

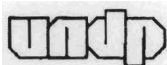
**GLOBAL
ENVIRONMENT
FACILITY**

Regional

Environmental Management in the Danube River Basin

Project Document

*This Project Document has been edited to facilitate public dissemination.
The original is on file in the GEF Office at UNDP Headquarters in New York.*



UNITED NATIONS DEVELOPMENT PROGRAMME

GLOBAL ENVIRONMENT FACILITY

Regional Project

Title: Environmental Management in the Danube River Basin

Number: RER/91/G31/A/1G/31

Duration: Four years

Project Site: Danube River Basin

UNDP Sector: General Development Issues, Policy and Planning

Subsector: Development Strategies, Policies and Planning

**Government
Implementing Agencies:** The governments of Austria, Bulgaria, Croatia, the Czech Republic, Germany, Hungary, Moldova, Romania, the Slovak Republic, Slovenia and Ukraine

Executing Agency: UNDP Office for Project Services (OPS), in association with the World Bank

**Estimated Starting
Date:** July 1991

Government Inputs: In kind (to be determined)

UNDP/GEF Inputs: US \$8.5 million

Brief Description:

The purpose of this project is to create the framework for a long-term solution to the problem of pollution in the Danube River Basin.

The project will form the scientific, institutional, and strategic basis for an action programme for Phase 1 of the Environmental Programme for the Danube River Basin by:

- Collecting data and establishing national and regional databases and information systems

- Providing technical assistance to participating country governments in identifying key problems and developing overviews of the existing situation
- Establishing networks for information exchange among like groups in participating countries, and providing training and institution strengthening
- Developing a strategic action plan for addressing water pollution in the Danube Basin
- Preparing a series of feasibility studies for high priority investments for local and international funding.

A. CONTEXT

1. Description of subsector

The Danube River Basin is in the heartland of south central and south eastern Europe. The river flows for a distance of 2,857 kilometers and drains an area of 817,000 square kilometers, including all of Hungary and Romania; most of Austria, Croatia, and Slovenia; nearly half of the Czech and Slovak Republics; a third of Bulgaria; and significant areas of Germany and Ukraine. Half of the average total volume of water of the Danube (216 cubic kilometers per year) comes from Austria, Croatia and Slovenia. The aforementioned countries are the principal Danube River Basin riparian countries (there are also small areas of the catchment in Albania, Italy, Poland and Switzerland), and are the focus of this project.

Land use in this large basin is highly diversified, including a wide range of agricultural practices, forestry, mining, natural areas, settlements and industries. Throughout its length, the Danube provides a vital resource for drainage, communications, transport, power generation, fishing, recreation and tourism, as well as an ecosystem of irreplaceable environmental value. More than forty dams and barrages have been constructed on the main river and its tributaries.

While this diversity of human activity provides important opportunities for the utilization of the river's resources, it also places great pressure on the environmental quality of the Danube River Basin. Environmental conditions in the area also have a significant impact on the highly polluted Black Sea into which the Danube discharges. Proposals for large-scale investment schemes on the Danube have exposed serious conflicts over alternative land uses, particularly the preservation of ecologically important wetlands.

The difficulty of balancing economic activities with environmentally sound and sustainable management has been thrown into sharp focus in the Danube River Basin. Urban populations are generating pollution through largely inadequate wastewater treatment and solid waste disposal facilities. A serious problem exists in relation to the disposal of industrial wastes into the air and water, and on land within the basin. Of special concern are those wastes

generated by energy, agro-processing, chemical, paper, metal processing, mining and textile industries. In addition, modernization and intensification of agricultural practices and livestock production are major sources of non-point pollution of surface and groundwater.

The critical interdependence of upstream and downstream neighbors for managing the environmental quality of the Danube can be seen at all levels of the basin, and in the important linkages between the Danube River, its delta, and the environmental quality of the Black Sea. Local action to control and manage waste discharges and land use is important, particularly in the case of tributaries with limited discharges. However, the quality and sustainability of environmental conditions in most areas of the basin depend also on the effectiveness of practices adopted and implemented upstream by local and national authorities. Cooperative action at the regional as well as local levels must therefore be one of the guiding principles of sustainable management of the Danube River Basin.

Restructured economies with modern production technologies, appropriate prices for inputs, and less intensive use of energy and raw materials are likely to emerge. This may reduce pollution from ongoing and future production but obviously cannot affect pollution accumulated over the past. It is essential that scarce resources be directed to those pollution problems which are likely to remain priorities even after economic restructuring.

2. Regional strategies

The riparian countries of the Danube River Basin have been participating in environmental management activities on a regional, national, and local level for several decades. At present, they cooperate in matters of navigability of the Danube within the framework of the International Danube Commission, and in a coordinated water quality monitoring programme which is being executed in accordance with the recommendations of the Bucharest Declaration of 1985.

To date, however, no comprehensive regional programme has been developed to address the institutional, technical, and financial constraints to effective environmental management. Within such an integrated management policy, solutions need to be found to well-balanced development, taking into consideration the different functions the river serves.

A regional convention on environmental management in the Danube River Basin is required to complement the Bucharest Declaration and to provide a long-term framework for international cooperation. The riparian countries are presently in the process of negotiating a convention aimed at protecting the environment. This convention is intended to provide for the establishment of a permanent secretariat. The effective implementation of the convention will depend on the necessary institutions, human resources, and financing being available in a timely manner following its ratification.

In the context of various programmes of assistance for Central and Eastern European countries, the idea of launching a series of immediate operational activities to support these

legislative initiatives in the form of a regional environment programme was put forward and supported on several occasions. Of particular note was the strong endorsement given for starting such a regional programme by the European Environment Ministers at the Environment for Europe Conference held at Dobris Castle near Prague in June 1991. In response to this demand, the United Nations Development Programme (UNDP) approved preparatory assistance in order to organize an initial workshop as well as a programme coordination meeting in Sofia in September 1991, with the participation of the cooperating international organizations.

3. Prior and ongoing assistance

Environmental protection and natural resources management are major issues for the rapidly developing programmes of cooperation between the countries of the Danube River Basin and multilateral and bilateral institutions, universities, research institutes, private sector interests and non-governmental organizations (NGOs). Organizations which have financed previous and ongoing studies include the Commission of the European Communities; UNDP; the United Nations Educational, Scientific, and Cultural Organization (UNESCO); the World Health Organization (WHO); and NGOs concerned with wildlife conservation.

At the Sofia meeting for programme coordination it was agreed that a much larger internationally supported Environmental Programme for the Danube River Basin would be planned and implemented in two phases over the next decade. The workplan for this programme was approved in February 1992 at the first meeting of the programme task force.

The objective of the programme is to create an institutional and operational framework, together with a sustainable programme of action, for long-term regional cooperation in water resources and wetlands conservation in the Danube River Basin. The programme would address a number of priority problems, including the integration of environmental concerns into development policy; improving water quality and conservation of key ecological areas; and environmental issues associated with land-use planning, agricultural development, urban management, and the restructuring of industries. Commitments have been made by a number of bilateral and international donors and NGOs, as well as riparian states, to provide funds and contributions in kind for different components of the programme.

The present project constitutes part of Phase 1 of the multi-donor, overall Environmental Programme for the Danube River Basin. The Global Environment Facility (GEF) contribution to the overall programme focuses on institution building and pre-investment activities, and consists of four main elements:

- Collecting data and establishing national and regional databases and information systems
- Providing technical assistance to participating country governments in identifying key problems and developing overviews of the existing situation

- Establishing networks for information exchange among like groups in participating countries and providing training and institution strengthening
- Developing a strategic action plan for addressing water pollution in the Danube Basin.

The objective of this project is to create the framework for developing a long-term solution to the problem of pollution in the Danube River Basin, and for addressing the wider issues of sustainable use and development of the region's natural resources. The project will provide necessary information and the institutional capacity for the overall Environmental Programme for the Danube River Basin.

GEF-funded activities to strengthen institutions and develop human resources will include improving capabilities in environmental monitoring and data management, harmonizing environmental standards and procedures, and promoting the exchange of data and technical information. Pre-investment activities will consist of the development of a strategic action plan, the identification of areas of acute environmental concern, and the preparation of pre-investment studies.

Selected bilaterally-funded activities which require coordination with the programme include: detailed, field-based water quality studies being supported by the Ministry of Traffic and Public Works, the Netherlands; the Infodanube environmental information system being supported by the government of the United States; and the Water and Sanitation for Health (WASH) Project which emphasizes the acquisition of emissions data, being supported by the United States Agency for International Development (USAID). NGO initiatives include the World Wide Fund for Nature's Green Danube Project, the Cousteau Foundation's Living River Project, and a number of others involving the creation of a series of parks and protected areas in the Danube River Basin and Danube Delta.

The present project replaces preparatory assistance approved in April 1991 under UNDP's Regional Programme for Europe (RER/91/002). Three working groups were then established to consider important technical issues requiring regional solutions and harmonization prior to implementation of the Environmental Programme for the Danube River Basin. These three working groups focused on:

- Strengthening data management systems
- Updating water quality legislation: standards, implementation and harmonization
- Evaluating the International Water Quality Monitoring Programme.

The findings of the three working groups were presented at the programme coordination meeting in Sophia in September 1991. Additional outputs of the preparatory assistance included:

- A compendium of information on all Danube-related environmental institutions in the region
- A feasibility study for a data bank on the Danube
- Recommendations on institutions best qualified for the function of overall project coordination in the region, which could also serve as the national focal point responsible for programme implementation
- Information on national and international institutions and organizations that are willing to contribute financially as well as technically to the reduction of pollution in the Danube River Basin
- Danube programme document/s for full project operations with multiple financing by UNDP, the United Nations Environment Programme (UNEP), the World Bank, the European Bank for Reconstruction and Development (EBRD), the European Community, the participating riparian countries, bilateral agencies in the United States (USAID) and the Netherlands, and NGOs.

The three working groups that participated in the programme coordination meeting in Sophia included representatives from many relevant institutions in riparian countries. It is anticipated that these institutions will play a key role in relevant sub-networks, such as database management, standards legislation, and monitoring.

4. Institutional framework for subsector

Pending the establishment of a permanent Danube River Basin Environment Secretariat to coordinate and manage the regional aspects of environmental protection in the area, the programme's management functions will be carried out by a Programme Coordination Unit (PCU). The PCU was established in February 1992 in Brussels under the proposed overall Environmental Programme for the Danube River Basin. The PCU will include staff provided by the major donors to this overall programme. UNDP will fund a GEF Project Manager/Institutional Development Specialist who will serve as a PCU staff member and also manage the training, institutional strengthening, and networking components of this project.

A key factor influencing the implementation of this project is the fact that it is a part of the overall Environmental Programme for the Danube River Basin. The activities under this project will therefore be coordinated with and integrated into the overall programme. To this end, periodic project review and evaluation will be coordinated by the task force (including all national programme coordinators) established under the overall Environmental Programme for the Danube River Basin, which will be responsible for the review of activities programme-wide. The programme is outlined in detail in the Proposed Programme Work Plan approved by the riparian states on February 14, 1992, in Brussels.

A number of additional factors will influence the implementation of this project. These include major changes in the role and structure of the region's governments, existing institutions, and personnel; and severe limitations on the availability of financing in local currency. A flexible and responsive approach to planning project activities, especially those relating to human resource development, will be required as individuals move between institutions undergoing restructuring, and from the diminishing public sector to the expanding private sector.

The project will involve representatives of a substantial number of organizations in the riparian countries due to:

- The regional nature of the problem
- The need for interdisciplinary specialists to evaluate diverse aspects of the problem
- The concern with the development of both institutions and human resources, and pre-investment studies
- The need to coordinate this project with the activities of the overall Environmental Programme for the Danube River Basin, and the various multilateral and bilateral institutions, local governments, and NGOs participating in the larger programme.

Institution building activities will:

- Create a regional network of institutions responsible for the control and management of water in the Danube River Basin.
- Assist management institutions and governments in obtaining technical advice and investments leading to improvement in water quality in the Danube.
- Create a facility for obtaining grants and credits by the participating countries for improved and expanded water quality control installations and analytical equipment.
- Support the development, staffing, and operation of the overall Environmental Programme for the PCU of the Danube River Basin. The PCU will provide an interim management structure for the development and implementation of the overall Environmental Programme for the Danube River Basin.

The project will also coordinate closely with non-governmental initiatives, such as those related to the creation of a series of parks and protected areas in the Danube River Basin and in the Danube Delta. The Regional Environmental Centre in Budapest will play a significant role in coordinating NGO activities and developing networking systems.

National Focal Points and Country Programme Coordinators

Each of the riparian country governments will designate an institution as the national focal point for activity under the overall Environmental Programme for the Danube River Basin. Each such institution will appoint a national programme coordinator to coordinate and manage national participation in the overall Environmental Programme for the Danube River Basin, and to provide technical expertise and information on particular topics. A major role of the focal points will be to canvass the participating ministries, local governments, academic and research institutions, NGOs and the public; and identify priority topics for workshops and networking activities. This project will provide support for and take advantage of the results of these functions of the national focal points and programme coordinators.

Management Structure

- *Programme Coordination Unit and task force.* These bodies, components of the management structure of the overall Environmental Programme for the Danube River Basin, will primarily coordinate and oversee all activities under the overall programme. In performing these functions, the task force and PCU will provide guidance to the GEF Project Coordinator/Institutional Development Specialist, ensuring the project's integration and coordination with the wider activities of the overall Environmental Programme for the Danube River Basin. The Institutional Development Specialist will provide periodic and technical reports to the PCU which will be integrated into the PCU's periodic and technical reports to the task force covering all activities supervised by the PCU. In addition he/she will prepare progress reports as required by UNDP procedures.

GEF Project Coordinator/Institutional Development Specialist. This specialist will be under contract to UNDP and stationed for the duration of the project at the PCU Office in Brussels. He/she will initiate and coordinate all activities under this project, and will coordinate the preparation of periodic progress reports, project management documentation, and materials for the meetings of the task force.

B. PROJECT JUSTIFICATION

1. Problem to be addressed and the present situation

The water quality of the Danube is a major concern. Findings from recent measurements of water quality and the assessment of available data in several reaches of the river have yielded important insights into the regional nature of the problem. The concentration of pollutants in the main stem of the Danube is in general similar to the improved levels currently found in the Rhine, principally because the flow of the Danube is about three times greater than that of the Rhine. There are, however, important exceptions. For example, the concentration of oil is

much higher in the Danube than in the Rhine, as is the case with some heavy metals which create significant public health and ecological concerns. The situation in the tributaries is much more severe and in many cases, the concentration of pollutants greatly exceeds acceptable standards. This reduces the availability of water and results in very high treatment costs for municipal and industrial water supplies, leading to significant ecological damage, and presenting a risk to public health.

The Danube discharges substantial loads of nutrients and non-degradable contaminants into the Black Sea. Because there is little exchange of water between the Black Sea and the Mediterranean, non-degradable contaminants from various rivers, as well as nutrient loads which cause eutrophication and subsequent oxygen depletion, accumulate in the Black Sea. On the coastal shelf, this oxygen depletion increases environmental and ecological problems, including an extensive loss of life-forms in the lower reaches of the water. A total collapse of the Black Sea ecological system as a long-term effect of continuing discharges cannot be excluded. The Black Sea, like the Danube itself, is a regionally important resource, and since it must absorb all of the pollution load of the Danube and several other major river basins, its protection can only be assured through regional cooperation.

Sources of pollution are not well identified and certainly not quantified. International water quality standards, emission limits, and analytical procedures are not well developed. Structures for efficient coordination are lacking both at the technical and management levels. The institutional and scientific bases to decide on investment priorities are also lacking.

Although the number of potential funding sources is quite large, financial resources are limited for investing in new infrastructure, or for modifying, rehabilitating, and modernizing existing infrastructure that could preserve and protect the river basin environment. Hence the riparian countries and the international financial institutions will face important choices in deciding how to allocate their limited resources to produce the greatest overall regional benefit. As well as balancing local needs and priorities with bringing the maximum environmental benefit to the region, the strategy should also be fully integrated with, and reflect the results of, the ongoing economic and industrial restructuring in the central and lower riparian countries. While restructuring may result in reduced pollution loads from heavy industry, energy and mining, significant increases in pollution loads from agriculture, agro-industry and urban solid waste may occur unless preventive action is taken.

2. Expected end-of-project situation

The expected results at the end of Phase I of the multi-donor Environmental Programme for the Danube River Basin, of which the present project is a crucial part, can be summarized as follows:

- A strategic action plan for the Danube River Basin will have been prepared
- Institutional and scientific bases for investment decisions will have been established

- Networks offering both management and technical support for newly established management structures will be functioning
- Main pollution sources (point and non-point) will have been identified, and their impacts quantified
- Pre-feasibility studies for high priority areas will have been prepared and actions taken to initiate investments by multilateral and bilateral sources
- Training facilities will be available
- Programmes to harmonize water quality standards, emission limits, legislation, analytical procedures, and quality control will be defined and in execution
- Important habitats will have been identified and measures to protect them will have been introduced
- Key measures to improve the water quality of the Danube and the western part of the Black Sea will have been initiated.

Informational and other outputs of the project will be made available to the future secretariat of the new Danube convention, and will feed directly into the overall Environmental Programme for the Danube River Basin.

3. Target beneficiaries

Major target beneficiaries include a wide variety of institutions, organizations and population groups:

- *Danube River Basin and Black Sea coast populations.* Currently affected by the polluted state of water in the Danube, these population groups will benefit from pre-investment activities and the institutional development work envisaged under this project, which will serve as the foundation for later activity to reduce pollution in the waters of the Danube Basin. Population groups along the more heavily polluted tributaries to the Danube and along the western shores of the Black Sea will benefit substantially from reduced pollution in these tributaries, and reduced discharges of polluted Danube River waters into the Black Sea. These communities will benefit from improved water quality, enhanced fisheries, recreational opportunities, and strengthened management of natural habitats.
- *Diverse plant and animal populations.* Improved water quality will promote the conservation of a range of ecological habitats. Particular beneficiaries will be the aquatic species found in the Danube and the Black Sea.

- **Tourists.** Visitors to the Danube River Basin and adjacent areas of the Black Sea coast will benefit from cleaner water resources for swimming, fishing, sailing, and skiing, as well as improvements in the quality and quantity of seafood, and in the health of river basin ecosystems.
- **National governments.** Riparian country governments will benefit from better coordination between planning and sectoral agencies, an enhanced understanding of environmental policy issues, strengthened institutions for environmental protection, increased numbers of personnel trained in the disciplines applicable to environmental protection work, and a better understanding of the priority pollutants and pollution sources within their respective territories.
- **Regional and local administrations.** These will benefit from a more effective national institutional framework designed with appropriate vertical and inter-sectoral coordination. Other benefits will result from measures that directly affect organizational development, such as networking or training opportunities, participation in the preparation and subsequently the implementation of investment projects, technical advice on specific technical and policy matters, and better understanding of the priority pollution sources within jurisdictions.
- **National and sectoral environment agencies.** These will gain an enhanced management capacity at the national level to plan, programme, regulate and enforce environmental actions. This will involve, among other things, a better qualified managerial and technical staff, an environmental investment pipeline, targeted environmental financing mechanisms, better coordination and exchange of experience and information across countries through newly established networking arrangements, a more effective organizational structure, an improved environmental database, and legal and regulatory frameworks.
- **Regional and local institutions.** These would include cooperating government technical organizations, universities, research institutes, and private sector organizations which could benefit from both networking arrangements, and the strengthening of national environmental management organizations.
- **Technical agencies and firms.** All such entities concerned with water quality issues in the Danube River Basin will benefit from an increase in investment levels; improved financing opportunities and incentives; increased private sector involvement; improved access to foreign expertise and technology; and better trained manpower.
- **National and regional NGOs.** Non-government bodies and grassroots groups concerned with environmental management and conservation of natural resources will benefit from direct involvement in project preparation and implementation at the national and local levels, from the increased visibility of certain environmental

issues which are the focus of their actions, and from selected financing opportunities for specific tasks.

- *International and bilateral donors and investment banks.* Financing institutions involved in the overall Environmental Programme for the Danube River Basin or in other environmental projects in the region will benefit from activities that strengthen institutional and human resources within the riparian countries, from the pre-feasibility studies prepared to support the development of lending operations, and from the strategic action plan resulting from the project.

4. Project strategy and implementation arrangements

This project's primary objective is to create a framework for the long-term solution to the problem of Danube River water pollution and for addressing the wider issue of sustainable use and development of the Danube Basin's natural resources. This objective will be realized within the framework, and in accordance with the general strategy, of the convention and the agreement currently being developed by the riparian countries. The strategy is based on the following key principles:

- *The approach should protect and enhance environmental values.* The project would thereby contribute to economic welfare and safeguard public health.

The approach should be integrated. To achieve long-term benefit, the Danube River Basin must be seen as an ecological system in which the inter-relationships between air, water, soil, and biological resources within and outside the basin must be considered. A similar interdependence is seen in the complex pattern of economic activities linked together by the river's course.
- *The approach should be participatory.* The project must reflect the priorities of the riparian countries. Each component of the project should emphasize consensus building, information sharing, and joint decision-making among the countries and their local authorities.
- *The approach should be coordinated.* Coordination among the countries and among the international funding sources will be essential because of their interdependence and the large number of projects foreseen throughout the basin. The limited resources that are available must be allocated where they can have the greatest benefit.

5. Reasons for assistance from GEF

Within the context of UNDP's regional programmes for Europe, the issue of pollution of the Danube was first raised in 1986 when preparations were made for the fourth cycle regional programme (1987-1991). The intercountry programme resulting from this exercise was

approved in February 1987 by the UNDP governing council and all beneficiary countries in the region. The programme provided a modest UNDP contribution towards a water quality control project involving the riparian countries. In 1987, a first consultative meeting was held in Laxenburg, Austria, to discuss modalities of regional cooperation for the improvement of water quality in the Danube. However, it did not result in an international agreement involving all the major riparian countries and the project was abandoned.

In 1989, a new initiative was undertaken by UNDP to build a consensus for a modest networking project focused on the riparian countries of Bulgaria, Croatia, Hungary, Romania and Slovenia. The proposal for a water quality management programme was endorsed in the following year by Bulgaria, Croatia, Romania and Slovenia, but other riparian countries remained concerned about the adequacy of proposals which were viewed as too limited in scope to result in a significant improvement in water quality in the Danube River Basin. Issues were also raised with regard to the adequacy of available funding and the proposed management arrangements for implementing a programme which some riparian countries felt could not be based on existing structures.

In the last quarter of 1990, UNDP decided to prepare a new proposal which would expand the scope of the programme and address management issues. In 1991, such a proposal was submitted and approved under the first tranche of projects supported by the GEF. This proposal was adopted by the GEF with a funding level of \$8.5 million in April 1991.

6. Special considerations

This project has been designed to integrate into its immediate objectives, outputs, and activities the environmental aspects of pollution of the Danube River, while ensuring the active participation of NGOs, grassroots organizations, financing institutions, and the private sector. Carefully selected mechanisms will be developed for consultation with participating governments (national and local), NGOs, the private sector and investment agencies (national, multilateral and bilateral). The project will also incorporate a variety of implementation arrangements whereby national institutes, government agencies, NGOs, and private firms will be entrusted with the responsibility for carrying out selected project components.

The political, economic, and administrative restructuring process currently underway in Eastern Europe will result in changes in management systems, the amalgamation of institutions, and the movement of personnel within the new system. This project's design allows flexibility in this regard by strengthening institutions and networking to assist the restructuring process.

7. Counterpart support capacity

The successful development and implementation of the proposed project will involve the participation of the principal riparian states in the Danube River Basin including: Austria, Bulgaria, Croatia, the Czech Republic, Germany, Hungary, Romania, the Slovak Republic, Slovenia and Ukraine.

Each riparian country government will designate a national focal point to coordinate and manage national participation, as well as a programme coordinator who will be responsible for the day-to-day operations of the overall programme within the country. As a part of their functions, these focal points and coordinators will also ensure that work under this project is well integrated and coordinated with all other activities within the overall Environmental Programme for the Danube River Basin.

The participation of representatives of cooperating riparian countries is critical to the success of the project. In particular, the participation of local governments is especially important given their increased responsibilities for environmental management as the result of administrative decentralization which is now occurring in many of the participating countries.

While the long-term commitment of the participating countries is strong enough to sustain the results of the project, special support will be required in the short term to assure operational success during the study phase. This is due to the process of political, administrative, and economic restructuring which is occurring in the region. This may specifically require the underwriting of selected local costs which would normally be provided by the cooperating governments.

It may be necessary to require that the management of host country institutions participating in the project sign a general agreement concerning the retention of trainees for a specified period of time. Similar agreements will be sought with participating private sector organizations, including consulting firms. Legal arrangements will be discussed on a country-by-country basis with the participating riparian states.

C. DEVELOPMENT OBJECTIVE

The long-term objective of the project is the sustainable use and development of natural resources in the Danube River Basin. This objective will be addressed within the framework of the Danube River Basin conventions and related international agreements.

D. IMMEDIATE OBJECTIVES, OUTPUTS AND ACTIVITIES

This project has the following immediate objectives:

- *Immediate Objective 1:* Development of an adequate institutional structure and human resource capacity to effectively plan, coordinate, and manage a long-term regional programme of management of the Danube River Basin at the regional, national and local levels, particularly through the development of a network of technical experts and other authorities involved in various topic areas

- *Immediate Objective 2:* The management, analysis, and further use of reliable data on point and non-point sources of pollution, their causes, and their impacts on the ecology, health, and economies of the Danube River Basin
- *Immediate Objective 3:* Preparation of a series of pre-feasibility studies for high priority environmental investments for local and international funding
- *Immediate Objective 4:* Preparation of a strategic action plan for improved environmental management of the Danube River Basin.

The project supports key objectives of the UNDP regional programme for Europe through:

- Support for environmental protection and natural resources management
- Preparation of high priority environmental investment activities for support by multilateral and bilateral organizations
- Enhancement, through a structured programme of activities, of technical cooperation between developing countries
- Promotion of regional, national and local institutional strengthening
- Provision of significant support for training of local personnel involved in administration, economics, municipal finance, science and technology
- Promotion of the development of the private sector through the participation of local consulting organizations in the preparation of complex pre-feasibility studies for environmental investments
- Direct involvement of non-governmental and grassroots organizations in the development and implementation of a regional project.

IMMEDIATE OBJECTIVE 1

Development of an adequate institutional structure and human resource capacity to effectively plan, coordinate, and manage a long-term regional programme of management of the Danube River Basin at the regional, national and local levels.

Achievement Indicator: A process of continuous assessment of the capacity of participating institutions to carry out associated activities on their own.

Output 1.1

Region-wide network capable of effectively sharing and disseminating information and developing technical approaches to environmental management.

Activities for Output 1.1

- 1.1.1 Identification of key region-wide issues and of affected parties, authorities and experts in each topic area.
- 1.1.2 Convening of workshops.
- 1.1.3 Development of action programmes and establishment of networks specific to each topic area.

Responsible Parties: Riparian state national focal points, regional institutions, and UNDP-funded institutional development specialist.

Output 1.2

Agreed and applied statements of strong institutional mandates.

Activity for Output 1.2

- 1.2.1 Preparation of programmes for institutions to plan, organize, budget and implement routine and special activities.

Responsible Parties: Regional governments, institutions and participating agencies.

Output 1.3

Strengthened regional human resources.

Activity for Output 1.3

- 1.3.1 Raising capital and using it to finance institutions.

Responsible Parties: Regional governments, institutions and participating agencies.

Output 1.4

Staff trained in new policies, procedures and methods.

Activity for Output 1.4

1.4.1 Training of staff through fellowships, group training, study tours and in-service training.

Responsible Parties: Regional and supporting institutions.

Output 1.5

Provision of requisite equipment and systems support.

Activity for Output 1.5

1.5.1 Provision of consultancy services in support of equipment procurement funded by the Commission of the European Communities.

Responsible Parties: Participating national institutions.

IMMEDIATE OBJECTIVE 2

The analysis and further use of reliable data on point and non-point sources of pollution, their causes, and their impacts on the ecology, health, and economies of the Danube River Basin.

Achievement Indicator: A growing body of relevant data of uniformly high quality, used to further activities of the overall Environmental Programme for the Danube River Basin.

Output 2.1

A unified approach for the collection of samples, data analysis, presentation and dissemination.

Activities for Output 2.1

2.1.1 Review of approaches presently in use in various countries.

2.1.2 Discussion and agreement on uniform methods and procedures.

Responsible Parties: Specialists in data collection and database management within participating agencies, working with national focal points.

Output 2.2

Operating programmes for quality control and intercalibration.

Activities for Output 2.2

2.2.1 Agreement on uniform methods and procedures.

2.2.2 Transfer of techniques.

Responsible Parties: Specialists in data collection and database management within participating agencies, working with national focal points.

Output 2.3

Common indicators for assessing economic impacts.

Activities for Output 2.3

2.3.1 Examination of present methodologies and areas for improvement.

2.3.2 Applying new methods and standards.

Responsible Parties: Specialists in data collection and database management within participating agencies, working with national focal points.

Output 2.4

An intercountry data bank for collection and dissemination of information on pollution sources and impacts.

Activities for Output 2.4

2.4.1 Application of common procedures (Activities 2.1-2.3).

2.4.2 Collection, quality checking and computerization of pertinent data.

2.4.3 Development of data dissemination procedures.

Responsible Parties: Specialists in data collection and database management within participating agencies, working with national focal points.

Output 2.5

A database on alternative technologies and approaches to solving the problems faced by each country.

Activities for Output 2.5

- 2.5.1 Application of the common procedures adopted (as above).
- 2.5.2 Collection, quality checking and computerization of pertinent data.
- 2.5.3 Development of data dissemination procedures.

Responsible Parties: Specialists in data collection and database management within participating agencies, working with national focal points.

Output 2.6

A database on proposed technical and capital assistance projects.

Activities for Output 2.6

- 2.6.1 Application of the common procedures adopted (as above).
- 2.6.2 Collection, quality checking and computerization of pertinent data.
- 2.6.3 Development of data dissemination procedures.

Responsible Parties: Specialists in data collection and database management within participating agencies, working with national focal points.

IMMEDIATE OBJECTIVE 3

Preparation of a series of pre-feasibility studies for high priority environmental investments for local and international funding.

Achievement Indicator: The completion of preliminary feasibility studies identifying high priority, viable, and attractive investment opportunities for local and international funding.

Output 3.1

Identification of high priority environmental issues amenable to investment funding.

Activities for Output 3.1

3.1.1 Identification of key issues, and of affected parties and experts in each topic area.

3.1.2 Development of criteria defining viable investment potential.

Responsible Parties: Participating governments; and supporting institutions, agencies and financial institutions.

Output 3.2

Preliminary feasibility studies defining potential environmental investments, outlining the scope, purpose and procedures for their implementation, as well as an evaluation of their viability and potential for success.

Activities for Output 3.2

3.2.1 Development, planning and evaluation of investment programme.

3.2.2 Report preparation.

Output 3.3

Overviews of existing water quality criteria in each riparian country.

Activity for Output 3.3

3.3.1 Review of existing practices and criteria in riparian countries.

Responsible Parties: Participating governments; and national focal points, institutions and agencies.

Output 3.4

Overviews of existing legislation regulating discharges, emissions, and water use in each riparian country.

Activity for Output 3.4

3.4.1 Review of applicable environmental legislation in each country.

IMMEDIATE OBJECTIVE 4

Preparation of a strategic action plan for improved environmental management of the Danube River Basin.

Achievement Indicator: The formal presentation and adoption by riparian states of a strategic action plan.

Output 4.1

Proposals for and adoption of strengthened policies and legislation.

Activity for Output 4.1

4.1.1 Preparation of enhanced policies and legislation.

Responsible Parties: Participating governments; and supporting institutions, agencies and financial institutions.

Output 4.2

Proposals for using economic instruments in environmental management, and new methods to finance capital and recurrent investment costs.

Activity for Output 4.2

4.2.1 Analysis of alternative economic means and financing.

Responsible Parties: Participating regional institutions and supporting financial institutions.

Output 4.3

Enhanced monitoring and enforcement programmes.

Activity for Output 4.3

4.3.1 Review of current and alternative practices.

Responsible Parties: Participating governments, institutions and agencies; and supporting financial institutions.

Output 4.4

Finalized investment priorities and associated pre-investment activities.

Activity for Output 4.4

4.4.1 Review of investment plans and associated pre-investment studies.

Responsible Parties: Participating governments, institutions and agencies; and supporting financial institutions.

E. INPUTS

Inputs to this project will be from two sources: UNDP (representing the GEF), and the participating riparian country governments.

Several activities under the overall Environmental Programme for the Danube River Basin will be jointly funded and carried out by the GEF and by other multilateral and bilateral institutions. Thus, several activities which are described as components of this GEF project may receive inputs both from GEF and other sources.

1. Participating governments

All participating riparian countries will make the following contributions to the project:

- Nomination of a programme coordinator and focal point representing the national government who will be responsible for the development and implementation of a variety of project-supported activities, as well as the coordination of national inputs
- Preparation of national reviews
- Provision of full access to the information required for the preparation and implementation of project activities
- Authorization, subject to adequate prior notification and formal clearance, of site visits by technical experts to support the preparation and implementation of the project
- Provision of office space, meeting facilities, local logistical support and local salaries for administrative, secretarial and professional staff.

The governments of Austria and Germany will fund all their own in-country costs, as well as the cost of their participation in the regional components of the project. For the remainder of the countries, many of which are undergoing economic restructuring and are under severe financial constraints, GEF funds may contribute to cover these costs as necessary. Contributions in kind are expected from several of the Central and Eastern European countries, particularly Bulgaria, Croatia, the Czech Republic, Romania, the Slovak Republic, Slovenia and Ukraine.

2. Global Environment Facility

The GEF has allocated \$8.5 million for this project for the period 1991-95. The project will be implemented by the Office for Project Services (OPS) of UNDP, and by the World Bank.

Support for the development, staffing, and operation of the PCU will be provided by UNDP.

UNDP will help strengthen networks, institutions, human resources, and NGOs by organizing workshops and information exchanges between representatives from the riparian countries and authorities in the health and environment ministries, NGO representatives, and industrial pollution control experts. UNDP will also support subsequent networking and information exchange within these groups. Fellowships, group training, study tours, and in-service training will also be provided (approximately \$2.5 million).

3. World Bank

The World Bank will act as executing agency for the preparation of the strategic action plan, national reviews, pre-feasibility studies of priority areas, and selected regional studies (approximately \$3 million).

The World Bank will also act as executing agency for the preparation of project activities concerning legislation, standards and data management (approximately \$1 million).

The World Bank will provide staff, free of charge, for professional backstopping of the project.

F. RISKS

The risks associated with the implementation of the proposed project are linked to the political, administrative, and economic problems associated with the restructuring process currently underway in a number of participating countries.

Description of risk	Estimated likelihood (high/medium/low)
1. Factors which may at the outset cause major delays or prevent achievement of the project's outputs and objectives:	
(a) Linkage of the project's "technical" programme to the "political" process associated with the new Danube Convention on the Protection of the Danube.	Low
(b) Political disruption in one or more riparian states to the extent that it delays initiation of studies.	High
(c) Economic disruption in one or more riparian states to the extent that it delays initiation of studies due to a shortage of funds to pay salaries or other local currency expenses.	Medium

2. Factors which could over time cause major delays or prevent achievement of the project's outputs and objectives:

- | | | |
|-----|---|-------------|
| (a) | Failure of consultants to maintain their schedules for preparation of reports due to problems in gaining access to field study sites and data. | Low-medium |
| (b) | Economic disruption in one or more riparian states to the extent that it delays preparation of studies due to a shortage of funds to pay salaries or other local currency expenses. | Medium-high |
| (c) | Temporary disruption of the study programme in one or more areas due to coordination problems between cooperating national governments and local/municipal government authorities. | Low-medium |
| (d) | Temporary disruption of both institution building and pre-investment activities in the former Yugoslavia as a result of civil war. | High |

G. PRIOR OBLIGATIONS AND PREREQUISITES

The prior obligations or prerequisites for work to commence on this project are:

- The proposed workplan was approved by the task force at its first meeting on February 14, 1992.
- In early 1992, all participating riparian governments designated an institution to serve as the national focal point for its participation in the overall Environmental Programme for the Danube River Basin and this project.
- In mid-1992, each national focal point designated a national programme coordinator who will be responsible for day-to-day coordination of project activities within the country. He/she will coordinate the activities of participating ministries, local governments, NGOs, and academic and research institutions.
- Each national focal point must name technical specialists who will work on various aspects of the programme, together with their responsibilities and reporting requirements.

H. PROJECT REVIEWS, REPORTING AND EVALUATION

1. Review

The project will be subject to annual tripartite review by the national programme coordinators of the riparian country governments, and representatives of UNDP, UNEP and the World Bank. The first review will take place in October 1992 and will be part of the task force's review of overall progress of the programme. These meetings will review annual Project Performance Evaluation Reports (PPERs) prepared by the GEF Project Coordinator/Institutional Development Specialist as directed by UNDP/OPS. Additional PPERs may be requested, if necessary, during the project.

The overall Environmental Programme for the Danube River Basin task force, supported by the PCU, will also review the progress of the project on a regular basis. Reports to be reviewed by the PCU include the annual PPER as well as quarterly status reports, periodic status reports, and technical reports, as outlined below.

2. Reporting

The GEF Project Coordinator/Institutional Development Specialist will be responsible for the preparation of the annual PPER, as well as periodic status reports and technical reports for submission to the PCU. UNDP Headquarters will also submit annual reports to the overall Environmental Programme for the Danube River Basin PCU. Reports submitted to the PCU will be integrated into the PCU's periodic and technical reports to the task force.

Quarterly Progress Reports

The GEF Project Coordinator will contribute to quarterly reports provided by the PCU containing a description of progress, any problems encountered, and expenditures made during programme execution. A status report on the performance of all consultants supporting the GEF project will also be submitted to the PCU for inclusion in the quarterly reports.

Periodic Status Reports

These reports will be prepared at the request of the PCU for presentation at key meetings associated with this GEF project or with the overall Environmental Programme for the Danube River Basin activities managed by the PCU.

Annual Reports (PPERs)

These annual reports will provide an overview of project activities and expenditures, and will be submitted to both the review committee (task force) and the PCU.

Technical Reports

Technical reports will be submitted to the PCU, and will be required as outputs from the

following project components: national review papers, pre-feasibility studies for priority areas, and the strategic action plan.

Terminal Report

A project terminal report will be prepared for review at a terminal tripartite review meeting. This report will be prepared in draft at least three months prior to the terminal tripartite review meeting to allow review and technical clearance by UNDP.

3. Evaluation

The project will be subject to internal review once a year. The first of these is to take place in October 1992 in coordination with the preparation of the first annual PPER, which will cover project activity through September 1992. Following completion of this and subsequent internal reviews, the PPER will be distributed to the national programme coordinators of the riparian countries for their information prior to tripartite review meetings. The PPERs will also be distributed to members of the PCU.

The final internal project review will begin two to three months prior to the end of operations, at which time the final project report will be prepared for the terminal tripartite review.

This project will also be subject to an independent external evaluation at a time to be agreed with the PCU and programme task force, but not later than the end of the second year.

I. LEGAL CONTEXT

A detailed legal memorandum governing the relations between the GEF, the executing agency, the associated executing agency, and the participating governments is on file at UNDP Headquarters in New York, and can be obtained upon request.

J. BUDGET

The GEF project budget totalling \$8.5 million follows.

PROJECT BUDGET COVERING GEF CONTRIBUTION (in current US\$)

PROJECT TITLE: ENVIRONMENTAL MANAGEMENT IN THE DANUBE RIVER BASIN
 PROJECT NO.: RER/91/G31/A/1G/31

BUDGET LINE	BUDGET ITEM	M/M	TOTAL	1992	1993	1994	1995
10	PERSONNEL						
11.01	Project Coordinator (Institutional Dev.)	36	360,000	40,000	120,000	120,000	80,000
11.51	Consultants (Int.)	45	470,000	95,000	150,000	150,000	75,000
13	Adm. Support		50,000	10,000	15,000	15,000	10,000
15	Travel		400,000	100,000	100,000	100,000	100,000
16	Mission Costs		115,000	40,000	25,000	25,000	25,000
17.51	National Consultants	45	<u>135,000</u>	<u>15,000</u>	<u>30,000</u>	<u>40,000</u>	<u>50,000</u>
19	Component Total		1,530,000	300,000	440,000	450,000	340,000
20	SUBCONTRACT						
21	Pre-feasibility Studies		3,000,000	500,000	1,000,000	1,000,000	500,000
22	Legislation and Standards		<u>1,000,000</u>	<u>200,000</u>	<u>400,000</u>	<u>400,000</u>	
29	Component Total		4,000,000	700,000	1,400,000	1,400,000	500,000
30	TRAINING						
31	Individual Training		800,000	100,000	300,000	350,000	50,000
32	Study Tours		800,000	100,000	300,000	350,000	50,000
33	Group Training		<u>900,000</u>	<u>100,000</u>	<u>400,000</u>	<u>300,000</u>	<u>100,000</u>
39	Component Total		2,500,000	300,000	1,000,000	1,000,000	200,000
40	EQUIPMENT						
41	Expendable Items		40,000	10,000	10,000	10,000	10,000
42	Non-expendable Items		<u>60,000</u>	<u>20,000</u>	<u>30,000</u>	<u>10,000</u>	
49	Component Total		100,000	30,000	40,000	20,000	10,000
50	MISCELLANEOUS						
51	Sundry		40,000	10,000	10,000	10,000	10,000
53	Reports		<u>60,000</u>	<u>15,000</u>	<u>15,000</u>	<u>15,000</u>	<u>15,000</u>
59	Component Total		100,000	25,000	25,000	25,000	25,000
93	OVERHEADS (OPS)		270,000	70,000	100,000	70,000	30,000
99	GRAND TOTAL		8,500,000	1,425,000	3,005,000	2,965,000	1,105,000