia, Syria, Tunisia, and Turkey	UNEP
IV. Caspian Sea Basin			
Addressing Transboundary Environmental Issues in the Caspian Environment Programme (CEP)	\$7,989,124.	Azerbaijan, Islamic Republic of Iran, Kazakhstan, Russian Federation, and Turkmenistan	UNDP, UNEP, World Bank
Regional Partnership for Prevention of Transboundary Degradation of the Kura-Aras River	\$ 5,000,000.	Armenia, Azerbaijan, Georgia, Iran, Turkey	UNDP
V. Aral Sea Basin			
Water and Environmental Management in the Aral Sea Basin	\$12,233,568.	Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan	World Bank
VI. Lake Basins			
Lake Ohrid Conservation Project	\$4,100,000.	Albania and Macedonia	World Bank
Development and Implementation of the Lake Peipsi/Chudskoe Basin Management Programme	\$1,000,000.	Estonia and Russian Federation	UNDP
VII. Arctic Ocean			
Persistent Toxic Substances, Food Security, and Indigenous Peoples of the Russian North	\$750,000.		UNEP
Support to the National Plan of Action for the Protection of the Arctic Marine Environment from Anthropogenic Pollution in the Russian Federation	\$6,191,000.	Russian Federation	UNEP, World Bank
VII. Other			
Integrated Water and Ecosystem Management Project	\$4,630,000.	Albania	World Bank
Agricultural Development Project	\$8,860,000.	Georgia	World Bank

Project Title	GEF Financing	Participating Countries	Implementing Agency
Integrated Ecosystem Management in the Transboundary Prespa Park Region	\$8,000,000.	Albania, Macedonia, Greece	UNDP
Agricultural Pollution Control Project	5300000.	Moldova	World Bank
Upgrading of Chisinau Waste Water Treatment Plant	To be determined	Moldova	World Bank
Wetland Restoration and Pollution Reduction	\$350,000.	Bulgaria	World Bank
Agricultural Pollution Control Project	\$300,000.	Turkey	World Bank

A variety of GEF-supported issue-specific and capacity building IW projects operate on the global scale with component activities in Europe and Central Asia. GloBallast, for instance, addresses the issue of inter-basin transmission of invasive aquatic species in ships' ballast water – including through demonstration activities in the Black Sea area. Examples of GEF capacity building projects with involvement in this region include the Global International Waters Assessment (GIWA), TRAIN-SEA-COAST and, as detailed below, the International Waters: Learning Exchange and Resource Network (IW:LEARN).¹⁰

The GEF recognizes that any given recipient country may not initially have sufficient local technical resources or expertise to fully develop or implement an IW project. Further, mature IW projects have experiences and lessons learned that could help newer projects to proceed more efficiently or effectively than their predecessors. To facilitate such learning and knowledge sharing among IW projects, the GEF created IW:LEARN.¹¹

The GEF IWLEARN Project

IW:LEARN aims to build a “global knowledge community” to sustain Earth’s transboundary water resources. Specific services provided to foster this IW community of practice include:

1. Facilitated face-to-face and electronic forums among IW managers and among between stakeholders to identify and address priority transboundary waters management needs at the local, national, regional and global scale;
2. Synthesis of “knowledge products” (e.g., articles, guidelines, distance education modules) gleaned from instructive experiences and lessons learned in order to address to these needs;
3. Dissemination of these knowledge products via both on-line and off-line electronic media as well as through face-to-face workshops and outreach activities;
4. Development of on-line and standalone electronic “resource centres” to provide wide access to these knowledge products and related knowledge resources (e.g., IW project profiles, tools, best practices, community news, events, etc.) via both electronic and traditional media (e.g., paper, radio, etc.);
5. Collaboration with IW projects to test and evaluate emerging Information and Communications Technologies (ICTs) and processes to advance transboundary water management;
6. Needs-based technical assistance to IW projects to apply such ICTs to increase effectiveness of transboundary communication and coordination both within and between projects;
7. Workshops for IW personnel to develop and replicate all the above products, services and tools to meet their own transboundary waters management needs; and

8. Establishment of regional support facilities to assist personnel in the development of these products and services to foster additional regional and thematic knowledge communities for the benefit of IW projects in their region.

IW:LEARN has supported forums and dialogs among over 200 participants of IW projects and their civil society counterparts at the global scale, as well as regionally in the Latin America and Caribbean (LAC), East Asia and European and regions, and locally in Southwestern Africa. It's knowledge products have been synthesized into a distance Masters degree pilot program in international development with focus on international waters – with 5 graduates and numerous applicants for the next cohort. Two on-line resource centres have been deployed by IW:LEARN and its partners: the “International Waters Resource Centre” (<http://www.iwlearn.net>), displayed in Figure 1, as well as a local transboundary “Distance Learning and Information Sharing Tool” (DLIST) along the Benguela Current coastal zone in Namibia and South Africa (<http://www.dlist.org>).

Through ICT workshops, IW:LEARN has trained and recruited over 40 IW information systems specialists and public information officer into its ongoing Implementation Team (the “I-team”). The I-team functions via the Internet as a peer-to-peer focus group and technical assistance community among GEF and other IW projects. I-team members also assist their projects and partners to utilize emerging ICTs, such as instant messaging and Internet-based telephony, where appropriate, to advance their respective transboundary water management objectives. The I-team will also contribute to the development of regional IW:LEARN support facilities in LAC, Africa, the Middle East and elsewhere.

With sufficient regional interest and involvement, specific GEF IW:LEARN activities – distance learning, knowledge sharing, and technical capacity building – could be applied to benefit transboundary waters management across Europe and Central Asia. So doing will also create a regional instance of GEF IW:LEARN's global knowledge community to sustain Earth's transboundary water resources. This process was launched with a seven person meeting of regional GEF projects and partners at the Second International Conference on Sustainable Management of Transboundary Waters in Europe (in Miedzzydroje, Poland on April 22, 2002). The authors look forward to working with these projects and the European IW community as a whole to realize these goals.

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Figure 1. Homepage of the GEF IW:LEARN-sponsored “International Waters Resource Centre” (<http://www.iwlearn.net>), simply designed to provide access to IW resources over limited-bandwidth Internet connections and via off-line CD-ROM. This prototype will be connected to a “cloud” of other regional and thematic resource centres worldwide.

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² Global Environment Facility (GEF) Secretariat website: <http://www.gefweb.org>.

³ GEF. 2001. *International Waters Programme Study*. Washington, DC. <http://www.iwlearn.net/iwps.pdf>.

⁴ GEF. 2001. *A Decade of Managing Transboundary Waters*. Washington, DC.

⁵ GEF. 1996. *Operational Strategy*. Washington, DC.

⁶ GEF. 1997. *GEF Operational Programs*. Washington, DC.

⁷ *GEF Operational Programs*, Paragraph 8.5e.

⁸ IWTF consists of representatives from the GEFSEC and each IA.

⁹ Hypertext profiles and documents for IW projects in Europe and Central Asia:
<http://www.iwlearn.net/projects/europe/europe.htm>.

¹⁰ Hypertext profiles for global thematic and capacity building IW projects:
<http://www.iwlearn.net/projects/global/global.htm>.

¹¹ IW:LEARN website: <http://www.iwlearn.org>.