



## Global Environment Facility

**MOHAMED T. EL-ASHRY**  
CHIEF EXECUTIVE OFFICER  
AND CHAIRMAN

November 18, 1999

Dear Council Member:

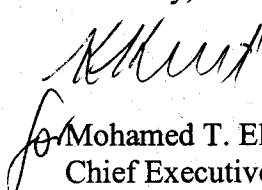
I am writing to notify you that UNDP, the Implementing Agency for the project entitled, *Regional (Russian Federation, Belarus, Ukraine): Preparation of a Strategic Action Programme (SAP) for the Dnieper River Basin and Development of SAP Implementation Mechanisms*, has submitted the proposed project document for CEO endorsement prior to final approval of the project in accordance with UNDP procedures. We have today posted the proposed project document on the GEF website at [www.gefweb.org](http://www.gefweb.org).

Over the next four weeks, the Secretariat will be reviewing the project document to ascertain that it is consistent with the proposal included in the work program approved by the Council in March 1998, and with GEF policies and procedures. The Secretariat will also ascertain whether the proposed level of GEF financing is appropriate in light of the project's objectives.

If by December 16, 1999, I have not received requests from at least four Council Members to have the proposed project reviewed at a Council meeting because in the Member's view the project is not consistent with the Instrument or GEF policies and procedures, I will complete the Secretariat's assessment with a view to endorsing the proposed project document.

If you do not have access to the Web, you may request the local field office of UNDP or the World Bank to down load the document for you. Alternatively, you may request a copy of the document from the Secretariat. If you make such a request, please provide us with your current mailing address.

Sincerely,

  
for Mohamed T. El-Ashry  
Chief Executive Officer  
and Chairman

cc: Alternates, Implementing Agencies, STAP



**United Nations Development Programme**  
GLOBAL ENVIRONMENT FACILITY (GEF)



12 November, 1999

Dear Mr. El-Ashry,

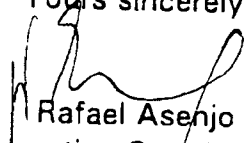
Subject: RER/98/G31/A/1G/31 – Preparation of a Strategic  
Programme (SAP) for the Dnieper River Basin  
And Development of SAP Implementation Mechanisms

I am pleased to enclose the project entitled "Preparation of a Strategic Programme (SAP) for the Dnieper River Basin and Development of SAP Implementation Mechanisms" approved by the GEF Executive Council in March 1998.

As per paragraph 29 and 30 of the GEF Project Cycle, we are submitting this project to you for circulation to the Executive Council Members for comments and, subsequently, for your final endorsement.

Thank you in advance for expediting the review and approval of this project.

Yours sincerely,

  
Rafael Asenjo  
Executive Coordinator

Mr. Mohamed El-Ashry  
Chief Executive Officer  
Global Environment Facility  
Room G6005  
1776 G Street  
Washington, D.C. 20433  
PM

**UNDP-GEF Project Document  
RER/99/G31/A/1G/31**

**Preparation of a Strategic Action Programme (SAP) for the Dnieper River Basin and  
Development of SAP Implementation Mechanisms**

**Revisions to the UNDP Project document per GEF Council Comments**

Canada: The Canadian member, citing the ongoing work of Canada's International Development Research Centre (IDRC) on the Dnieper River in Ukraine, requested that "consideration should be given, among other things, to alternative management approaches for multi-country cooperation, besides the traditional model for implementation...". UNDP, IDRC and the three riparian countries have since engaged in extensive consultations on a coordinated Dnieper basin-wide programme implementation and management structure. As a result, the GEF project has been fully integrated with ongoing and planned IDRC-EMDU Dnieper activities under the umbrella of the jointly funded UNDP-IDRC Dnieper Basin Environment Programme (DBEP). IDRC has taken responsibility for selected components of the UNDP-GEF project in which they bring comparative advantages. Both organizations are represented on the Project Steering Committee. This cooperation has also enabled IDRC to leverage additional Dnieper funding through CIDA.

Canada also requested that the project feature an "agreed approach among participating countries in the region toward capacity building for sustainable management of the basin". Objective 7 of the project includes a number of capacity building activities which have been prepared in consultation with the governments, particularly in the areas of river basin monitoring and basin-wide information management

Ukraine: The Ukrainian government had stated that it "hopes that cooperation with IDRC on this very important project will proceed"; this has been fully accomplished as stated above and described in detail in the project document.

Finland: Finland Council member had noted that a statement in project brief that "current investment priorities in the region may be on things other than environmental concerns" should be considered a potential risk, especially with regard to sustainability of outputs. This comment is acknowledged and reflected in Section VI-3, Risks (p.38). Finland also requested "to see a strengthened role of the riparian states in the Task Force"; senior officials from the environmental ministries in each country are represented on both the DBEP Steering Committee and the more operational 'Joint Management Committee'. In addition, the role of the states in the project has been further strengthened through the creation of interministerial National Project Management Committees (involved in the preparation of National Action Plans) and the broadly represented Dnieper Basin Regional Council

represents one activity designed to facilitate such sustainability. The project also features a number of training and capacity building activities, including supporting a Deputy Project Manager recruited from one of the three countries, with the expectation that the latter would assume a similar, more long-term post if a permanent body was established

United Kingdom: The United Kingdom Council Member requested some clarification on the incremental cost estimates for the project. The descriptive text for the Incremental Cost Analysis (Annex 1 in the brief) was not included in the original submission to the Council intersessional; this is included as Annex X to the project document and includes all the country and other donor data used in the estimation of the baseline.

Ivory Coast, Turkey and Zimbabwe all commented favorably with no requests for modification or clarification.

# UNITED NATIONS DEVELOPMENT PROGRAMME

Regional Project with participation from the governments of:  
*Belarus, Russian Federation, Ukraine*

**Project Budget Number:**

RER/99/G31/A/1G/31

**Project Title:**

Preparation of a Strategic Action Programme (SAP) for the Dnieper River Basin and Development of SAP Implementation Mechanisms

**Project Short Title:**

Dnieper Basin Environment Programme (DBEP)

**Executing Agent:**

UNOPS with IDRC

**Implementing Agent:**

UNOPS

**GEF Implementing Agency:**

UNDP

**Project site:**

Kyiv, Ukraine

**Beneficiary Countries:**

Belarus, Russian Federation, Ukraine

**Estimated Start Date:** December 1999

**Estimated End Date:** December 2002

**HQ PAC Approval Date:** 12 October 1999

**Programme Officer:** Christopher Briggs, GEF Regional Coordinator, RBEC

## Summary of UNDP and Cost-Sharing

UNDP:	Current	Previous	Change
TRAC (1,2,3)			
Other (GEF)	\$6,451,816		
Regional Program			
<b>Cost Sharing:</b>			
Government			
Financial Inst.			
<b>AOS:</b>			
SOF 03 (TRAC)			
PPRR	\$96,360		
Other (GEF)	\$451,824		
<b>Sub Total:</b>	<b>\$7,000,000</b>		
<b>Parallel Financing:</b>			
IDRC	\$1,675,000		
UNDP	\$980,000		
Russia	\$100,000		
Ukraine	\$4,200,000		
Belarus	\$300,000		
<b>GRAND TOTAL</b>	<b>\$14 255 000</b>		

## Classification Information

ACC sector & sub-sector	Primary type of intervention
0400 – Natural resources	
0410 – Water resources planning and development	
DCAS sector & sub-sector	Secondary type of intervention
Primary area of focus/ sub-focus	Primary target beneficiaries
Secondary area of focus/ sub-focus	Secondary target beneficiaries

formulation, review and endorsement process of a Strategic Action Programme; (3) Improve financial/legal/operational mechanisms for pollution reduction and sustainable resource use; (4) Formulation of National Action Plans by Inter-ministerial Committees; (5) Improve conservation of biodiversity in the Dnieper River Basin; (6) Enhance communication among stakeholders and encourage public awareness and involvement in addressing the problems of the Dnieper Basin; and (7) Build capacity for SAP implementation.

This project is part of the GEF Black Sea Basin Strategic Approach. The Dnieper Project is to be executed by UNOPS, with full involvement of specialised UN Agencies where appropriate and with the International Development Research Centre (Canada) acting as partners for the execution of specific components. The partnership with IDRC facilitates continuity with on-going projects in the region and greater leverage of donor funds.

This project document represents the UNDP-GEF contribution to the Dnieper Basin Environment Programme and encompasses the activities of other organisations contracted to UNDP for the purpose of its execution. The total project budget is US\$7,000,000.

<b>On behalf of the Governments of:</b>	<b><u>Signature</u></b>	<b><u>Date</u></b>	<b><u>Name/Title</u></b>
Belarus	_____	_____	_____ _____
Russian Federation	_____	_____	_____ _____
Ukraine	_____	_____	_____ _____
<b>On behalf of:</b>			
UNDP GEF	_____	_____	_____ _____
UNOPS	_____	_____	_____ _____

# TABLE OF CONTENTS

<b>I.</b>	<b>CONTEXT</b>	
	A. Description of the Region and the Sub-sector	5
	B. Host Country Strategies	6
	C. Prior and on-going Assistance directed at the same Sub-Sector	7
	D. Institutional Framework	8
<b>II</b>	<b>PROJECT JUSTIFICATION</b>	
	A. The problem to be addressed: The present situation	9
	1. The need for a Regional Environmental Programme	9
	2. The framework for the revised Dnieper Transboundary Diagnostic Analysis	12
	a) Information gaps and uncertainties	12
	b) Root causes of identified problems	12
	c) Priority areas of future interventions	13
	3. The Strategic Action Programme	13
	B. End of project situation	14
	C. Target beneficiaries	16
	D. Project strategy and institutional arrangements	17
	1. Strategy	17
	2. Sustainability	18
	a) Sectoral commitment	18
	b) Financial sustainability	19
	E. Reasons for UNDP Assistance	19
	F. Special considerations	20
	G. Counterpart support capacity	20
<b>III</b>	<b>DEVELOPMENT OBJECTIVE</b>	<b>21</b>
<b>IV.</b>	<b>IMMEDIATE COMPONENTS, OBJECTIVES, OUTPUTS AND ACTIVITIES</b>	<b>21</b>
	Component I <u>Project Co-ordination</u>	22
	Objective 1      Create a transboundary management regime	
	and co-ordinating body	22
	Component II. <u>The Strategic Action Programme Process</u>	24
	Objective 2.      Assist countries in SAP formulation, review and	
	endorsement process	24
	Objective 4.      Formulation of National Action Plans by Inter-ministerial	
	Committees	26
	Objective 7.      Build capacity for SAP implementation	27
	Component III. <u>Facilitating investment in reducing transboundary pollution</u>	28
	Objective 3.      Improve financial/legal/operational mechanisms for	

<b>V.</b>	<b>INPUTS</b>	<b>35</b>
	A. Government Inputs	35
	B. GEF Inputs	36
	C. UNDP Inputs	36
	D. IDRC Inputs	36
	E. UNIDO Inputs	37
	F. UN-ECE Inputs	38
	G. IAEA Inputs	38
<b>VI.</b>	<b>RISKS</b>	<b>38</b>
<b>VII.</b>	<b>PRIOR OBLIGATIONS AND PREREQUISITES</b>	<b>39</b>
<b>VIII.</b>	<b>INSTITUTIONAL FRAMEWORK, CO-ORDINATION AND ADMINISTRATION</b>	
	A. Institutional Arrangements	40
	1. Regional Institutions	40
	2. National Institutions	41
	3. Project Implementation	43
	B. Co-ordination arrangements	43
<b>IX.</b>	<b>PROJECT REVIEWS, REPORTING AND EVALUATION</b>	<b>43</b>
<b>X.</b>	<b>LEGAL CONTEXT</b>	<b>44</b>
<b>XI.</b>	<b>BUDGET</b>	<b>45</b>
	A. Budget lines	45
	B. Budget description and abbreviated terms of reference	47
ANNEX I	Terms of Reference DBEP PMU and job descriptions for the PMU staff	50
ANNEX II	Organigram of the structure for governance, co-ordination and implementation	55
ANNEX III	Terms of Reference for National Project Management Committee, Steering Committee, Dnieper Regional Council, Joint Management Committee, National Focal Points, Activity Centres.	56
ANNEX IV	Terms of reference for the Working Groups	60
ANNEX V	Details of project components to be executed by IDRC	66
ANNEX VI	Details of project components to be executed by UNIDO and IAEA	83
ANNEX VII	Comparative advantage of IDRC for the execution of specific project Components	87
ANNEX VIII	Role and background of UNIDO	90
ANNEX IX	Acronyms/Abbreviations	93
ANNEX X	GEF Incremental Cost Analysis and Matrix	95



## I. CONTEXT

### A. Description of the Region and the sub-sector

The Dnieper River is the third largest in Europe (after the Volga and the Danube). It drains an area of 509,000 square kilometres and has a total length of 2,200km. The Dnieper is also the second largest river emptying into the Black Sea. It is a transboundary system: 20% of the river basin is within the territory of the Russian Federation, 23% in Belarus and the largest portion, 55%, is in Ukraine. The river has a number of tributaries that cross the boundaries of the three republics: the rivers Berezina, Pripyat, Desna, Psel, Vorska, and the Inhulets. Despite the large proportion of the basin within Ukraine, over 84% (44.8 km<sup>3</sup>) of the water flowing down the river originates from Russia and Belarus. The significance of the river extends beyond its riparian states as it empties into an enclosed international body of water, the Black Sea, shared between six countries (Bulgaria, Georgia, Romania, Russia, Turkey, and Ukraine).

About 33 million people live in the Dnieper basin, 22 million of who live in Ukraine. Ukraine may be considered a “water poor” country and the river suffers heavy abstractions for industry, agriculture and domestic purposes. Of the 44.8 km<sup>3</sup> of water crossing the border into Ukraine, only 8.5 km<sup>3</sup> are discharged into the Black Sea. The flow of about 200 small rivers in the Basin is partially regulated while the flow of an additional 600 rivers (total length of 19,500 km) is fully regulated. Furthermore, the tributaries drain significant industrial and residential centres in Belarus, Ukraine and Russia, creating a vastly complex river-system of high economic, social and environmental value. Highly altered by a long series of reservoirs, the Dnieper is no longer a self-regulating river-ecosystem, and the adjoining hydro-electric facilities, nuclear power stations - including two remaining reactors from the still operating Chernobyl station - and other heavy industrial complexes have caused environmental and socio-economic damage on a region-wide scale. Eight of the fifteen operating nuclear reactors in Ukraine lie within the Dnieper drainage. Apart from Chernobyl on the Pripyat River, there are an additional six reactors in the Zaporozhskaya atomic energy station on the mid reaches of the Dnieper itself. Extensive forest and wetland reclamation for agricultural development and large urban populations with insufficient levels of sewage treatment, further serve to amplify the severe environmental and health problems which greatly impact the ecosystems and inhabitants not only of the Dnieper River Basin, but also of the entire Black Sea region.

The Dnieper basin has been described as a “classic example of unsustainable development” due to the past legacy of trying to convert a traditionally agricultural region into a major industrial one in the space of a few decades. The situation has been complicated by the extreme social and economic difficulties all three riparian countries are facing in the transition to market economies. In the Dnieper Basin, this combination of circumstances has resulted in:

- a high industrial density and urban population;
- intensively farmed areas with a history of over-fertilisation (to compensate for the loss of agricultural land due to urban, mining and industrial development) but with little current use of agrochemicals but severe erosion and falling productivity

- industrial accidents, the most notorious being the 1986 Chernobyl nuclear disaster which led to the contamination of vast areas of eastern and northern Europe with radioactive fall-out;
- frequent accidental spills of contaminated wastewater into the river, and on occasions, into the drinking water system; and
- treatment or partial treatment of only 45% of wastewaters.

For the river itself, the above situation has resulted in severe deterioration of its quality. There are often high concentrations of nutrients, BOD, bacteria, heavy metals and toxic organic contaminants, which result in a water quality classification of “poor” to “unacceptable”. The presence of many dams has resulted in the accumulation and frequent resuspension of highly contaminated sediments and their transport downstream; and the development of nuisance algal blooms and their consequent production of toxins, anoxia and massive fish kills. In the case of the Chernobyl accident, large quantities of radioactive caesium were deposited into the sediments of the reservoirs (most notably the Kievskoye and Moriyevskoye reservoirs close to Kyiv) leading to a significant risk of exposure to radioactivity, both locally and downstream in the Black Sea.

For the natural environment and its human population, the consequences of the deterioration of the Dnieper are considerable. The absence of reliable supplies of safe drinking water is one of the more obvious consequences. Less obvious is the threat to other species and their habitats. For example, 69 of the 164 animal species in the Ukrainian Red Data Book (of endangered species) inhabit the Dnieper Basin, 5 of the fish within the Dnieper itself. The integrity of the Dnieper wetlands is particularly important for the conservation of these species.

Many of the consequences of the environmental degradation in the Dnieper basin are transboundary in nature. The break-up of the former Soviet Union resulted in new societal divisions and different economic and political objectives and strategies amongst the newly independent riparian states. As mentioned earlier, the Dnieper also discharges to the Black Sea and from there to the Mediterranean. The present project focuses on the transboundary aspects of management of this system within the framework of the GEF International Waters Focal Area.

## **B. Host country strategies**

The three riparian countries have expressed their commitment to the protection of the Dnieper Basin in a number of programmes and projects. Each country has special government structures for environmental protection namely:

- Belarus: Ministry of Natural Resources and Environmental Protection;
- Russia: State Committee on Environmental Protection;
- Ukraine: Ministry of the Environment and Nuclear safety

In addition to these structures, there are complex arrays of other government agencies which have special responsibilities related to the aquatic environment such as the Hydro-meteorological services, Ministri

have additionally prepared draft national strategies to further the development of the Strategic Action Plan formulation process. Ukraine and Russia already have an inter-governmental agreement regarding cooperation in the management of shared transboundary watercourses such as the Dnieper, and Russia and Belarus are presently formulating a similar agreement.

Other stakeholders in each of the countries are organising themselves in a way that permits a more concerted approach towards participation in environmental management initiatives. Both Russia and Ukraine will shortly be the sites of Regional Environmental Centres. These initiatives, with considerable donor support, will support the work of Non Governmental Organisations including those pertaining to the private sector. It is hoped that the interests of NGOs in Belarus can also be supported in a similar manner in the near future.

On 1 July 1996 in Helsinki, the three Ministers of Environment (Belarus, Russia, Ukraine) signed a letter expressing their intention to provide resources and participate equally in the development of a project for the Dnieper environment. This was a clear statement of commitment by the governments of the region and shows the intention of working together towards clearly defined common goals.

### **C. Prior and on-going Assistance directed at the same Sub-Sector**

The three riparian nations convened in 1995 and agreed upon a memorandum, which requested UNDP assistance in the development of a GEF Environmental Management Program for the Dnieper River Basin. As a result, a PDF-B grant was made with UNDP as the implementing agency and signed on 23 March 1996 (RER/95/G42/A/1G/31). The first Task Force meeting for planning the work was held in July 1996 in Kyiv. This meeting, together with the establishment of a Project Co-ordinating Council, marked the start of data compilation for the Transboundary Diagnostic Analysis of the Dnieper.

The Transboundary Diagnostic Analysis (TDA) was the main outcome of the PDF-B funding. It was completed with the support of the previously cited Project Task Force. This consisted of three Chief National Experts, six experts from all three countries and an international expert assigned by the United Nations Environment Programme (UNEP). By a decision of the Project Co-ordinating Council in January 22-23, 1997, it was agreed to submit the TDA in two parts: (1) *A Tri-national Integrated Report*, representing a regional overview of the environmental issues facing the three riparian countries. The 122 page report was compiled in Russian with an English translation at the Ukrainian Scientific Centre for water Protection, in Kharkiv (January-March, 1997). (2) The 50 page *Synthesis Report*, presenting an executive summary, rationale for the subsequent GEF project and highlights of the integrated report, which was prepared by the UNEP expert, working from the Canada Centre for Inland Waters, Burlington, Canada, February-March, 1997.

The TDA and preliminary SAP processes during the project preparatory phase led to recommendations for improvements and restructuring of the system for institutional capacity building and the establishment of a

the auspices of its Office for Central and Eastern Europe Initiatives. Early in 1994, OCEEI started a 4.8 million CAD program funded by the Canadian Government entitled Environmental Management Development in Ukraine (EMDU). The suite of activities focussed on the rehabilitation of the Dnieper River Basin and pursued a multi-disciplinary approach to environmental management capacity building in relevant Ukrainian ministries, research and educational institutions, and NGOs. Phase 2 is managing 4.2 million CAD from CIDA and is slated to run through 2000. The goal of the second phase continues to be to support and to strengthen environmental reforms in Ukrainian institutions and industry and to heighten environmental education and awareness among scientists, decision-makers, and the general population. Objectives are to provide aid to the Ministry of Environmental Protection and Nuclear Safety and other government agencies, research institutes, industry, and NGOs working on environmental issues, and identify and overcome impediments to better environmental protection activities by building up technological, organisational, regulatory, methodological, and managerial preconditions for improved efficiency of municipal utilities and cleaner production in the Ukrainian industrial complex. The Programme also fosters linkages between standards and activities at the national level and their application at the local and industrial levels.

The above initiatives represent the most significant activities in support of the transboundary Dnieper Basin environment. However, there are a large number of national bilateral assistance projects that have a direct impact on the ultimate success of the regional programme. Amongst these, it is worth noting: (1) the work of the International Atomic Energy Agency, largely focussed on the issue of monitoring remedial action following the Chernobyl catastrophe; (2) the work of the Swedish International Development Aid in improved management and operation of the Dnieper reservoirs; (3) the projects of GEF within the Biological Diversity Focal Area (World Bank Portfolio for Ukraine); (4) projects designed to support the integration of Regional Environmental Centres in Russia and Ukraine (largely through funding from EU-Tacis and US-AID); (5) wetlands protection and restoration projects, *inter-alia* by Wetlands International and the UK Darwin Initiative.

At the multi-country level, the GEF Implementing Agencies have developed a Black Sea Basin Strategy that offers better co-ordination of the International Waters projects within the 17-country Black Sea Basin to achieve the goals defined by the GEF International Waters Operational Programme. The projects within this strategy currently include the Danube Basin Project (from 1992), the Black Sea Project (1993), the Danube Delta project (1994) and the present Dnieper Basin project. Currently Ukraine is a beneficiary of all four of these projects and Russia of one of them (the Black Sea). Belarus has not previously received assistance as part of this co-ordinated approach. In most cases, the GEF projects are part of wider multi-donor programmes. The main co-lateral donor in the case of the Danube and Black Sea has been the European Union through its Phare and Tacis programmes.

#### **D. Institutional Framework**

There is currently no common institutional framework for co-ordinated actions on the Dnieper by the

the Dnieper emphasises the need for a new transboundary institutional framework. It recommends the establishment of an “International Joint Commission for the Dnieper Basin”. It suggests that countries should subscribe to “appropriate international agreements” and establish a co-ordinating body that takes advantage of the know-how and experience from other successful environmental rehabilitation projects in river basins elsewhere.

Establishment of an international co-ordinating body is one of the keys to sustainability of the current project but is a process that should be initiated by the riparian countries themselves without outside interference. The relationship between the present project and this anticipated development will be described in a later section.

## **II PROJECT JUSTIFICATION**

### **A. The problem to be addressed: The present situation**

#### **1. The need for a Regional Environmental Programme**

As indicated in Section I. A., the Dnieper Basin may be considered to be suffering severe environmental degradation. There are large arrays of problems, often antagonistic, which contribute to this situation and are symptomatic of a legacy of unsustainable development. Many of these are described in detail in the existing Transboundary Diagnostic Analysis. Their complete solution will require a profound reform in the pattern of usage of natural resources with a move to increased productivity for decreased resource use characteristic of those market economies which place a high value on conserving the natural environment. The present proposal however, focuses on one aspect of the problem, the transboundary management of the river basin with the objective of protecting international waters regionally and globally. It is necessary to recognise those problems which must be resolved by national efforts (using bilateral assistance where appropriate) and result in benefits for the individual country concerned, and those for which additional assistance will be needed and which benefit the entire region of the downstream countries in the Black Sea and beyond. The GEF is an appropriate mechanism for addressing these additional (or “incremental”) costs but, by working closely with other donors, it will be possible to lever a broader base of funding which will assist countries to resolve the strictly national “baseline” problems upon which the “incremental” costs are built. The present section will focus on the need for the regional programme from the perspective of the GEF International Waters Focal Area.

The existing TDA highlights the following transboundary issues in the Dnieper Basin:

#### *Transboundary problems within the basin*

1. All three zones of the basin are heavily industrialised and urbanised, with large areas of intensive agriculture characterised by overuse of fertilisers and pesticides.
2. Over 200 million cubic metres of inadequately treated wastewater – heavily polluted by BOD, oil products, ammonia, heavy metals, and suspended solids – are carried annually from the Russian

and over 1,000 tons of heavy metals. All these loadings result in water concentrations that exceed the maximum allowable concentrations (MAC) the government has set by 100% to 1,900%, with resultant threats to the Dnieper ecosystem and public health.

4. Radioactive sediments from the Chernobyl fall-out are carried by tributaries downstream and accumulate in the large reservoirs of the region.
5. The Dnieper reservoirs are at an advanced stage of the eutrophication process and experience frequent periods of heavy blooms of toxic blue-green algae, which result in severe oxygen deficiencies in the water.

### *Transboundary problems affecting the Black Sea (and beyond)*

6. The Dnieper carries into the Black Sea 99,640 tons of BOD, 86 tons of phenols, 1,305 tons of oil products, over 20,000 tons of nitrogen (as ammonia, nitrate and nitrite) and similar amounts of heavy metals (iron, copper, zinc and chromium). All of these pollutants exceed the MAC.
7. The high input of nutrients from the Dnieper is accelerating the eutrophication process in the Black Sea and, as a result, degradation of bottom-dwelling fauna due to frequent periods of oxygen deficiency.
8. Rapidly increasing salinity of the seawater<sup>2</sup> as a result of reduced flows from the Dnieper (unsustainable water consumption by industries and irrigation systems in the highly developed Lower Dnieper area) endangers indigenous fish and shellfish populations.
9. Exotic species of blue-green algae are transported by the Dnieper from the Kakhov Reservoir, creating heavy nuisance blooms in the near-shore areas and on the beaches.

### *Protection of biological diversity*<sup>3</sup>

10. \*Forestation of the Upper Dnieper Basin has fallen to only 25% of the total area, from 75-80% a century ago. Urban and industrial areas have grown rapidly.
11. In the Pripyat River Basin (a tributary of the Dnieper) large-scale land drainage operations – designed to provide new arable soil – extend to 20-50% of the area .
12. \*The most vulnerable biota are found in the forest and steppe communities, many of which are expected to continue towards extinction. The pattern of distribution of plant species and the structure of forests have also changed significantly.
13. \*Unsustainable industrial and agricultural developments devastated the region. Open pit mines, non-mineral quarries, solid waste and abandoned military sites now dominate the landscape of Zone 1 (Russia and Belarus).
14. Many animal and fish species are endangered or have become extinct in both the Dnieper and Black Sea coastal areas.
15. \*The diversity and productivity of meadowland species is decreasing at an alarming rate.
16. In drained areas, eutrophic swamps have been replaced by weed grasses,
17. \*In Ukraine, only 4.8% of the total area is protected under nature reserves. The steppe zone is the least protected.
18. \*Use of meadows as pastures has further reduced biodiversity in the whole basin.

19. 33 million people drink water from the Dnieper, its reservoirs and tributaries; the river is the main source of drinking water for the region.
20. The health of the human population has been adversely affected by many environmental factors. Impacts in Zone 1 are primarily due to radioactive fall-out from the Chernobyl accident in 1986. Since then the mortality rate increased by 15%, mostly due to thyroid cancer.
21. Average life expectancy is 68 years – one of the lowest in Europe.
22. 40% of drinking water extraction sites in Zone 1 do not meet quality requirements.
23. In Zone 2, frequent disruptions in water treatment operations, poor sanitary conditions near the intakes or in the plants, and ineffective disinfection are common. Drinking water after treatment often does not meet the standards.
24. The most frequent water contaminants are oil products, phenols, organic compounds, pesticides, heavy metals and pathogenic bacteria.
25. The poor quality of drinking water poses a constant threat of large-scale outbreaks of epidemics: In 1994 alone, 1527 cases of cholera, 845 cases of viral hepatitis A, and 1527 cases of enteric fever were reported.

#### *Institutional problems*

26. The current economic recession and loss of government revenues has resulted in drastically diminished funding of central and regional governments, universities and Academy of Science laboratories. Many environmental research projects have been halted or became inactive because of the lack of funding.
27. Monitoring programmes on the Dnieper and its tributaries have been disrupted for the same reason. There are serious gaps in the monitoring database.
28. Laboratory equipment – with none or an extremely limited replacement rate – has in many instances become obsolete and in urgent need of upgrading. Modern, up-to-date, automated and computerised instrumentation is beyond the reach of the institutes' budgets.
29. The level of knowledge, professional expertise, and dedication of researchers and technical support staff is high. The issue is one therefore of rebuilding from scratch, rather than true capacity building.
30. The isolation and limited contact with the science community abroad has stunted professional development and the incorporation of new technologies to the field.

The above issues formed the key conclusions of the TDA conducted under the PDF-B phase of the project. Funding was insufficient to make a more comprehensive study that examined social and economic issues and the need for a more intersectoral approach towards managing the Dnieper. This was widely recognised however in subsequent workshops, as the preparatory process for the present project advanced. It was clear that many problems could only be resolved by a concerted approach that brings together the key stakeholders from all three countries, especially those engaged in diverse aspects of managing the basin itself. Quite simply, it would not be politically realistic for any single country in the Dnieper basin to tackle problems such as nutrient reduction without similar or complimentary actions being taken by its neighbours.

To summarise, the need for a new Transboundary Institutional Framework focuses on the establishment of an effective management and coordination regime with effective intergovernmental agreements, regulations, information exchange, an emergency warning system, as well as broad stakeholder participation. It also advocates the establishment of an International Joint Commission for the Rehabilitation of Critical Areas (including Dnieper hotspots); and it promotes the creation of new environmental policies using "ecosystem, sustainable development, and interdisciplinary approaches."

## 2. The framework for the revised Dnieper Transboundary Diagnostic Analysis

The TDA uses the best available verified scientific information. The TDA examines the state of the environment, the root causes for its degradation and the needs for remedial and preventative actions, including capacity building. It focuses on the transboundary issues without ignoring national concerns and priorities. It identifies information gaps, policy distortions and institutional deficiencies. The analysis should be cross-sectoral and examine national economic development plans, civil society (including private sector) awareness and participation, the regulatory and institutional framework and sectoral economic policies.

### *a. Information gaps and uncertainties*

A major difficulty encountered during the development of the current TDA was the lack of recent information on the state of the river and the uncertain reliability of earlier data sets. Most data on chemical contaminants for example, is unsupported by quality assurance standards or is obtained with equipment and techniques which are known to give very imprecise results. This can result in "false positives" for some contaminants and the complete absence of information for others. The frequency of measurements in recent years has been so irregular that the load calculations (tons of pollutant discharged to the Black Sea per year) may be off by as much as an order of magnitude.

Complicating matters more, the economic situation in the Basin has led to the closure of a large number of industrial plants and difficulties in regulating the emissions of others, particularly the mining industry. There is a need to set up mechanisms for assessing the discharges from all point sources, linked to the regulatory framework in each country. This data should be openly available.

At present, there is no common and accessible system for gathering and managing information on the Dnieper system. Such a system or network needs to include data on sources, levels and effects of pollution, ground water data, public health data, information on the river flux itself, information on land use and the status of protected areas, and relevant social and economic data. The gathering of such data will be a prerequisite for the application of modern river basin management methods and the analysis of priorities for action (during the Strategic Action Programme process).

There is a clear need for revising and updating the Dnieper TDA. Such a revision should include the development of a "State of the Dnieper" report. The TDA itself should be a concise document that can be



that demonstrate and summarise, in a stepwise manner, the linkages between problems and their underlying or 'root' causes. Uncertainties accompanying each linkage should be clearly stated. The analysis also permits barriers to resolving the problems to be investigated.

The existing TDA does not examine the root causes of the environmental problems of the Dnieper in a systematic manner. The completion of such an analysis will be useful as a tool for setting priorities within the SAP. It will also help to identify all of the stakeholders that must be engaged in effective management solutions.

The methodology required for the identification of social and economic root causes is currently being refined as part of another GEF Project – the Global International Waters Assessment. By maintaining close links with GIWA, the analysis will be fully compatible with similar activities developed in all major catchments world-wide and will benefit from similar analyses conducted elsewhere.

### *c. Priority areas of future interventions*

The TDA has a specific function for the GEF International Waters Programme. It is a mechanism for identifying priorities for subsequent GEF interventions. It will be important to distinguish carefully those issues that can be addressed within the context of the GEF Operational Programmes when making the final summary tables. This will facilitate the preparation of future submissions for funding. Within the context of the Black Sea Basin Strategic Approach however, transboundary problems already recognised as requiring interventions are the excessive discharge of plant nutrients to the sea (nitrogen and phosphorus compounds), and the release of certain persistent contaminants, notably radionuclides, oil and some persistent organic contaminants. The type of intervention considered as appropriate will be determined by following the Dnieper causal chain and assessing priorities on the basis of the greatest reduction of the transboundary contaminant per unit cost of GEF support.

## 3. The Strategic Action Programme

This section considers why the development of a Strategic Action Programme is an appropriate action for improving the state of the Dnieper Basin environment and reducing the transboundary consequences of environmental deterioration. The Strategic Action Programme (SAP) is a negotiated policy document, endorsed at the highest level of all relevant sectors, which establishes clear priorities for action to resolve the priority problems identified in the TDA. The SAP should carefully discern the priority transboundary issues. The concerns should be matched with proposed sectoral interventions (policy changes, regulatory reform, investment requirements, capacity building, public awareness development, and stakeholder participation). The interventions should incorporate preventative and remedial actions, in keeping with common principles underlying sustainable development, including the precautionary principle, the polluter pays principle, the user pays principle, transparency of information and full stakeholder participation. Care must be taken to cross-check the proposed measures against existing national and regional environmental action plans, regional conventions and GEF interventions in other focal areas; the intention is to build upon existing processes and agreements where possible. This approach should also

## B. End of project situation

The end of project situation may be summarised as follows:

1. A number of *thematic reports* will have been published on issues directly related to transboundary management of the Dnieper. These will include
  - a ‘State of the Dnieper’ report based on existing information, supplemented by new studies conducted within the scope of the Project;
  - feasibility studies on the use of economic instruments (for municipal and industrial control of transboundary pollutants);
  - evaluations of improved practices for managing agricultural waste from intensive animal husbandry;
  - evaluations of the regulatory system for pollutant discharge compliance and polluter responsibility;
  - review of Environmental Impact Assessment policies and practices;
  - management review of holding ponds for industrial waste;
  - review of waste management guidelines and practices for nuclear facilities and disposal sites;
  - an assessment of operational capacities and practices regarding the transboundary environmental consequences of water abstraction and water returns from treatment plants;
  - an assessment of Dnieper protected areas, priority ecosystems, biodiversity hot spots and the legal, policy and institutional framework for Dnieper basin biodiversity protection;
  - assessments of agricultural practices and fisheries and aquaculture in relationship to biodiversity conservation (and the reduction of downstream transboundary impacts);
  - a social and economic assessment of the effect of transboundary pollution on the basin’s population.
2. A revised and *updated Transboundary Diagnostic Analysis* will have been published incorporating new information on pollution sources, levels and effects, and socio-economic indicators of the root causes of environmental degradation in the region.
3. An analysis will have been made of the *options for improving the transboundary Dnieper Environment*. These will include the identification of gaps in existing institutional capacity; ways of improving stakeholder participation; identification of necessary investments for eliminating transboundary pollution ‘hot spots’; feasibility studies for the use of new economic instruments; options for improving laws, regulations, licensing and enforcement systems; recommended improvements in practices for reducing waste discharges with transboundary consequences; recommended reforms in the application and conduct of environmental impact assessments; options for reforms for biodiversity protection (including agricultural and fisheries reforms).
4. A regional *strategy for protecting key habitats and species* in the Dnieper Basin (including the identification of prioritised investment projects to protect wetlands important for biological diversity and for limiting the discharge of contaminants, including nutrients, to the Black Sea).
5. A *Strategic Action Programme* will have been endorsed at the Cabinet level in all three countries. This should detail a series of legal, policy and institutional reforms, investments or

Management Committee to regularly oversee project management, and a fully functional Programme Management Unit for the day-to-day co-ordination of the project. National administration will include National Project Management Committees and National Project Management Offices.

8. The three countries shall have established a number of **thematic activity centres** which share roles coordinating training, information exchange and capacity building in support of the SAP process (at least one in each country).
9. The three countries will have a functioning **Dnieper Regional Council** to include representatives of all Dnieper Oblasts, representatives of relevant ministries, the project implementation unit and various representatives from the civil society including scientific institutions, private sector and NGO representatives. The Council shall have specific functions assigned by the SAP and shall meet at least annually.
10. Sufficient institutions will have been provided with **equipment and training** in order to monitor the state of the Dnieper environment and the effectiveness of the implementation of the SAP.
11. A regional **Dnieper River Basin environmental database** will have been created with on-line user capacities.
12. **Pilot projects** will have been completed in:
  - the use of economic instruments in municipal and industrial pollution control and reduction;
  - management of industrial waste from intensive animal husbandry.
13. A **Priority Investment Portfolio** will have been prepared and pre-feasibility studies completed. This, together with the SAP, may lead to the **identification of subsequent GEF interventions** in the form of investments addressing transboundary priorities.
14. A **Donor Conference** will have been held in which donors were identified for the SAP baseline and the Priority Investment Portfolio priority activities.
15. Countries shall be at an advanced stage of implementation of the co-ordination/co-operation principles stipulated by the **UN/ECE Helsinki Convention on Transboundary Water Bodies**.
16. The Project should have made a substantial contribution toward the **dissemination of information to all stakeholders, including the general public** regarding the state of the Dnieper, the options for improving the situation, the rights and responsibilities of the public for participation in the solutions and the decisions of governments for approving and implementing the SAP and NAPs. The means for achieving this will have been through electronic postings (World-Wide Web) and improved internet access (practical support to selected stakeholders), the publication and wide dissemination of a jargon-free accessible version of the TDA/SAP in local languages, newsletters published by the project and by NGOs and regular stakeholder consultations.
17. A successful **public awareness and environmental education campaign** should have been completed which, in addition to the information mentioned above, should have resulted in participatory regional events reported in the local media and in the development of environmental curricula in schools in the Basin.
18. The NGOs and other community-based organisations in the region should have developed a deeper involvement in transboundary Dnieper environmental issues, as evidenced by the formation of an **active network** (meeting twice annually) and the successful completion of

### **C. Target beneficiaries**

The primary target beneficiary of this project is the population of all three Dnieper countries, in particular the population which lives in the Dnieper Basin. The Basin population should benefit from a more active role in the management of the Dnieper Basin and from the implementation of a co-ordinated programme of improved policies, regulatory tools and investments for improving its management. These in turn, are expected to lead to improved water quality, rehabilitation of the renewable natural resources of the River, protection of its biological diversity and protection of human health. It should provide better opportunities to present and future generations to use the Basin environment in a sustainable manner and to develop a sounder basis for economic development. Populations in the coastal zone of the neighbouring Black Sea should also benefit from major economic, social and ecological benefits of the decrease in eutrophication and chemical pollution of the Sea.

In the short-term, governments and institutions will benefit from institutional strengthening as a result of networking, training programmes and the provision of key items of equipment and in particular from the development of NAPs. Proper environmental assessments and pre-investment studies should facilitate the release of vital credits for improving waste management and for stimulating the development of key sectors.

The direct recipients of the project objectives will be:

- Governments of the region;
- National Focal Points;
- Regional scientific and technical organisations concerned with environmental quality and management/rehabilitation of natural resources;
- National, local and municipal governments in co-operating countries;
- Technical organisations, universities, research institutes and private sector organisations (tourism, agriculture, fisheries, oil and gas industry, environmental consultancy firms, etc. in coastal states; and
- Non-governmental organisations and community-based organisations, including schools, concerned with environmental protection and sustainable development.

The target beneficiaries will be:

- the resident population of the Dnieper Basin who will benefit from improved water quality and supply, enhanced fishery resources, recreational opportunities and strengthened protection and management of natural habitats;
- the coastal population of the Black Sea who will benefit from improved fisheries, tourism, recreational opportunities, and ecosystem and public health; and
- future generations of the human population both within and beyond region who will benefit from the opportunities created by the conservation of biodiversity in the region - the present project enables the present generations to respect the rights of future ones instead of transferring th

## **D. Project strategy and institutional arrangements**

### **1. Strategy**

The project strategy closely follows that described in the GEF International Waters Operational Strategy<sup>6</sup> For the projects destined for Operational Programmes 8 and 9 (Waterbody based operational programme and, Integrated land and water multiple focal area programme), the first step is one of joint fact-finding through a mechanism called the Transboundary Diagnostic Analysis (TDA). The TDA uses the best available verified<sup>7</sup> scientific information. It examines the state of the environment, the root causes for its degradation and the needs for remedial and preventative actions, including capacity building. It focuses on the transboundary issues without ignoring national concerns and priorities. It identifies information gaps, policy distortions and institutional deficiencies. The analysis should be cross-sectoral and examine national economic development plans, civil society (including private sector) awareness and participation, the regulatory and institutional framework and sectoral economic policies. Though a first version of the TDA was prepared during the PDF-B phase of the project, it is necessary to deepen the analysis and to obtain new data on the state of the Dnieper environment in order to apply the results to the improved management of the system.

Having agreed on the current information base, the next step is to develop and negotiate a Strategic Action Programme (SAP). This is a negotiated policy document, endorsed at the highest level of all relevant sectors, which establishes clear priorities for action to resolve the priority problems identified in the TDA. The SAP should carefully discern the priority transboundary issues. The concerns should be matched with proposed sectoral interventions (policy changes, regulatory reform, investment requirements, capacity building, public awareness development, stakeholder participation). The interventions should incorporate preventative and remedial actions, in keeping with common principles underlying sustainable development, including the precautionary principle, the polluter pays principle, the user pays principle, transparency of information and full stakeholder participation. Care will be taken to cross-check the proposed measures against existing national and regional environmental action plans, regional conventions and GEF interventions in other focal areas; the intention is to build upon existing processes and agreements where possible. This approach should also subsequently facilitate baseline identification.

In the case of the Dnieper Basin, the strategy will involve the necessary building of an institutional capacity for joint assessment and management of the river and its catchment area. The emphasis throughout the project will be on the optimal use of existing national institutions and skills. The use of foreign consultants will be reduced to a necessary minimum and their work will be focused on transferring skills which are currently lacking in the region or for updating local specialists in the use of new techniques, equipment or policy tools. The current project uses a blend of specialised international agencies in order to provide the most cost-effective technical support to the riparian countries (see section F. below).

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<sup>6</sup> GEF International Waters Operational Strategy, GEF/UNEP, 1997.

<sup>7</sup> Ibid.

The project strategy will identify incremental costs for possible subsequent GEF interventions as well as assisting the countries to lever financial support for “baseline” actions (necessary national investments or policy changes upon which the GEF support may be built).

In the context of the current GEF International Waters Portfolio, this project will be a component of the Black Sea Basin Initiative, which consists of a co-ordinated array of projects within the Black Sea Basin, an area with a population of over 160 million people living in 17 countries. The protection of the Black Sea is one of the objectives of each of these component projects. For this to happen, particular attention will be paid to the control of excessive discharges of nitrogen and phosphorus compounds which have contributed to the demise of the Black Sea ecosystem, and to the control of all other persistent pollutants that damage the integrity of the marine ecosystems in the Black Sea and beyond and threaten human health throughout the Basin.

## 2. Sustainability

### *a. Sectoral commitment*

Sustainability has been a major issue throughout the project development phase. The project objectives and strategy have been carefully developed to take into account the social and economic realities of the riparian countries of the Dnieper. There have been a number of consultations with all relevant parties, particularly on the institutional arrangements and their longer-term sustainability. Finally, multi-party consultations were held in Kyiv in February 1999, under the auspices of UNDP, followed by a series of IDRC missions to all three countries to assess the level of commitment and to clarify any remaining misunderstandings.

It is clear that the strategy agreed and presented within the present document requires a long-term commitment by the countries of the region to establish new institutional structures and to maintain them following the closure of the project. It also requires that the SAP sets realistic goals that can be attained without long term donor assistance. The countries have agreed in writing to the institutional structure presented in this document. The structure itself builds on existing mechanisms where possible and on maintaining a consensus between all stakeholders throughout the process of developing the SAP.

There is little difficulty to build a consensus between similar sectors in the three countries. The real challenge is to build a consensus across sectors. For this purpose, it is necessary to establish common environmental objectives and practical goals for achieving them. The process starts with the common objectives (it has already started with the creation of the Project Brief itself). Agreement moves by small steps within the comprehension of the Parties but which mesh together in their movement towards a common objective. Thus there will be important discussions on methodologies, standards, data distribution in order to create the information necessary for politicians and the public in general to make necessary management choices for attaining each goal. The concept of choices is important to develop - each option is associated with an uncertainty that, unlike past practice, must be properly and transparently

structure, which could potentially evolve into a permanent Dnieper Commission. It offers a unique mechanism for involving all stakeholders from the basin in a single forum.

The various functional bodies established through the project are country-driven and require minimal donor support. They are designed to be “exported” into any permanent mechanism established by the time of conclusion of the current project, ensuring the best possible chance of sustainability.

All project activities involving western consultants are designed as partnerships between national organisations and their western counterparts. This is done with the specific objective of transferring information, knowledge and skills that can be applied long after the project itself has terminated

#### *b. Financial sustainability*

This is one of the most difficult aspects of project design and implementation. The economic situation of the beneficiary countries is currently very poor and much public funding is necessarily directed towards maintaining essential services, servicing existing debts, etc. Funding for the environmental sector is rather limited and countries have had difficulties addressing existing international commitments (for example, thus far, they have been unable to sustain their commitments towards the Black Sea programme). The central importance of the Dnieper basin towards the economy of Ukraine, Belarus and one district of Russia however, is such that action to protect this river system is practically a pre-requisite for economic development. There is reason to believe that the “baseline” course is one that will be energetically pursued by the riparian countries.

The project places considerable emphasis on the creation of an investment portfolio for dealing with some of the most urgent problems within the basin. The successful design of this portfolio will add considerable weight to the financial sustainability of the project outputs. The project funding includes nearly US\$1 million for the scoping and pre-investment studies necessary for the creation of the portfolio. Disbursement of this assistance is programmed for the final year of the project in order to ensure that there is a full engagement of all sectors in the process of identifying the investments, as well as a willingness to borrow and ability to pay by the recipient countries.

### **E. Reasons for UNDP Assistance**

The principal reason for UNDP involvement in this project is that this project falls under two of the key UNDP mandates i.e. regional co-operation and environmental protection. The project, involving Belarus, Ukraine and Russia brings the countries closer together in achieving common goals. The current project was developed as part of the International Waters Portfolio of the UNDP-GEF. UNDP has been the lead agency in this process from the outset.

UNDP has country offices in all three beneficiary countries. The UNDP Resident Co-ordinator in Ukraine

## **F. Special considerations**

This project has an unusual design in that it operates on the basis of a very close partnership between UNDP and an independent organisation, the International Development Research Centre (see Section I C and Annex VII for a full profile). The reason for this partnership is that over the past few years, IDRC has conducted important pioneering work in the field of institutional development and environmental protection in the Dnieper Basin, particularly in Ukraine. As a result, it has established a strong institutional network and has comparative technical advantages in some areas. Incorporation of IDRC will improve the effectiveness of project implementation and reduce the start-up time for the project. Existing IDRC infrastructure will be used for the project co-ordination unit (to be known as the Programme Management Unit) in Kyiv. Contractually, IDRC will be incorporated in the project through a number of sub-contracts with UNOPS, which will be described in a subsequent section of this project document.

In addition to the services of IDRC, the project will work closely with a number of UN specialised agencies, also on the basis of comparative advantage for technical implementation. These will include UNIDO, IAEA and UN-ECE. The function of these agencies within the project will be described in subsequent sections of this document.

## **G. Counterpart support capacity**

### *Government Commitment*

The three participating countries have the commitment as well as the capacity to implement this project. They have actively participated in the discussions during the 18 months of project preparation including two major workshops in Kyiv and a number of working group meetings. They participated very actively in the PDF-B phase of the project through the technical meetings and data gathering exercises that led to the initial Transboundary Diagnostic Analysis. During this period, they have also demonstrated their strong commitment to build their capacity to take part in the SAP preparation process and to implement joint strategies to protect the environment in the Region.

In addition, each of the three participating countries is reviewing its legal and institutional framework for nature conservation and control of environmental degradation and pollution. The three countries are signatories of international conventions to protect biodiversity, international waters, wetlands, and others.

### *Institutional Capacities and Arrangements*

The three countries have a large body of committed specialists in most of the fields necessary for the implementation of the current project. The institutions involved however have lacked sufficient funding for a number of years in order to be equipped to the standards required by the project, or for the staff to be properly retrained. The governments have been very clear that the facilities of their technical institutions will be made available for the purposes of the project – a major aspect of the project will be to upgrade



### **III. DEVELOPMENT OBJECTIVE**

The *long-term objectives* of the project are to remedy the serious environmental effects of transboundary pollution and habitat degradation in the Dnieper River Basin, to ensure sustainable use of its resources, and to protect biological diversity in the basin.

The project will enable the implementation of a series of complementary investigative, preventative and remedial actions that will be elaborated in a Strategic Action Programme for the Basin region. The proposed Dnieper River Basin Programme would work towards enabling the three riparian countries to implement the principles of co-ordination and co-operation stipulated by the agreement signed in 1992 by the governments of the republics of Russia, Belarus and Ukraine. The management capacity both at the level of individual countries and at the regional level would be strengthened; and wider global benefits would accrue to the basin countries as well as those of the Black Sea, an important international water body dramatically affected by the activities within its tributary Dnieper Basin.

### **IV. IMMEDIATE COMPONENTS, OBJECTIVES, OUTPUTS AND ACTIVITIES**

The implementation of the project will be sub-divided into five operational components:

- Component I. Project co-ordination
- Component II. The strategic action programme process
- Component III. Facilitating investment in reducing transboundary pollution
- Component IV. Biodiversity conservation
- Component V: Improving stakeholder participation in transboundary issues

A total of seven major objectives have been defined within these areas<sup>9</sup>(in accordance with the objectives approved by the GEF Council).

In order to present the relationship between the components, objectives, outputs, success criteria, activities, lead agencies (and associated international partners), national counterparts and project milestones, a set of tables have been compiled which form the remainder of the current section of this document. The tables also provide indicative budgets for the implementation of the defined activities. Abbreviations used in the tables will be found in the glossary of the project, provided as Annex IX. The tables are designed to form the basis of management reviews to monitor the annual progress of project implementation.

It is important to clarify that these tables concern only the GEF financed components of the Project. It is hoped that the wider Dnieper Basin Environment Programme might build upon this approach in order to assemble a clear overall picture of project objectives, activities, milestones and mechanisms of

## COMPONENT I. PROJECT CO-ORDINATION

### Objective 1. Create a transboundary management regime and co-ordinating body

The first step towards creating a regional management mechanism is to establish the implementation structure for governance, co-ordination and management of the DBEP. The agreed management arrangements will include a Steering Committee with executive functions, a Joint Management Committee to regularly oversee project management, and a Project Management Unit for the day-to-day co-ordination of the project. National administration will include National Project Management Committees and National Project Management Offices. Regional Activity Centres will be established in order to co-ordinate the technical input to the project from the specialist institutions in the region.

<b>Outputs:</b> 1. A transboundary management regime and co-ordination body for the Dnieper River Basin		<b>Success criteria:</b> <ul style="list-style-type: none"> <li>• Programme Management Unit (PMU) established and operational</li> <li>• Expert groups established and working</li> <li>• Activity Centres established and operational</li> <li>• Steering Committee established and operational</li> <li>• Dnieper Basin Environment Programme established and functional</li> </ul>		
Activities:		Lead Agencies	National counterparts	Target date for completion
		Associated Internat'l Partners		Indicative GEF fund allocation
Activity 1a	Establish the Project Steering Committee, Joint Management Committee and National Project Management Committees. Creation and operation of the Dnieper Basin - Programme Management Unit (Dnieper - PMU) to facilitate, co-ordinate, and communicate on the implementation of priority activities identified in the following components.	*UNDP-GEF	NFPs	All bodies established by December 1999
Activity 1b		IDRC		\$900,000
Activity 2.	Establish international (both basin countries and external) expert working groups (in line with Activity Centre themes) on monitoring, reservoir safety, biodiversity/rehabilitation of ecosystems, pollution control, etc. to provide technical support in the implementation of all relevant project components.	IDRC	NFPs Govt. institutions Academies of Science	All WGs to be established by December 1999
		UNDP UNEP UNIDO Donors Intl. NGOs		\$200,000

Activity 3.	Establish regional activity centres (1 or more per country) with principal expertise(s) in selected priority areas of transboundary concern (see definition and localisation in Annex IV). These activity centres will serve as the focal points for regional training, capacity building and information exchange and SAP formulation in the selected areas of expertise.	IDRC	NFPs	All ACs to be established by January 2000
		UNDP UNEP UNIDO Donors		\$500,000
Activity 4.	Create Dnieper Regional Council to include representatives of all Dnieper Oblasts, representatives of relevant ministries, the project implementation unit and various representatives from the civil society including scientific institutions, private sector and NGO representatives. Co-ordinate annual meeting of the Dnieper Regional Council.	IDRC	NFPs Natl. Project Mgmt. Cttees. NGO Forum	First meeting in June 2000
		UNDP COs		\$90,000
		*operational responsibilities for UNDP-GEF will be managed by UNOPS		<b>TOTAL \$1,690,000</b>

## COMPONENT II. THE STRATEGIC ACTION PROGRAMME PROCESS

This is one of the core elements of the project. It will identify the key transboundary issues and develop a framework of effective actions to resolve them. The GEF intervention will identify a clear baseline for subsequent incremental cost funding at the national and regional levels and will facilitate capacity building for SAP implementation.

### Objective 2. Assist countries in SAP formulation, review and endorsement process

The preliminary elements of a SAP for the Dnieper River Basin were identified as part of the review and consultative processes occurring during development of the draft TDA. This preparatory work will be utilised in the formulation of a SAP according to the GEF operational strategy and programmes. The overall process will include: identification of 'root causes', 'hot spot' identification, priority setting, stakeholder involvement, SAP formulation review, high level country endorsement, publication and broad dissemination.

<b>Outputs:</b> 2. A Strategic Action Programme for the Dnieper River basin, including baseline commitments by governments.  <b>Intermediate outputs</b> 2a. A document detailing existing monitoring capacity in the region, identifying gaps and actions needed to fill gaps 2b. An updated and revised Transboundary Diagnostic Analysis		<b>Success criteria:</b> <ul style="list-style-type: none"> <li>• TDA revised and updated</li> <li>• Capacities and gaps in river basin monitoring assessed.</li> <li>• Stakeholders involved fully engaged in SAP process</li> <li>• Hot spots and 'root causes' identified</li> <li>• Ministerial conference held to endorse SAP</li> <li>• Donor and country commitments to financing SAP implementation</li> <li>• SAP broadly disseminated</li> </ul>		
Activities:		Lead Agencies	National counterparts	Target date for completion
		Associated Internat'l Partners		Indicative GEF fund allocation
Activity 1.	Evaluate existing monitoring capacities in basin and identify critical gaps; identify reforms and investments to fill gaps in transboundary monitoring.	UNDP	NFPs Activity Centre WG Natl. Institutions	June 2000
		UNEP		\$50,000
Activity 2.	Hold experts meetings and regional workshops with all stakeholders involved (including NGOs and private business) to discuss the identified 'root causes' of transboundary environmental problems and to identify actions to address them in SAP.	UNDP	NFPs Natl. Proj. Mgmt. Cttes. Dnieper Regional Council NGOs	June 2000
		IDRC		\$70,000

Activity 3.	Identify pollution `hot spots' (using Rapid Assessment Surveys) for subsequent rehabilitation/investments following SAP development phase.	IDRC	NFPs, Natl. Proj. Mgmt. Cttees, Activity Centre/WGs	June 2000
		UNIDO		\$120,000
Activity 4.	Revise, update, finalise and publish TDA (in print and on-line)	UNDP, in co-operation with UNEP (CTA to prepare TOR) PMU	Activity Centres Expert WGs National Focal Points Governments	Dec. 2000
		IDRC, Intl. Agencies and NGOs		\$150,000
Activity 5.	Draft, review, refine and finalise SAP, including identification of baseline and incremental costs. Secure near-term country commitments to financing baseline. Facilitate stakeholder involvement in SAP process.	*UNDP, in co-operation with UNEP, PMU	NFPs, Activity Centres, WGs, Natl. Proj. Mgmt.Cttees.	Oct. 2001
		*Other partners as appropriate		\$90,000
Activity 6.	Hold Ministerial Conference for SAP endorsement at highest government level(s).	*UNDP, PMU	NFPs	Nov. 2000
		As requested by govts.		\$50,000
Activity 7.	Publish (print & on-line) and broadly disseminate and publicise SAP	UNDP, PMU	NFPs, Natl. Proj. Mgmt. Cttees.	Feb. 2002
		UNEP, IDRC		\$30,000
		*The role of international agencies here is strictly one of facilitation and technical advice where requested		<b>TOTAL \$560,000</b>

#### Objective 4. Formulation of National Action Plans by Inter-ministerial Committees

Activities envisaged under National Action Plans (NAPs) include assistance to the three recipient countries in the development and implementation of the transboundary aspects of individual NAPs. Development of NAPs should be executed in accord with related components of the regional SAP and should be executed in close partnership with country authorities, international organisations, international institutions, and experts from the region. National Action Plans should highlight priority interventions---policy, legal and institutional reforms, programs, technical assistance, demonstrations and investments---that countries would be willing to commit to over a 5-10 year period. This work is seen as a cost-sharing activity with individual governments.

<b>Outputs:</b>		<b>Success criteria:</b>		
1. National Action Plans (NAP's) formulated by Inter-ministerial Committees		<ul style="list-style-type: none"> <li>NAP Inter-ministerial committees established and operating in each country (on the basis of the Natl. Proj. Mgmt. Cttees.)</li> <li>Stakeholders involved in formulation and review of NAPs</li> <li>Three completed NAPs approved at Cabinet level.</li> <li>NAPs successfully address SAP transboundary priorities through national actions</li> </ul>		
<b>Activities:</b>		<b>Lead Agencies</b>	<b>National counterparts</b>	<b>Target date for completion</b>
		<b>Associated Internat'l Partners</b>		<b>Indicative GEF fund allocation</b>
Activity 1	Constitution of NAP inter-ministerial committees. This will usually be on the basis of the existing Natl. Proj. Mgmt. Cttees. which will have increased membership for this purpose	UNDP	NFPs, Natl. Proj. Mgmt. Cttees.	March 2000
		IDRC		\$25,000
Activity 2.	Assistance to countries in the development of NAPs	UNDP	Natl. Proj. Mgmt. Cttees.	Oct. 2001
		All partners available as required		Total \$425,000
Activity 3	Public participation/stakeholder participation in NAP development and endorsement process (by conducting consultations and a strategic environmental impact assessment)	UNDP	Natl. Proj. Mgmt. Cttees., Regional Environ. Centres, NGOs	June 2001
		IDRC		\$75,000 (to be divided between the countries)
Activity 4.	NAP endorsement at Cabinet level		NFPs	Oct. 2001, Counterpart funding only
		*Note: The designation "Lead Agency" refers to project support only. This activity will be co-ordinated by the NPMCs		<b>TOTAL \$525,000</b>

## Objective 7. Build capacity for SAP implementation

Implementation of the SAP will require improved generation and flow of information. The preliminary TDA has already pointed to two areas, which represent major barriers to be overcome for the implementation of any basin-wide management policy. These are (1) the lack of credible and comparable data on contaminant sources, levels and effects and (2) the lack of a single unified source of reliable information for management decisions. These deficiencies have already had downstream implications on the adjacent Black Sea Environmental Programme, which also lacks reliable information on contaminant transfers from the Dnieper River.

<b>Outputs:</b>		<b>Success criteria:</b>		
1. Enhanced capacity for SAP implementation		<ul style="list-style-type: none"> <li>New technical and human resource capacities created in river basin monitoring</li> <li>Regional environmental database developed and utilised by different stakeholders</li> <li>Monitoring data employed for enforcing new regulations and for regional status and trends reports</li> </ul>		
<b>Activities:</b>		<b>Lead Agencies</b>	<b>National counterparts</b>	<b>Target date for completion</b>
		<b>Associated Internat'l Partners</b>		<b>Indicative GEF fund allocation</b>
Activity 1	Provision of equipment to fill gaps in monitoring capacities identified in Activity 2.1, with focus on priority transboundary contaminants and ecosystems.	UNDP	Activity Centres, National institutions	Oct. 2000
				\$350,000
Activity 2a.	Create regional Dnieper River basin environmental database with on-line user capacities (following an examination of current systems developed by UNEP-GRID, IDRC and National Institutions)	UNDP, PMU	NFPs, Activity Centres, Working Groups, National Institutions	2a. Dec. 2000
Activity 2b.	Preparation and publication of the first "State of the Dnieper Report" (using data validated through intercomparison exercises and quality assurance procedures and by conducting a pilot survey of the entire river)	UNEP, IDRC		2b. Sept. 2001
				2a. \$100,000 2b. \$200,000 Additional activities under 2b will be co-funded by IDRC
Activity 3.	Provide training in river basin monitoring to fill gaps identified in 2.1.	UNDP	Activity Centre, National Institutions	Oct 2000
		UNEP, IDRC		\$50,000
				<b>TOTAL</b> <b>\$700,000</b>

## COMPONENT III. FACILITATING INVESTMENT IN REDUCING TRANSBOUNDARY POLLUTION

### Objective 3. Improve financial/legal/operational mechanisms for pollution reduction and sustainable resource use

Activities within Objective 3 will identify and assess appropriate legal and financial/economic mechanisms for addressing transboundary environmental concerns as well as identify barriers to their implementation and, through the SAP, propose actions to overcome these barriers. The preparation of a Priority Investment Portfolio (PIP) at the latter stages of the SAP development process will be supported with subsequent identification and response to acute environmental problems (such as the transboundary movement of radioactive contaminants) in high priority areas and in particular those, such as nutrients, that contribute to the state of global commons (such as the Black Sea ecosystems). Donor conferences in the latter half of the SAP development process will also facilitate investment in priority activities identified in the PIP.

<b>Outputs:</b>		<b>Success criteria:</b>		
1. Financial mechanisms for environmental management/Investment portfolio		<ul style="list-style-type: none"> <li>• Priority Investment Portfolio prepared</li> <li>• Feasibility studies of measures for reducing the discharge of nutrients from animal wastes</li> <li>• Legal/enforcement mechanisms reviewed</li> <li>• Dnieper Programme contributes to the GEF Black Sea Basin Initiative.</li> <li>• Effective implementation of new regulations limiting transboundary discharge of contaminants (including the discharge of nutrients and other contaminants of global significance to the Black Sea)</li> </ul>		
<b>Activities:</b>		<b>Lead Agencies</b>	<b>National counterparts</b>	<b>Target date for completion</b>
		<b>Associated Internat'l Partners</b>		<b>Indicative GEF fund allocation</b>
Activity 1a.	Initial workshops to examine the pollution hot spots and to identify those requiring investment action and to formulate priorities. Preparation of a Priority Investment Portfolio (PIP) including pre-feasibility studies.	UNIDO, PMU	NFPs, Natl. Proj. Mgmt. Cttees., Local govts., Private sector	1a. September 2001 1b. June 2002 (funding will be reserved until approval of NAPs)
Activity 1b.		UNDP, IDRC WB, EBRD, Donors		1a. \$200,000 1b. \$1,000,000
Activity 2.	Conduct feasibility studies/pilot project(s) for use of economic instruments in municipal and industrial pollution control and reduction; link with IDRC-EMDU Environmental Audits and Green Technologies programs	IDRC	NFPs, Natl. Proj. Mgmt. Cttees., Local govts., Private sector	June 2001
		WB,EBRD		\$100,000



Activity 3.	Conduct evaluations and pilot project(s) on management of agricultural waste from intensive animal husbandry (to demonstrate strategies for reducing nutrient and other contaminant transfers to Dnieper waters)	UNIDO	NFPs, Mins. of Agriculture Oblasts WGs Activity Centre	January, 2001
		UNDP WB, EBRD		\$100,000
Activity 4.	Hold donor conferences at end of Dnieper full project to identify donors for SAP baseline and PIP-identified priority activities.	UNDP	NFPs Mins. of Econ. Local govts. Private sector	June 2002
		WB, EBRD UNDP IDRC Donors		\$80,000

Outputs:		Success criteria:		
2. Improve legal and operational mechanisms for transboundary pollution reduction		• EIA, reservoir, nuclear facility and water treatment guidelines and practices reviewed; reforms recommended as inputs to SAP and NAPs		
Activities:		Lead Agencies	National counterparts	Target date for completion
		Associated Internat'l Partners		Indicative GEF fund allocation
Activity 5.	Collect and evaluate existing laws, regulations, licensing and enforcement systems regarding pollutant discharge, compliance, and polluter responsibility. Recommend reforms as inputs to SAP and NAPs	UNIDO PMU	NFPs, Natl. Proj. Mgmt. Cttees., WG	September 2000
		UNDP		\$80,000
Activity 6.	Assess and review Environmental Impact Assessment policies and practices in region (and to compare with best practices outside the region where appropriate). Recommend reforms as inputs to SAP and NAPs	UNIDO PMU	NFPs, Natl. Proj. Mgmt. Cttees., WG	March 2001
		IDRC		\$50,000
Activity 7.	Work towards implementation of co-ordination/co-operation principles stipulated by the UN/ECE Helsinki Convention on Transboundary Water Bodies; participate in Convention Technical and CoP meetings	UN/ECE	NFPs, Natl. Proj. Mgmt. Cttees.	March 2001
		UNDP		\$50,000
Activity 8.	Review and assess management policies, guidelines and practices for managing holding ponds for industrial waste. Recommend reforms as inputs to SAP and NAPs. Note: SIDA has funded a reservoir management programme.	UNIDO/SIDA	Activity Centre, WG	May 2001
		UNDP/IDRC		\$50,000
Activity 9.	Review and assess management guidelines and practices for nuclear facilities and disposal sites with potential impacts on Dnieper basin waters. Recommend reforms as inputs to SAP and NAPs	IAEA	Activity Centre, WG	June 2001
		UNDP, UNIDO		\$75,000
Activity 10.	Assess operational capacities and practices regarding the transboundary environmental consequences of water abstraction and water returns from treatment plants.	IDRC	NFPs, Natl. Proj. Mgmt. Cttees.	June 2001
		WB/EBRD/WHO		\$75,000
				TOTAL \$1,860,000

## COMPONENT IV. BIODIVERSITY CONSERVATION

### Objective 5. Improve conservation of biodiversity in the Dnieper River Basin

Activities within this objective to protect biodiversity will review the legal and institutional structure in the different Basin countries for the protection and management of endangered species, critical ecosystems, and nature reserves located within the Basin, as well as the actual status of protection of these resources. Particular attention will be given to preserving and enhancing the natural function of wetlands in reducing the nutrient and contaminant loading to international waters. Information will be collated to identify weaknesses regarding the management of existing or planned protected areas in the Dnieper Basin including size, key natural resources, management authority, staffing and budget toward the management of biodiversity. This work will be co-ordinated closely with other on-going or planned biological diversity conservation projects in the region.

<b>Outputs:</b> 1. Framework for enhanced capacity for conservation and protection of biological diversity in the Dnieper Basin.		<b>Success criteria:</b> <ul style="list-style-type: none"> <li>Published strategy for protecting key habitats and species in the Dnieper Basin.</li> <li>Published reviews of conservation implications of current Dnieper basin agricultural, fisheries and aquaculture practices</li> <li>New conservation areas adopted by governments and appropriate regulations introduced.</li> <li>Investment projects identified to protect wetlands important for biological diversity and for limiting the discharge of contaminants, including nutrients, to the Black Sea.</li> </ul>		
Activities:		Lead Agencies	National counterparts	Target date for completion
		Associated Internat'l Partners		Indicative GEF fund allocation
Activity 1. .	Conduct a complete assessment of existing protected areas, priority ecosystems and biodiversity hotspots, including economic valuation studies	*IDRC	NFPs WG Activity Centre	May 2000
		UNDP, WWF		\$80,000
Activity 2.	Review legal, policy, institutional and regulatory framework for Dnieper basin biodiversity protection. Recommend reforms as inputs to SAP and NAPs	*IDRC	NFPs WG Activity Centre	Sept. 2000
		UNDP, UNEP		\$60,000

Activity 3a.	Review and assess agricultural practices in relation to transboundary biodiversity conservation (in context of pollution reduction and soil conservation); recommend reforms as inputs to SAP and NAPs	*IDRC	WG National consultants	October 2000 (agric.) Jan 2001 (fish)
Activity 3b.	Review status of fisheries and aquaculture in the region in relationship to biodiversity conservation; identify gaps and problem areas; recommend reforms as inputs to SAP and NAPs.	World Bank Black Sea and Danube Secretariats	Natl. Proj. Mgmt. Cttees.	\$100,000
Activity 4.	Assist countries to develop a regional strategy for protecting key habitats and species in the Dnieper Basin (including the identification of prioritised investment projects to protect wetlands important for biological diversity and for limiting the discharge of contaminants, including nutrients, to the Black Sea).	*IDRC	NFPs	Sept. 2001
		UNDP WB, EBRD	Dnieper Regional Council	\$35,000
		*co-operation with Wetlands International and other donors, liaison with the World Bank		<b>TOTAL</b> <b>\$275,000</b>

## COMPONENT V: IMPROVING STAKEHOLDER PARTICIPATION IN TRANSBOUNDARY ISSUES

**Objective 6. Enhance communication among stakeholders and encourage public awareness and involvement in addressing the priority transboundary problems of the Dnieper Basin.**

The Dnieper SAP will require broad-based participation by the general public, private sector associations, academic and research institutions, non-governmental organisations and local community groups. The large number of stakeholders involved and affected by pollution control issues in the Dnieper river requires multi-level awareness programmes targeting different groups of stakeholders and other decision-makers, from national to village and household levels. Local community groups are especially efficient in triggering social and environmental change at the community and household levels. Effective participation of the general public and other stakeholders in pollution prevention programs and resource planning issues requires strengthened environmental awareness and improved channels for interaction among stakeholders and the governments, with adequate financial resources mobilised for activities to address the above Objectives.

<b>Outputs:</b>		<b>Success criteria:</b>		
1. Enhanced communications between stakeholders and increased public awareness and involvement		<ul style="list-style-type: none"> <li>• Key stakeholders identified and involved in project activities</li> <li>• Project activities and recommendations and the TDA/SAP, disseminated via Internet and in jargon-free local language publications distributed widely.</li> <li>• New stakeholder networks created</li> <li>• Public awareness of Dnieper issues enhanced; Dnieper issues included in environmental education curricula</li> <li>• Dnieper-oriented NGOs in region sharing, meeting, co-ordinating and networking</li> <li>• Dnieper Small Grants program implemented</li> </ul>		
<b>Activities:</b>		<b>Lead Agencies</b>	<b>National counterparts</b>	<b>Target date for completion</b>
		<b>Associated Internat'l Partners</b>		<b>Indicative GEF fund allocation</b>
Activity 1.	Facilitate socio-economic assessment of the effect of transboundary pollution on the Basin's population (based on existing materials) and the identification of key stakeholders	*IDRC PMU	NFPs, Natl. Proj. Mgmt. Cttees., Local consultants	Oct. 2000
		UNDP		\$50,000
Activity 2.	Improve access and distribution of project and Dnieper basin information through electronic postings on the World Wide Web and Internet list-servers; build linkages with IDRC-EMDU Environmental Management Information System (EMIS);	*IDRC PMU	Natl. Proj. Mgmt. Cttees.	Web site Jan 2000 Postings continuous
		UNDP UNEP-Grid		\$50,000

Activity 3.	Hold regular consultations and technical/policy workshops (1/yr) with broad involvement from international agencies, national governments, research institutions, the private sector, and all interested public organisations and NGOs	*IDRC	Dnieper Regional Council, WGs, RECs, NGOs	First consultation by June 2000
		UNDP, Intl. Agencies		\$120,000
Activity 4.	Expand Internet access for key stakeholders through establishment of additional e-mail connections and Web-Services with priority for those without existing service	*IDRC PMU	Local consultants NGOs	March 2001
		UNDP (COs)	Natl. Proj. Mgmt. Cttees.	\$50,000
Activity 5a.	Collect, publish and disseminate bi-annually project and general Dnieper basin news and information gathered by the project, consultants, scientists and NGOs; also post such information on the Internet	*IDRC PMU	All networks	5a: First publications by Feb. 2000
Activity 5b.	Publish and widely disseminate a jargon-free accessible version of the TDA/SAP in local languages – the material should be distributed through government channels and NGOs	UNDP All donors/agencies involved in the project		5b: April 2002 \$120,000
Activity 6.	Create public awareness and environmental education campaign through participatory regional events publicised by popular media, NGO newsletters, Internet postings, and school-based environmental curricula development; develop linkages with IDRC-EMDU Policy and Public Education component	*IDRC	WG NGOs	First newsletter by Feb. 2000
		UNDP EU-Tacis	Local authorities	\$80,000
Activity 7.	Sponsor and organise bi-annual NGO forum for NGOs to network, identify priorities and responsibilities, and share data and information	*IDRC	NGOs	First meeting by March 2000
		UNDP		\$60,000
Activity 8.	Create and administer a small grants program for NGOs and community organisations to fund small-scale activities related to the rehabilitation and improved transboundary management of Dnieper river basin resources.	*IDRC	NGOs	First call for proposals by March 2000
		As requested		\$200,000
		*co-operation with Tacis and with the RECs in Russia and Ukraine and UNDP in all three countries		<b>TOTAL \$730,000</b>

## VIII. INPUTS

### A. Government Inputs

All three countries are strongly committed to the project and will provide the necessary staff time and facilities to co-ordinate and implement the national inputs to the work. The input will include the staff time and facilities necessary to manage the national co-ordinating mechanisms including the National Project Management Committees. The approved Project Brief also lists the following “baseline” inputs to the Project:

#### Ukraine:

The Parliament of Ukraine adopted the National Programme of Ecological Rehabilitation of the Dnieper River Basin and Improvement of the Drinking Water on 27 February 1997. For the implementation of the Programme the amount of 4.2 billion UAH (approx. 2.4 billion USD) is anticipated for the period 1997 - 2010.

In 1998 the amount of 391.9 M UAH (approx. 218 M USD) is foreseen to be expended in the state budget for the following priority activities:

- construction and reconstruction of buildings and water supplies systems, creation of sewage systems in towns and large villages - 337 M UAH (approx. 187 M USD)
- implementation of water protection measures on industrial enterprises under the ministries and other central bodies of executive power - 27 M UAH (approx. 15 M USD)
- realisation of water protection measures on rivers and water bodies - 12.8 M UAH (approx. 7.1 M USD)
- execution of water and land protection measures in the Dnieper basin - 7.6 M UAH (approx. 4.2 M USD)
- protection and development of nature reserves within the basin - 0.4 M UAH (approx. 0.2 M USD)
- other measures on nature protection (among which State ecological monitoring, scientific-technical support, etc.) - 7.1 M UAH (approx. 3.9 M USD)

Financing of the above activities will be undertaken from the state and local budgets, and other sources.

In 1999 the estimated amount for the Ukrainian national activities is 524.75 M UAH (approx. 291.5 M USD), including:

- water and land protection measures on the territories of the Dnieper basin, protection and development of nature reserves, state ecological monitoring etc - 122.23 M UAH (approx. 68 M USD)

- Creation of the basin database in Minsk for the support of the realisation of Dnieper project - 90 thousand USD
- Construction of sewage treatment systems with the use of highly effective technologies for refining of industrial flows in the following towns (in thousand USD):
  - Rechitsy - 215
  - Gomel - 346
  - Pinsk - 187
  - Orsha - 208
  - Zhlobin - 113
  - Osipovichy - 120
  - Borisov - 175
- Water supplies and installation of additional purification of drinking water in Gomel town - 390 thousand USD
- Scientific, regulatory, methodological and software support to the international project - 96 thousand USD

TOTAL for the above: 2.204 M USD

Overall, in 1998 Belarus plans to spend a total of about 12.3 M USD for environmental protection activities in the Dnieper river basin

### Russia:

For the period 1997 - 2000 the outlay for the implementation of programmes for Bryansk and Smolensk regions (the two largest regions upstream in the Dnieper basin) is 704.5 M USD, which includes the expenses for the construction and evacuation of people from the radio-contaminated territories. In addition, about 95 - 100 M USD are planned to be allocated from regional budgets, ecological funds and enterprises over a period of 4 years.

### **B. GEF Inputs**

The GEF has allocated a total of US\$7,000,000 for the implementation of this project. The indicative time frame for the project is three years, from approximately October 1999 to October 2002.

### **C. UNDP Inputs**

UNDP as implementing agency for the project will continue to backstop it with its own staff members and financing, both from headquarters and locally from the Country Offices in Kyiv, Moscow and Minsk. In addition to this, the GEF Project Brief has identified the following funding inputs, either from UNDP core budgets or from other projects implemented by UNDP with a direct relevance to the current project:



Other related activities initiated and supported by the UNDP Office in Kiev include: Introduction of Sustainable Development Principles into Ukrainian Governmental Institutions, Training Component (\$70,000), the Ecological Network (support to the development of the concept of establishment of ecological corridors in Ukraine) (\$105,000); Improving Environmental Monitoring Capacity (\$60,000 plus \$1,044,200 from US-EPA), and, with WMO, a Donors' Meeting on Meteorological and Hydrological Services in Support of Sustainable Development in Newly Independent States (Europe and Central Asia) held in April 1995 in Geneva.

#### IA Country Assistance: Belarus

Related projects currently being coordinated by the UNDP office in Minsk include: Raising Public Environmental Awareness in Belarus (\$115,000), and Sustainable Development of Chernobyl-Affected Areas in Belarus (Local Agenda 21) (\$630,000).

#### IA Country Assistance: Russia

The UNDP office in Russia has only recently opened and projects complementary to the Dnieper River Basin programme are not yet underway.

### **D. IDRC Inputs**

As a partner granting agency in the GEF endeavour, IDRC will take part in the management of the overall programme, while employing its methodology in seeing through those project areas assigned to it in the overall contract, and it is legally and otherwise capable of sub-contracting with local and outside institutions to carry out the tasks under its purview. IDRC has been contributing and will continue to contribute its funds to national work within the three riparian countries, and, as a partner in the GEF Programme, will work to garner further funding from other donors and from Russia, Belarus, and Ukraine themselves. IDRC has a good track record for leveraging funding in the Dnieper Basin. Early in 1994, IDRC started a 4.8 million CAD program funded by the Canadian Government entitled Environmental Management Development in Ukraine (EMDU). This project helped to lay the ground for the wider plan of activities for cleaning up the Dnieper River. Indeed, IDRC co-sponsored the UNDP initial study (TDA) of the River basin. A second phase of EMDU (budgeted at CDA 4,2 millions) started in 1998 and is due to be completed by the end of 2000. About half a million is still uncommitted for activities, some of those will directly affect the start-up of the Transboundary program.

Canada is currently approving an additional grant worth CDA\$2 million to cover "below base line" national activities in Belarus and Russia; those activities are directly related to the GEF project. In addition, as in the case for Ukraine, this grant is intended to help in the start-up of the transboundary program of activities.

### **E. UNDP Inputs**

service module. It also contributes to the design, implementation and assessment of environmental policy considerations that are components of other projects, whose core is within the other 15 UNIDO service modules.

Further details of UNIDO's inputs are included in Annex VI.

## **F. UN-ECE Inputs**

UN-ECE has been responsible for the development of a large number of Pan-European policy and legal agreements of direct relevance to project implementation. Of particular importance is the UN/ECE Helsinki Convention on Transboundary Water Bodies. The Agency will provide its experience and legal advice to the countries in the development of policies which will enable the Helsinki Convention to be implemented in a timely and effective manner.

## **G. IAEA Inputs**

As the specialist Agency responsible for all aspects of nuclear safety, IAEA is ideally situated to contribute its own expertise to project implementation. IAEA has been responsible for conducting a large number of studies regarding the aftermath of the Chernobyl accident and the safety aspects of nuclear electric power production in the region. It will make much of that information available during its involvement in the project and provide linkages with other activities contributing to similar aims and objectives.

# **VI. RISKS**

There are a number of risks associated with the implementation of this project. These may be classified into three groups: (1) Political risks; (2) Operational risks; and (3) Economic risks. There are inevitable linkages between the three.

### *(1) Political risks*

Governments in many countries of the CIS have undergone frequent changes. The turnover of senior government officials tends to be considerable with a consequent occasional hiatus in the decision making process. It is conceivable that a policy framework approved by one regime could be rejected by another. Furthermore, in some instances, there are legislative stalemates where the respective parliamentary assemblies do not approve government policies (such as environmental loans). In the case of Belarus, the ongoing negotiations on integration with Russia may result in changes in government structures and hierarchy.

sustainability, a number of innovative environmental management groups will be created. The Dnieper Regional Council should prove to be particularly effective in this respect as it brings a broad spectrum of stakeholders together, covering different levels of government as well as representation from civil society.

Major political conflict between the riparian countries is not seen as a significant risk.

### *(2) Operational risks*

Under the difficult economic conditions faced by the countries, technical institutions are often difficult to sustain. Another GEF project in the region has recently experienced the frustration of building capacity in a government-nominated institution that was subsequently suddenly closed. The selection process of institutions to support within the Dnieper project will be conducted in close partnership between the implementing agencies and the governments. Nevertheless, the risk remains that institutions cannot be sustained. Furthermore, the low salaries available for most government employees is leading to a loss in specialists or the need for them to seek outside employment on a part-time or full-time basis. In some senses the project will help to give new purpose to some of the depressed institutions. It must be seen as part of a longer-term strategy for sustainability however, rather than temporary relief.

Other types of operational risk, such as civil conflict, are not considered as significant at present.

### *(3) Economic risks*

The state of the economy in the region is an obvious cause for concern. The major impact of further economic collapse on the project would be through a loss of sustainability of project outputs and through the failure of any investment portfolio to meet baseline costs. Experience with the adjacent Black Sea project is that governments have, thus far, been unable to sustain financial commitments to the establishment of a permanent shared institutional mechanism for joint environmental management. The Dnieper project is more intrinsically linked with the economic interests of the riparian countries and it is anticipated that this problem will not occur in this particular case. The situation with respect to the other inter-related GEF projects in the region will be monitored carefully however.

In the case of the investment portfolio, the two key risks are an unwillingness to borrow funds for the identified projects and an inability to repay any consequent loans. Such risks are always assessed carefully before making individual loans. The funds for detailed pre-investment studies will not become available until the third year of implementation, thus giving ample time to assess the associated risks prior to disbursement.

## **VII. PRIOR OBLIGATIONS AND PREREQUISITES**

## **VIII. INSTITUTIONAL FRAMEWORK, CO-ORDINATION AND ADMINISTRATION**

### **A. Institutional arrangements**

#### **1. Regional Institutions**

##### *Steering Committee:*

Membership of the Committee will be composed of a senior government official (designated National Focal Point) from each country along with the UNDP GEF Regional Coordinator for Europe/CIS (or their designated representatives). Members of the Joint Management Committee or other Dnieper River Basin stakeholders may be invited to sit on the Committee as observers as and when the full members so wish. The UNDP GEF Project Manager may also be invited to attend as an observer at the Committee's discretion or at the request of the UNDP GEF RBEC Regional Coordinator.

The Committee will set its own operational procedures and approve its own Terms of Reference. It will meet at least once a year and thereafter as frequently as the Committee itself deems necessary.

The Steering Committee will review the Project budget and work programmes as adopted by the Joint Management Committee and provides feedback and policy guidance to the JMC on such matters.

The Steering Committee will function as the principal policy guidance body of the Project. The Committee will provide guidance to the Project Management Unit (PMU) through the JMC on issues pertaining to the regional administration of the project and to the National Project Management Committees (NPMCs) on issues pertaining to the national administration of the Dnieper Basin Environment Programme.

The Chairman for each Steering Committee meeting will be the Environment Minister of the host country.

Funding for Steering Committee business will be covered by the Project. Assistance to the countries from these funds will cover the cost of the Minister and members of the JMC (if invited) for each meeting.

##### *Joint Management Committee:*

The JMC will be composed of the three National Focal Points (NFPs) for the Project and the UNDP GEF Project Manager. The UNDP GEF Deputy Project Manager and the Project Executing Agencies may be invited as observers at the discretion of the Committee or at the request of the Project Manager. The JMC functions at a more operational level than the Steering Committee which focuses on providing broad policy and strategic guidance to the programme.

Funding for meetings of the JMC will be provided by the Project.

*Programme Management Unit:*

Staffing for the PMU will consist of the UNDP GEF Project Manager, River Basin Management Expert, Deputy Project Manager, short-term Technical Advisors, administrative staff and representatives of the Executing Agencies (e.g. UNOPS, IDRC, UNIDO).

The PMU will carry out the day-to-day administration of the Project and will act as the regional secretariat for the JMC and the Steering Committee. The Project Manager will be responsible to the JMC and the Steering Committee for the project activities, the project's financial accountability, staff welfare and discipline, etc. The Project Manager will provide the JMC with a budget review and work plan every six months.

The Project Manager will communicate directly with the National Project Management Office (NPMO) and with the Chairman of the NPMC (The NFP). The Project Manager will also liaise with the Regional Activity Centres (RACs) and closely co-ordinate with all other Project national activities.

The host country will assist in providing accommodation for the PMU. The support costs and salaries of staff will be covered by the Project in co-ordination with other donors.

## 2. National Institutions

*The National Project Management Committee:*

Membership of the NPMC will consist of the NFP, who will be the Chairperson, and other Government or non-government stakeholders as selected by the NFP in consultation with the Minister who is the member of the Steering Committee. The objective is to attain a broad participation of all sectors engaged in national decision-making with respect to the Dnieper Basin. The Project Manager and/or Deputy Project Manager may also attend meeting of the Committee in agreement with and at the request of the Chairman.

The NPMC will develop its own operational procedures and Terms of Reference which will be approved by the Minister who is the member of the Steering Committee. It will meet at least, on average, every 3 months and thereafter as frequently as the Committee itself deems necessary.

The NPMC will ensure that the Project policies adopted by the Steering Committee are reflected in the national execution of the Project. In this respect, the Chairman will liaise closely and co-ordinate with the Project Manager.

Meetings and all other direct functions of the NPMC will be nationally funded except that the cost of

national post and will be funded by the government or national institution by which the NFP is employed. Support funds for the NFP will be represented by support costs to the NPMO.

The NPMO will have a small staff allocation (secretarial/administrative) along with support equipment (communications, word-processing, copying, etc.) and will be supported by the Project in co-ordination with other donors.

*The Regional Activity Centres:*

The NPMCs will select each centre (an existing specialised institution) having first agreed in the Steering Committee on the designation of the centres to each of the countries. They will each have a Director and support staff. These will be existing national staff funded by the institution. Additional specialists will be supported by the Project, which will also assist in allocating funds for administrative and technical support equipment.

Each RAC will communicate with and exchange relevant data with other RACs both nationally and regionally as well as other relevant national and regional institutions, which are stakeholders in the Project.

*The importance of networking:*

The concept of networking is a key aspect of project design and implementation and is an area where much practical experience has been acquired in recent years in the NIS. A fundamental component in the GEF strategy is the regional activity centre (RACs), a concept tested in the Black Sea Environmental Programme but originally developed in UNEP projects, notably the Mediterranean Action Plan. The regional activity centres are a mechanism by which countries agree to share specific co-ordinating roles employing institutions which already exist and can be sustainably financed by national governments using their own resources. Each RAC has its own network of technical focal points within which components of the program are realised and information is exchanged freely, usually by electronic means, and without outside interference. The scheme avoids the unnecessary transfer of currency from country to country and provides a means of providing counterpart funding for the project. In the establishment of the RACs, it is important that uniform criteria are discussed and agreed for the selection of the topics for each centre to develop and for the selection of the centres themselves. Certainly, centres should be chosen that are in Oblasts within the Dnieper basin and which contain appropriate expertise, irrespective of which sector they may pertain to. The discussion on this aspect should take place as one of the first steps in project implementation.

The RACs are not the only means of networking. An example of civil society networking is that of the Regional Environmental Centres. These should be incorporated into the project from its outset. RECs are in their final stages of establishment in Russia and Ukraine and hopefully, a similar organisation will be created in Belarus. It should be pointed out that the RECs are not a mechanism for co-ordinating NGOs

## Project Implementation

Each International Funding Agency has its own rules, regulations and procedures governing the provision and administration of funds for projects. It is recognised that any funding for the Project must abide by the rules and regulations of the funding agency.

Within these requirements and conditions the JMC will sanction all expenditures through its 6-monthly review of project budgets and work-plans. These will be carefully reviewed by the Steering Committee at its next meeting. Once sanctioned, it will be the responsibility of the Project Manager (in consultation with the NFPs) to fulfil the approved budgetary allocations.

All expenditures are accountable through the Project Managers through the JMC to the Steering Committee and individual projects will be audited by the relevant international agency. This accountability requires full transparency in all financial dealings and it will be the individual Project Manager's responsibility (supported by the Steering Committee) to ensure such transparency.

Budget funds are allocated by line for specific activities and objectives and it is a strict requirement of UNDP that these are clearly identified in the UNDP Project Document. Budgets are not allocated by percentage to each country. Funds will not be distributed for Project activities without the approval of the 6-monthly budget and work plan by the JMC and without the authorisation of the Project Manager. The Project Manager will ensure that such budget releases are in accordance with the requirements of UNDP and GEF.

### **B. Co-ordination arrangements between agencies involved in project execution**

Regular informal consultations will be held between the various agencies involved in project execution. These would normally take place at the time of Steering Committee meetings but can also be arranged at the request of any of the parties. Particularly close co-operation will be necessary between IDRC and UNOPS both at the Headquarters and local levels.

## **IX. PROJECT REVIEWS, REPORTING AND EVALUATION**

In line with UNDP procedures, the project will be subject to tripartite review (TPR) once every twelve months. On these occasions, the CTA will prepare an updated workplan and Annual Project Report (APR) and formulate recommendations for eventual adjustments of strategies and activities. A draft APR shall be prepared at least two months in advance of the TPR to allow review by UNDP prior to the meeting. The project will also participate in the GEF Project Implementation Review (PIR) process.

Meetings can also be organized ad hoc at the request of the coordinator of the PMU and/or on request by

Periodic Status Reports would be prepared at the request of the Steering Committee for presentation at key meetings associated with the Project.

The project will also participate in the UNDP-GEF International Water (IW) LEARN Project through information exchange and sharing lessons learned with GEF and other regional waters projects.

Towards the end of year 3, a final independent evaluation of the project will be carried out by project evaluation specialists selected by UNDP-GEF. The evaluation will include: an assessment of (a) the outputs generated, (b) the processes used to generate them, (c) project impacts using indicators included in the logical framework matrix and d) lessons learned.

## **X. LEGAL CONTEXT**

This Project Document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement between the Government of those participating countries which have signed such Agreement and the United Nations Development Programme.

The following types of revisions may be made to this project document with the signature of the Principal Project Resident Representative (PPRR) only, provided he or she is assured that the other signatories of the project document have no objections to the proposed changes:

1. Revision in, or addition of, any of the annexes of the project document.
2. Revisions which do not involve significant changes in the immediate objectives, outputs or activities of the project, but are caused by the rearrangement of the inputs already agreed to or by cost increases due to inflation
3. Mandatory annual revisions which rephrase the delivery of agreed project inputs or increased expert or other costs due to inflation or take into account agency expenditure flexibility.



## XII. BUDGET

Project Number: RER/99/G32/A/1G/31

Project Title: Preparation of a Strategic Action Programme (SAP) for the Dnieper River Basin and Development of SAP Implementation Mechanisms

### A. Budget lines

The following budget, presenting a breakdown of the budget implementation per year, has been prepared by UNOPS.

Budget Line	Description	Objective /Activity	Lead Agency	Total Budget	1999	2000	2001	2002
				\$	\$	\$	\$	\$
<b>10</b>	<b>Personnel</b>							
<b>1100</b>	<b>International Project Staff</b>							
1101	Project Coordinator (P5)- 3yrs	1/1a	UNOPS	390,000	21,667	130,000	130,000	108,333
1102	River Basin Mgm Expert ( P4)-3 yrs	1/1a	UNOPS	360,000	20,000	120,000	120,000	100,000
1197	Consultant monitoring capacities	2/1	UNOPS	46,296	2,572	15,432	15,432	12,860
1197	Consultant Update TDA	2/4	UNOPS	27,778	1,543	9,259	9,259	7,716
1197	Consultant SAP	2/4	UNOPS	46,296	2,572	15,432	15,432	12,860
1197	Consultant monitoring programmes	2/1	UNOPS	18,519	1,029	6,173	6,173	5,144
1197	Consultant Incremental costs	2/5	UNOPS	9,259	514	3,086	3,086	2,572
1197	Consultant NAP (economist)	4/2	UNOPS	37,037	2,058	12,346	12,346	10,288
1197	Consultant equipment specifications	7/1	UNOPS	18,519	1,029	6,173	6,173	5,144
1197	Consultant environmental databases	7/2a	UNOPS	18,519	1,029	6,173	6,173	5,144
1197	Consultant, State of the Dnieper Report	7/2b	UNOPS	18,519	1,029	6,173	6,173	5,144
<b>1300</b>	<b>National Support Staff</b>	1/1a						
1301	Secretary		UNOPS	23,148	1,286	7,716	7,716	6,430
1302	Admin Assistant		UNOPS	23,148	1,286	7,716	7,716	6,430
<b>1500</b>	<b>Duty Travel</b>							
1501	PMU Travel	1	UNOPS	37,037	2,058	12,346	12,346	10,288
1502	Local Travel	1	UNOPS	27,778	1,543	9,259	9,259	7,716
1503	Government Travel	1	UNOPS	9,259	514	3,086	3,086	2,572
<b>1600</b>	<b>Mission Cost</b>	1						
1601	UNOPS	1	UNOPS	13,889	772	4,630	4,630	3,858
1602	UNDP	1	UNOPS	13,889	772	4,630	4,630	3,858
<b>1700</b>	<b>National Professional Project Personnel</b>							
1701	Deputy coordinator	1/1	UNOPS	92,593	5,144	30,864	30,864	25,720
1702	NPPP Monitoring	2/1	UNOPS	18,519	1,029	6,173	6,173	5,144
1703	NPPP SAP	2/5	UNOPS	18,519	1,029	6,173	6,173	5,144

2103	IAA UNIDO PIP	3/1	UNIDO	898,518	49,918	299,506	299,506	249,588
2104	IAA UNIDO	3/3,5,6	UNIDO	212,963	11,831	70,988	70,988	59,156
2105	IAA UNIDO, Dnieper Holding Pond Operation	3/8	UNIDO	46,296	2,572	15,432	15,432	12,860
2106	IAA UN/ECE Transboundary Water Bodies	3/7	UN/ECE	46,296	2,572	15,432	15,432	12,860
2107	IAA IAEA Nuclear Facilities and Disposal Sites	3/9	IAEA	69,444	3,858	23,148	23,148	19,290
2108	IAA UNEP TDA	2/2	UNEP	18,519	1,029	6,173	6,173	5,144
2109	Contract State of the Dnieper	7/2b	UNOPS	185,185	10,288	61,728	61,728	51,440
2110	Contract TDA (local institutes)	2/4	UNOPS	72,222	4,012	24,074	24,074	20,062
2111	PMU Office Facility	1/1	UNOPS	100,000	5,556	33,333	33,333	27,778
<b>29 Component Subtotal</b>				<b>3,823,518</b>	212,417	1,274,505	1,274,505	1,062,085
<b>30 Fellowship/Meetings</b>								
3201	Meetings of the Project Steering Committee, JMC and NPMC	1/1a	UNOPS	55,556	3,086	18,519	18,519	15,432
3202	Expert meetings/regional workshops on root causes' in preparation of SAP	2/3	UNOPS	64,815	3,601	21,605	21,605	18,004
3203	SAP review meetings, studies & Ministerial Conference	2/6	UNOPS	83,333	4,630	27,778	27,778	23,148
3204	Meeting on monitoring capacities	2/1	UNOPS	18,519	1,029	6,173	6,173	5,144
3205	Meeting of 6 WG on TDA-issues	2/2	UNOPS	55,556	3,086	18,519	18,519	15,432
3206	Meetings ad hoc SAP Task Force	2/5	UNOPS	38,889	2,160	12,963	12,963	10,802
3207	Meeting of the WG on SAP	2/5	UNOPS	9,259	514	3,086	3,086	2,572
3208	Meetings on the development of NAPs	4/2	UNOPS	138,889	7,716	46,296	46,296	38,580
3209	Meeting on public participation	4/3	UNOPS	41,667	2,315	13,889	13,889	11,574
3210	Donor Conference	3/4	UNOPS	74,074	4,115	24,691	24,691	20,576
3301	Training in River Basin Management, etc.	7/3	UNOPS	92,593	5,144	30,864	30,864	25,720
<b>39 Component subtotal</b>				<b>673,148</b>	37,397	224,382	224,382	186,985
<b>40 Equipment</b>								
4501	Communications eq for NAP committees	4/1	UNOPS	37,037	2,058	12,346	12,346	10,288
4502	Monitoring equipment	7/1	UNOPS	277,778	15,432	92,593	92,593	77,160
4503	Office Operation and Maintenance	1/4	UNOPS	37,037	2,058	12,346	12,346	10,288

5301	Miscellaneous			15,335	852	5,112	5,112	4,260
5401	UNDP CO Support Costs Kiev		UNDP	96,360	5,353	32,120	32,120	26,767
<b>59</b>	<b>Component subtotal</b>			<b>204,288</b>	11,349	68,096	68,096	56,746
<b>90</b>	<b>Project total (operational)</b>			<b>6,548,176</b>	363,787	2,182,723	2,182,723	1,818,933
93	Project support cost			451,824	25,101	150,608	150,608	125,506
<b>100</b>	<b>GRAND TOTAL</b>			<b>7,000,000</b>	388,889	2,333,331	2,333,331	1,944,439

## B. Budget description and abbreviated Terms of Reference

The GEF budget will be executed by UNOPS with some activities sub-contracted to other specialised organisations, notably IDRC. Brief descriptions of aspects of the budget are included below:

### International Project Staff:

These experts will be recruited internationally, using processes and procedures well established by UNOPS and accepted by United Nations member states. Their salaries and expenses will be paid according to scales regularly reviewed by UNOPS for UNDP operations world-wide. Two international experts are anticipated in support of the project. Their detailed Job Descriptions are given in Annex I.

*Project Manager:* Also referred to as the Chief Technical Adviser, this person will be responsible for the implementation of the project at the Project Management Unit in Kyiv. He/she will implement the workplan agreed by the Steering Committee, in close co-operation with the Project Management Committee and within the reporting and management regulations of UNDP/UNOPS.

*River Basin Management Expert:* He/she will be responsible for technical advice on river basin management and environmental assessment. Her/his expertise will be complementary to that of the Project Manager in order to provide a wide base of expertise for project implementation and co-ordination.

### Short-term international consultants:

Short-term consultants will give technical inputs to the national and regional working groups, act as resource persons and give methodological guidance. International expertise will be required in the following themes (detailed Terms of Reference will be prepared by the CTA during project implementation – note that additional consultants will be supplied through sub-contracts and inter-agency agreements):

*Consultant monitoring capacities:* Will work with local counterparts to assess the current capacities of regional institutions to monitor the state of the Dnieper, its tributaries and the sources of pollution which contribute to the quality of the river and adjacent aquatic systems. She/he will help to formulate

*Consultant monitoring programmes:* Will work in close co-operation with the relevant Activity Centre and working group in order to develop an integrated monitoring programme for the Dnieper and its tributaries. The programme will include measurements of sources, levels and effects of pollution and GEF support will focus on its transboundary aspects.

*Consultant incremental costs:* Will help the governments to identify the incremental costs of implementing the SAP. This will facilitate the development of follow-up GEF interventions.

*Consultant NAP (economist):* This position is to provide specialist support for costing the implementation of each of the NAPs. The economist will work closely with national experts from Ministries of Economy during the development of the NAPs.

*Consultant equipment specifications:* Will help with the identification and tendering procedure for laboratory and office equipment to ensure efficient supply at the most economic cost. He/she will also train local staff in procurement practices.

*Consultant environmental databases:* Will, in close co-operation with national experts, prepare a detailed strategy for the creation of a regional database and identify the strengths and weakness of existing systems in order to adapt them to the needs of the project.

*Consultant, State of the Dnieper Report:* Will work with local specialists to integrate the Report, critically review the data, draft the English language version and prepare it for publication.

### **National Support Staff**

The GEF/UNDP has made a commitment to hire local staff to carry out important functions of the PMU. The staff will include a Secretary and an Administrative Assistant.

### **Duty Travel**

These funds are for travel of the PMU staff throughout the region and elsewhere in support of the Project. Local travel funds are primarily for regional personnel to attend workshops, meetings, training, and other functions throughout the region. Government travel funds are to assist officials to attend key technical meetings during the implementation of the project.

### **Mission Costs**

These funds are to finance travel of UNDP/GEF and UNOPS staff to attend key meetings in the region, particularly review meetings during the course of the project.

### **National Professional Project Personnel**

National Professionals and Consultants will be recruited from qualified candidates from the participating countries to work at the national level. National Consultants will play an important role in the SAP planning process so that the SAP is country-driven. They will reinforce the capacity and responsibility of

the international specialist. He/she will be expected to assume specialist professional tasks in project execution.

*NPPP Monitoring.* This post is for a local specialist in pollution monitoring who will co-ordinate the emergent Dnieper monitoring network. He/she will work closely with the international specialists engaged for this work and with the relevant Activity Centre.

*NPPP SAP.* This will be a short-term consultancy to provide a dedicated counterpart for the international specialists and regional working groups. The task will be one of liaison and organisation of all local inputs to the SAP process.

*NPPPs NAP.* Funds are allocated in this rubric in order to enable dedicated teams to work in each country on the preparation of the National Action Programmes. The teams will be multi-sectoral in composition, including specialists in environment, agriculture, industry, economics, etc. The work will be co-ordinated by the National Project Management Committees with the support of the PMU and the UNDP Country Offices.

*NPPP Translators NAPs.* Translation services will be important at all stages of project implementation. The funding on this budget line will cover the requirements in this area.

*NPPP Public Participation.* It is important to maintain a strong liaison with representatives of civil society throughout the project implementation. The funds in this budget line will guarantee the creation of a full-time position in the PMU for a regional specialist in this field. It is suggested that this person should have responsibility for technical support to the Dnieper Regional Council. She/he should be appointed in consultation with the Regional NGO forum and the RECs.

## **Subcontracts**

Much of the work performed by associate organisations and international agencies will be administered using the mechanism of subcontracts. Subcontracts may be executed with the individual institutions, agencies, NGOs or other recognised legal entity to perform specific activities associated with the GEF/UNDP project. The subcontracts will be based upon specific terms of reference agreed prior to contract execution. It is important to stress that the subcontracts are assigned on the basis of comparative advantage for the countries in the region. The budgets proposed by subcontractors will be carefully assessed to ensure that the maximum possible use of national consultants and the transfer of benefits to the region. A summary of the contracts is given as follows:

### *IDRC*

As a major partner in project execution, IDRC will be responsible for Objective 1, Activity 2,3, and 4; Objective 2, Activity 3; Objective 3, Activity 2 and 10; Objective 5, Activities 1 – 4; and Objective 6, Activities 1 – 8. The description of the work to be undertaken in each of these activities is given in Annex

#### *UN-ECE*

An Inter Agency Agreement will be established with UN-ECE for the execution of Activity 7 of Objective 3. The detailed Terms of Reference for this activity will be presented to the first meeting of the Project Steering Committee.

#### *IAEA*

An Inter Agency Agreement will be established with IAEA for the execution of Activity 9 of Objective 3. The proposed work to be undertaken is described in Annex VI. The detailed Terms of Reference for this activity will be presented to the first meeting of the Project Steering Committee.

#### *Other Sub contracts*

UNDP will administer all other sub-contracts through UNOPS and select appropriate national and international contractors in close consultation with the Steering Committee. In the case of budget line 2111, the office facilities for the PMU will be contracted on a cost-sharing basis with IDRC.

#### **Fellowship/Meetings**

This budget area covers all operational meetings for the project as specified in the tables of objectives and activities. Funds are also reserved under budget line 3301 for training activities for specialists from the region through individual and group training.

#### **Equipment**

The project will purchase US\$ 448,148 of equipment for institutions in the region. The specifications of this equipment will be developed at the PMU in close consultation with the recipients. Purchases will follow the procurement rules of UNOPS taking advantage of the special status of UNDP with regard to exemption from import duties where applicable.

#### **Miscellaneous**

Costs are included for project reporting (publications, technical documents) for the PMU and Activity Centres. Sundries are the PMU items (for example postage and removals) not falling within the other categories. The cost of activities undertaken by the UNDP country office is included in this general category.

#### **Support costs**

6.9 percent of the costs of the GEF/UNDP Project, excepting the cost of activities at the UNDP Country Office, are made available for Project Execution.

## **ANNEX I TERMS OF REFERENCE DBEP PMU AND JOB DESCRIPTIONS FOR THE PMU STAFF**

### **Terms of Reference**

#### **Dnieper Basin Environment Programme Project Management Unit (PMU)**

*Kyiv, Ukraine*

**Background:** The PMU will provide a co-ordination and management structure for the development and implementation of the Dnieper Basin Environment Programme in accordance with the rules and procedures of GEF/UNDP based on directions provided by the Steering Committee and the guidance of the Joint Management Committee.

#### **Tasks:**

- Assistance in networking between National Focal Points and Activity Centres, Working Groups and any other multi-country bodies established in the three riparian countries (Belarus, Russian Federation, Ukraine);
- Organisation of technical co-operation activities between Dnieper Basin Regional Activity Centres in all three riparian countries for capacity-building, environmental policy, management and pre-investment activities;
- Organisation of consultative meetings for introducing and implementing programme activities (the Steering Committee, Project Management Committee, etc.);
- Organisation of the meetings of the Dnieper Regional Council;
- Collection and dissemination of information on policy, economic, scientific and technical issues related to the programme; that are not addressed by the Dnieper Basin Regional Activity Centres;
- Provision of support for the preparation of technical and pre-investment studies;
- Preparation of progress reports (administrative and financial) concerning programme activities;
- Establishment of and assistance in networking between specialised institutions in participating countries and technical specialists from elsewhere;
- Assistance in implementing pilot projects for the environment;
- Co-ordination of international, multi-lateral and bi-lateral environmental activities in the Dnieper Basin, where appropriate; and
- Programme management (financial, logistical and strategic) in the context of the GEF/UNDP and, where appropriate, the IDRC components of the project.

## **Job Descriptions for the Project Management Unit Staff**

### **A. Professional Staff**

#### **Project Manager**

##### ***General Job Description***

The Project Manager shall be responsible for the overall management of the GEF funded project activities within the Dnieper Basin Environment Programme (DBEP). He/she shall liaise directly with the DBEP National Focal Points and the representatives of the GEF partners, IDRC and other donors, in order to co-ordinate the annual work plan for the Project. The work plan will provide guidance on the day-to-day implementation of the current project document and on the integration of the various donor funded parallel initiatives. He/she shall be responsible for all substantive, managerial and financial reports from the Project. He/she will provide overall supervision for all GEF staff in the Project Management Unit as well as guiding and supervising all external policy relations. The Project Manager will communicate directly with the National Project Management Offices (NPMO) and with the Chairmen of the NPMCs (The NFPs). The Project Manager will also liaise with the Regional Activity Centres (RACs) and closely co-ordinate with all other Project national activities. He/she shall consult with, and co-ordinate closely with, the Project Management Committee, the Principal Project Resident Representative, senior representatives of partner agencies as well as the respective UNDP officers in all Dnieper Basin Countries.

##### ***Duties***

The Project Manager will have the following specific duties:

- to manage the PMU, its staff, budget and imprest fund;
- to become personally involved in project implementation according to the workplan and his/her particular specialist knowledge;
- to prepare the annual work plan of the programme on the basis of the Project Document, in close consultation and co-ordination with the National Focal Points, the Project Management Committee, GEF Partners, IDRC and relevant donors;
- to co-ordinate and monitor the activities described in the work plan;
- to ensure consistency between the various programme elements and related activities provided or funded by other donor organisations;
- to prepare and oversee the development of Terms of Reference for consultants and contractors;
- to co-ordinate and oversee the preparation of the substantive and operational reports from the Programme; and
- to foster and establish links with other related Dnieper Basin projects, and, where appropriate, the other regional International Waters programmes within the GEF's Black Sea Basin policy approach.

##### ***Skills and Experience Required***

- post-graduate degree in Environmental Management or a directly related field (e.g. river basin management, natural resources economics, etc.);
- at least twenty years experience in fields related to the assignment. At least ten years experience at a senior project management level. Demonstrated diplomatic and negotiating skills;
- familiarity with the goals and procedures of international organisations, in particular those of the GEF partners (UNDP, UNEP, World Bank);
- excellent knowledge of English; and
- familiarity with the administrative procedures of the Dnieper Basin Environment Programme would be



## **River Basin Management Expert**

### **General Job Description**

The River Basin Management Expert will provide additional expertise to the PMU for the establishment of the integrated technical services needed to support a Dnieper Basin Management Programme. She/he will bring technical expertise to the project based upon professional involvement in one or more established river basin management projects in other parts of the world. He/she will assume responsibility for setting up the PMU information system, for co-ordinating the work on establishment of an integrated Dnieper Monitoring Programme and Pollution Assessment and for assisting the Project Manager, local and international experts in the revision of the Transboundary Diagnostic Analysis and preparation of the Strategic Action Programme.

### **Duties**

The River Basin Management Expert will have the following specific duties:

- to provide support to the Project Manager for the technical implementation of the project, according to the agreed workplan;
- to ensure liaison between the technical components of the network (Activity Centres, Working Groups, etc.) and with the components sub-contracted to other agencies;
- to supervise data exchange and the maintenance of the data communications network between DBEP co-operating institutions;
- to supervise the development and maintenance of information management strategies (Information Systems, GIS) developed during the DBEP Phase I;
- to liaise with donors, specialised UN Agencies, international NGOs (such as WWF, IUCN) and other organisations involved in establishing and managing programmes for research and assessment in the Dnieper Basin;
- to supervise the production of Technical publications;
- to provide guidance for the completion of the revised Transboundary Diagnostic Analysis; and
- to provide technical support for the process of developing the Strategic Action Programme.

### **Skills and Experience Required**

The incumbent must have direct experience of working in a senior technical position in a river basin management programme for a period of not less than five years.

Other requirements are as follows:

- post-graduate degree in environmental science, hydrology, or a directly related field to environmental management;
- at least ten years professional experience including the direct experience in river basin management programmes described above;
- proven experience with computer data bases and environmental monitoring systems;
- experience in training other specialists;
- familiarity with the problems of the Dnieper Basin region would be advantageous, and
- knowledge of Ukrainian or Russian languages would be an additional asset.

**Duty station:** Kyiv, Ukraine

**Duration:** Two years on a fixed-term contract

## **Deputy Project Manager**

### **General Job Description**

The Deputy Project Manager is a post reserved for a national of one of the riparian countries. The incumbent will assist the Project Manager with his/her duties and will receive additional training in project management in order that he/she can act as Project Manager during periods of absence of the post holder. She/he will also have specific responsibilities to act as interim technical secretary for the Dnieper Regional Council and will work closely with the three governments and representatives of NGOs and civil society for the creation of this body.

### **Duties**

The Deputy Project Manager will have the following specific duties:

- to act as technical secretary for the Dnieper Regional Council;
- to attend meetings of the National Project Management Committees in order to ensure liaison between all project components;
- to assist with the administration of other components where required by the Co-ordinator
- to co-ordinate the edition of a regular information bulletin on the programme (Initially issued in English and Russian and widely distributed);
- to supervise the development of a library for the PMU;
- to liaise with other donors on the implementation of projects which support public participation/ public awareness in the Dnieper Basin region; and
- to contribute his/her own expertise to the implementation of specific components of the project.

### **Skills and Experience Required**

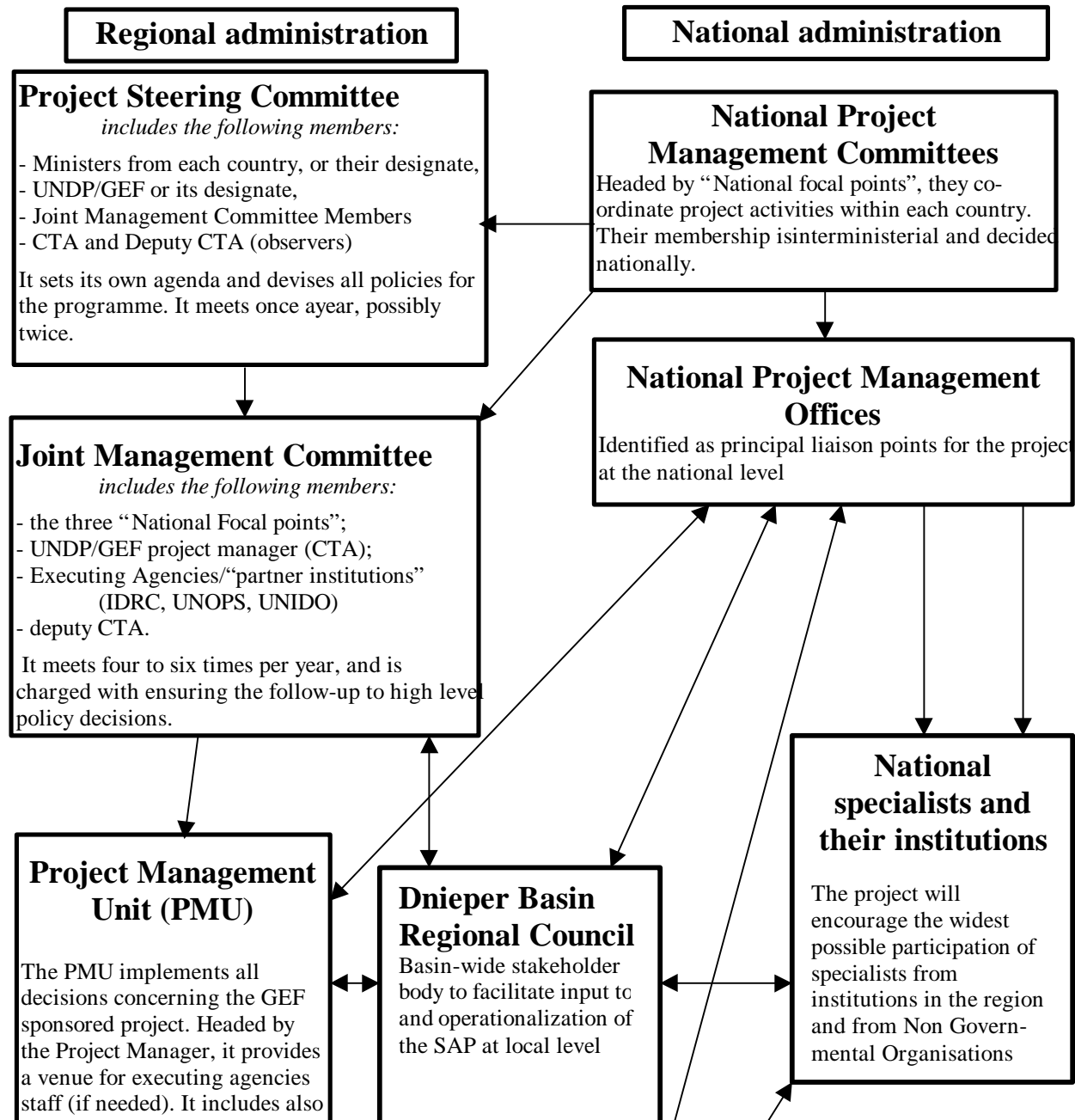
- advanced degree in environmental studies or a directly related field;
- at least five years direct experience with the management of environmental problems within the Dnieper Basin; and
- full fluency (spoken and written) in English and Russian;
- experience of working with international organisations is not essential but would be an asset.

**Duty station:** Kyiv, Ukraine

**Duration:** Three years on a fixed-term contract

**Suggested post level:** The appointment will be made on the technical merits of the applicants to fulfil the tasks indicated

## ANNEX II ORGANIGRAM OF THE STRUCTURE FOR GOVERNANCE, CO-ORDINATION AND IMPLEMENTATION



## **ANNEX III   TERMS OF REFERENCE FOR NATIONAL FOCAL POINTS, NATIONAL PROJECT MANAGEMENT COMMITTEES, STEERING COMMITTEE, DNIEPER REGIONAL COUNCIL, JOINT MANAGEMENT COMMITTEE, ACTIVITY CENTRES.**

### **National Focal Points**

#### **Background**

Each country will select a person, or persons, who will have executive responsibility for the Project in that country. This person would normally be a senior government official, such as a Minister or Deputy Minister of the Environment, or equivalent. The National Focal Points (NFPs) will be a major driving force for the Project and eventually for a wider Dnieper Basin Environment Programme. They will speak on behalf of their governments and ensure liaison with other sectors, also at the executive level.

#### **Tasks:**

- To represent his/her/their country on the Project Steering Committee and the Joint Management Committee;
- To ensure implementation of the agreed workplan and timetable, both nationally and regionally;
- To liaise with other government sectors to guarantee an intersectoral approach to project implementation;
- To participate in the development of the Strategic Action Programme for the Dnieper and to promote its adoption at the highest level of government;
- To ensure the provision of national counterpart funding and institutional support for the implementation of the project;
- To oversee the development of National Programmes of Action;
- To chair the National Project Management Committee;
- To develop institutional plans to encourage long term sustainability in the implementation of the SAP and NAPs;
- To encourage participation of civil society in the project, including national Non-Governmental Organisations.

### **National Project Management Committees**

#### **Background**

Membership of the NPMC will consist of the NFP, who will be the Chairperson, and other Government or non-government stakeholders as selected by the NFP. The objective is to attain a broad participation of all

**Tasks**

The NPMC will:

- ensure that the Project policies adopted by the Steering Committee are reflected in the national execution of the Project (in this respect, the Chairman will liaise closely and co-ordinate with the Project Manager);
- ensure an integrated and co-ordinated approach to facilitating the sectoral changes needed for the long-term rehabilitation of the Dnieper system;
- identify national modalities for the implementation of various components of the DBEP;
- develop, support and co-ordinate national networks of specialised institutions;
- co-ordinate and ensure timely delivery of national contributions to the project;
- assume responsibility for national contributions to the Transboundary Diagnostic Analysis and Strategic Action Programme, and the preparation of the National Strategic Action Programmes;
- ensure full co-operation with, and support to, Dnieper Basin Activity Centres;
- liaise closely with the Project Management Unit.

## **Steering Committee**

**Background**

The Steering Committee will function as the principal policy guidance body of the Project. The Committee will provide guidance to the Project Management Unit (PMU) through the JMC on issues pertaining to the regional administration of the project and to the National Project Management Committees (NPMCs) on issues pertaining to the national administration of the Dnieper Basin Environment Programme. The Committee will set its own operational procedures and approve its own detailed Terms of Reference. It will meet at least once a year and thereafter as frequently as the Committee itself deems necessary.

**Membership**

Membership of the Committee will be composed of a senior government official (designated National Focal Point or higher official) from each country along with the UNDP GEF Regional Co-ordinator for Europe/CIS (or their designated representatives). Members of the Joint Management Committee or other Dnieper River Basin stakeholders may be invited to sit on the Committee as observers as and when the full members so wish. The UNDP GEF Project Manager would normally be invited to attend as an observer at the Committee's discretion or at the request of the UNDP GEF RBEC Regional Co-ordinator. Funding for Steering Committee business will be covered by the Project. Assistance to the countries from these funds will cover the cost of the National Focal Points and members of the JMC (if invited) for each meeting.

- to ensure co-operation with neighbouring GEF programmes within the GEF's Black Sea Basin Initiative.

## **Joint Management Committee**

### **Background**

The JMC was created at the request of the three Dnieper Basin governments in order to ensure their close participation in the day-to-day running of the project. The JMC will develop its own operational procedures and detailed Terms of Reference that will be approved by the Steering Committee. It will meet at least, on average, every 2-3 months and thereafter as frequently as the Committee itself deems necessary or at the specific request of the Steering Committee. The JMC will adopt a Project work plan and budget report, as presented by the Project Manager, on a six-monthly basis. These will be passed on to the Steering Committee for its review and consideration at their next meeting. The JMC will also be responsible for ensuring that the policy guidance of the Steering Committee is reflected regionally in the day-to-day functioning and management provided by the PMU and nationally through the National Project Management Committees (NPMCs).

### **Membership**

The JMC will be composed of the three National Focal Points (NFPs) for the Project and the UNDP GEF Project Manager. The UNDP GEF Deputy Project Manager and the Project Executing Agencies may be invited as observers at the discretion of the Committee or at the request of the Project Manager.

Funding for meetings of the JMC will be provided by the Project.

### **Tasks**

- to provide guidance to the PMU for co-ordinating and managing the project and its sub-components;
- to assist in developing operational mechanisms for implementing the project work-plan, especially where this involves cross border consultation and policy development;
- to develop the annual work-plan and budget for subsequent approval by the Steering Committee;
- to provide a forum for consultations with the various agencies executing components of the project.

## **Activity Centres**

### **Background**

The Project will fund a maximum of six Regional Activity Centres (RACs) in the region. The Regional Activity Centres are a mechanism by which countries agree to share specific co-ordinating roles employing institutions which already exist and can be sustainably financed by national governments using their own resources. Each RAC has its own network of collaborating specialists and institutions within which components of the program are realised and information is exchanged freely, usually by electronic means, and without outside interference. The scheme avoids the unnecessary transfer of resources for

The sites Regional Activity Centres shall be selected at the first meeting of the Project Steering Committee. Funding for the Centres will not become available until they have presented satisfactory work plans and budgets to the Joint Management Committee.

### **Main Tasks**

- to co-ordinate the specialist technical inputs required for developing the Transboundary Diagnostic Analysis, the Strategic Action Programme;
- to develop and implement mechanisms for assessing the environment and preparing regular state of the environment reports;
- to develop cost effective measures and strategies for implementing the SAP;
- to develop mechanisms for ensuring the longer-term sustainability of the Dnieper Basin institutional network.

## **Dnieper Basin Regional Council**

### **Background**

The institutional mechanisms described in this project document are mostly directed towards the implementation of the GEF Project and most will become redundant on conclusion of the Project. In order to ensure greater long-term stability, a sustainable multi-sectoral consultation body shall be established. This body, the Dnieper Regional Council, will bring together central governments, local authorities and other stakeholders. It will be set up in a very flexible manner, allowing it to evolve according to the needs identified by the participants.

### **Membership**

The DBRC will include representatives of all Dnieper Oblasts, representatives of central governments, the project implementation unit and various representatives from the civil society including scientific institutions and NGO representatives. The Council will be quite large (some 30 members in total) but, with careful planning could be very effective as a working body with real influence at a local level. This body will bring together various networks, help define policies as well as recommend ways to operationalize them at local levels. Governments might consider developing this body as a successor to the previous Dnieper Commission.

### **Tasks**

- to hold regular consultations and technical/policy workshops (1/yr) with broad involvement from international agencies, national governments, research institutions, the private sector, and all interested public organisations and NGOs;
- to hold experts meetings and regional workshops with all stakeholders involved (including NGOs and private business) to discuss the identified 'root causes' of transboundary environmental problems and to identify actions to address them in SAP;
- to develop sustainable broad-based consultative mechanisms for future basin-wide management of the

## **ANNEX IV TERMS OF REFERENCE FOR WORKING GROUPS**

### **1. Biodiversity Terms of Reference**

The Soviet legacy, current environmental policies, and the stagnation of the local economies have had a strong impact on biodiversity in the Dnieper Basin. In particular, the main problems are inadequate protection of biological diversity in the Basin; grossly reduced areas of natural landscape; loss and degradation of wetlands; general loss of habitat; extinction of numerous indigenous species; and invasion of exotic species. The worst problems and most vulnerable areas are deforestation of the Upper Dnieper Basin; destruction of the wetlands in the Pripjat River Basin; damage and species losses in the forest and steppe communities; adverse impact of unsustainable industrial, mining, and agricultural development; use of meadows as pastures; and the extinction of fish species in the Dnieper and the Black Sea coastal areas.

Preparation of an effective action plan for the conservation of the remaining biodiversity of the Basin is urgently needed. Studies call for increasing the total area of biodiversity protection zones throughout the Basin; establishing new nature reserves, protected areas, and national parks; beginning wide-spread rehabilitation programmes to protect and restore natural landscapes and forests; regulating expansion of urban and agricultural areas; introducing integrated management plans for the flood plain areas; ensuring better protection of the steppe zone and its unique biodiversity; and introducing stringent regulatory policies to stop the further invasion of exotic species into the marine environment.

Since the Rio Conference and the creation of the GEF in the early '90s, all three riparian countries of the Dnieper River Basin became recipients of a significant amount of financial assistance from the World Bank and the GEF (as well as other donors) with the objectives of preserving, restoring and improving the state of natural, semi-natural, and disturbed ecosystems, species habitats, and landscape; promoting sustainable use of natural resources; and involving society in conservation of biological integrity. Russia, Belarus, and Ukraine have prepared their national strategies for conservation of their biological diversity and are developing legal, financial, institutional, scientific-methodological, and information-educational instruments for their implementation. All these projects have been national in scope, with focus on specific areas of concern, e.g. Azov-Black Sea Corridor, the Danube Delta, Pripjat Marshes, and Transcarpathia. There is a wealth of experience and data in all three countries that needs to be integrated and interpreted internationally for its effective use in the Dnieper River Basin as a whole, with special attention to ecologically vulnerable ecosystems like wetlands, forests, steppes, reservoirs, deltas, and agricultural landscapes. Establishment of national ecological networks is currently under development in all three countries. The proposed GEF-SAP funding will assist in integrating all available information from these projects, complement it with some new initiatives to generate specific information presently unavailable, and ensure its effective incorporation into the Dnieper SAP.

Actions and outputs under the Biodiversity rubric include:

1. Establishing an Expert Working Group on Biodiversity, which will provide input into implementation



7. Selecting consultants in legal / regulatory and public participation in biodiversity for carrying out activity 5.2, maintaining contact and arranging meetings, and vetting reports;
8. Assessing and carrying out professional development of the local staff;
9. Publishing and disseminating research data;
10. Introducing and testing novel approaches on a pilot / demonstration project basis (adopt-a-park, remote video monitoring of wildlife, etc.);
11. Holding periodic consultations with other working groups to integrate activities elsewhere with biodiversity activities.

## **2. Pollution Prevention and Control Terms of Reference**

Pollution prevention and control is an activity dealing with devising laws, policies, and activities that will lessen pollution entering the Dnieper River.

In the Soviet Union, the primary emphasis of the industrial sector was on production, the meeting of centrally determined objectives and quotas with little concern for costs in terms of resource use, environmental degradation, or health risks. The lack of market forces influencing production and consumption resulted in far higher use of resource inputs per unit of production than was found in western industrialised countries. Excessive resource use in combination with a system that placed little value on the environment resulted in a heavy pollution load being discharged into the Dnieper River. Although strict standards for water quality existed in the form of maximum allowable discharges, environmental laws were not enforced and were subordinated to achieving production objectives.

The collapsing of waste treatment infrastructure through a lack of maintenance and investment is a growing contributor to pollution of the River. Environmental laws, largely held over from the Soviet system, remain poorly enforced or are frequently ignored, while harassment by and bribing of environmental officials is not uncommon. In the absence of a fully functioning market economy, the true costs of wasteful use of resources and the savings engendered by resource conservation are not fully realised. To date, the approach to pollution prevention has been the use of regulations and penalties for polluters. Neither the governments nor industrial managers are knowledgeable about the principles and advantages of "clean production" as a means to reduce input costs and pollution. Effective pollution reduction in the Basin requires a coordinated programme of environmental laws that are equivalent to those of the European Community, effective enforcement of environmental laws, and an emphasis on clean production that captures the benefits of reduced resource use with accompanying cost savings for production inputs and waste treatment.

Activities will be oriented toward three objectives:

1. To generate water quality standards in the 3 countries that are similar to those adopted by the European Community, including the updating of criteria with respect to limited substances.

1. Establishing an Expert Working Group on Pollution Prevention and Control, which will deal with environmental laws and their enforcement and permitting, provide input into implementation of other related projects, and govern activities at the Pollution Prevention and Control Activity Centre;
2. Setting up in one of the riparian countries a Pollution Prevention and Control Activity Centre, which will serve as the focal point for regional training, capacity building, information exchange, and SAP formulation;
3. Studying the environmental laws of the EU and making recommendations to national legislators;
4. Devising enforcement and penalty schemes that are similar for the 3 countries. In doing so, the experience of East European countries like Poland and the Czech Republic will be studied;
5. Holding periodic consultations with other working groups to integrate activities elsewhere with pollution prevention and control activities;
6. Devising realistic systems of permitting for waste discharge and realistic fees for pollutant discharge into municipal treatment systems;
7. Examining and making recommendations for the development of environmental funds (study Polish and other experience);
8. Providing training for wastewater operators on how to manage more effectively their waste treatment plants and provide an information centre for municipal governments seeking technical and financial assistance in upgrading their systems;
9. Developing a proposal for a warning system to deal with discharges of pollutants (chemical, nutrient, or radioactive) into the River system.

### **3. Legal, Regulatory and Economic Issues Terms of Reference**

To be prepared by IDRC at start of project.

### **4. Information Management Terms of Reference**

Management and decision-making require timely and accurate information. In the FSU, data on public activities related to environment, health, agriculture, etc., was strictly confidential and accessible to only a small group of people. When they were given any information at all, the public and foreign entities were usually fed specially prepared and questionable data. Because of the government's secretive nature, information was often the key to power and was hoarded and guarded by institutions and individuals. Thus, information organisation, dissemination, and quality all suffered under the Soviet system.

In the post-Soviet era, this mentality often continues; government bodies and research organisations regularly collect information in a competing and redundant manner, use conflicting methodologies or outdated equipment or technology for information gathering, and guard information to the detriment of decision making. These ongoing problems, coupled with the general lack of computers and reliable communications systems, have hampered management of the Dnieper River Basin.

1. Establishing an expert working group on information management, which will provide input into implementation of a basin-wide information system and other related projects and govern activities at the Information Management Activity Centre;
2. Setting up in one of the riparian countries an Information Management Activity Centre, which will serve as the focal point for regional training, capacity building, information exchange, and SAP formulation;
3. Ensuring that appropriate institutions are assigned to collect data and that international standards are applied in data measurement and gathering;
4. Creating a plan for integrated international management and sharing of information and establishment of the Dnieper Basin database, including: establishment of parameters and metadata; determination of stakeholders and end users and their roles; definition of system functions; determination of information, training, and equipment needs; maintenance of the system; and assurance of information accessibility;
5. Defining standards for technology (hardware and software), common core data, and data exchange;
6. Working with selected government bodies, research institutions, and NGOs to select, to purchase, and to install necessary hardware and software and to establish internet connections;
7. Assuring that all relevant data is open and available to end users through web pages, list servers, e-mail, etc., as well as regularly published documents;
8. Holding periodic consultations with other working groups to integrate activities elsewhere with information management;
9. Overseeing the preparation, publication, and distribution of the State of the Dnieper Report.

## **5. Pollution Monitoring Terms of Reference**

All three Dnieper Basin countries are heavily industrialized and urbanised, with large areas of intensive agriculture characterized by overuse of fertilizers and pesticides. There is extensive transboundary flow of contaminants: at the Belorussian-Ukrainian border, for instance, 62 thousand tons of BOD, 37 thousand tons of COD, over 150 tons of heavy metals flow annually. All these loadings exceed the maximum allowable concentrations (MAC values) by 100 to 1900 percent (TDA, 1997). Radioactive sediments from the Chernobyl fall-out are carried by tributaries downstream across the border and accumulate in the large reservoirs on the Dnieper, posing a potential threat to the Black Sea. Existing monitoring stations are remote from the new international borders, inadequately staffed, and their equipment becoming outdated.

Three major environmental and transboundary problems have been identified in the Dnieper River Basin:

1. Unacceptable levels of pollution and toxic contamination of surface and groundwater resources, moving across international boundaries and eventually into the Black Sea, also an international water body;
2. Ineffective water and wastewater management;
3. Advanced eutrophication of large reservoirs on the Dnieper, with the threat of accidental flush-outs of contaminated sediments and frequent fish kills.

4. Holding periodic consultations with other working groups to integrate activities elsewhere with pollution monitoring;
5. Relocating and / or establishing new monitoring stations close to the international borders to ensure continuing surveillance and compliance with tri-national water quality targets;
6. Introducing new indicators and advanced concepts in water quality monitoring, with upgraded data processing and instant information exchange to ensure early warning capability in case of accidental spills or exceeding of permissible levels;
7. Preparing costed proposals for overall capacity building of the monitoring systems and information technology and developing training programmes for laboratory personnel in new methods of analysis;
8. Promoting scientific exchanges for the professional staff.

## **6. Clean Production Terms of Reference**

The traditional Soviet approach of output at any cost paid little heed to environmental concerns. The high concentration of light and heavy industry in the Basin, particularly in the south, coupled with the great agricultural expanses in the central and northern regions, has greatly degraded the Basin; indeed, were it not for recent decreased economic output and lack of funds for pesticides and fertilisers, practices similar to those of Soviet times would continue to highly pollute the River at similar levels. Still, industrial emissions and agricultural pollution account for most of the pollution entering the Dnieper watershed. The problem is of acute concern given the legacy of Soviet practice and current policies in the Basin.

Industrial enterprises in the riparian countries find themselves at varying stages of privatisation, with different levels of foreign ownership, and in disparate legal frameworks. Approaches to emissions and effluents, therefore, vary from country to country. Agriculture, on the other hand, remains structured in all three countries much as it was previously, with state ownership of large collectives and poor land, fertiliser, and pesticide use practices making it a major source for non-point source pollutants. Coordinated action among the three riparian countries is absolutely essential in gauging and ameliorating pollution from enterprises and agricultural concerns and there is a need to employ cleaner practices in anticipation of economic stability and increased output in the Basin. Employing environmental audits and clean technologies / practices will reduce inputs, lessen emissions, effluents, and runoff, and allow for bigger long-term profits in all of the countries.

Actions and outputs under the Clean Production rubric include:

1. Setting up an Expert Working Group on Clean Production, which will provide input into implementation of the basin-wide information system and other related projects and govern activities at the Clean Production Activity Centre;
2. Setting up in one of the riparian countries a Clean Production Activity Centre, which will serve as the focal point for regional training, capacity building, information exchange, and SAP formulation;
3. Establishing in each of the 3 countries a group of experts in the field of environmental auditing capable of providing training in this topic. This can be done by enhancing the capability of the experts

8. Fostering the establishment of companies to conduct audits of selected industrial / agricultural concerns.

## ANNEX V DETAILS OF ACTIVITIES TO BE EXECUTED BY IDRC

Budget Line # 2101

### **Activity 1.2**

Establish Expert Working Groups with members from riparian nations and foreign experts

#### *Objective:*

Six working groups will be established which will correspond to the topics associated with the activity centres. Each working group will have about 20 members from the three riparian countries; will have one foreign expert associated with it; and will maintain close linkages with the activity centres (some of the meetings will take place at the activity centres).

#### Working groups:

- 1) Biodiversity
- 2) Pollution prevention and control
- 3) Legal, regulatory and economic issues
- 4) Information management
- 5) Pollution monitoring
- 6) Clean production

#### *Activities:*

The full working groups will meet once a year with members, while maintaining contact between meetings. They will provide input and advice for SAP and NAPs development and guidance for the activities undertaken by the activity centres.

#### *IDRC's role:*

IDRC will assist in the organisation of the working groups, participate in their annual meetings, and provide general technical backstopping and advice throughout the lives of the working groups.

#### *Success Criteria:*

Working groups established by December 1999 and first meeting by January 2000

Milestones: two successive meetings held, with foreign experts and IDRC participating

Effective guidance provided to activity centres, SAP, and NAPs

Budget Line # 2101

providing the above services, the activity centres will build the capacity of the riparian nations to develop and eventually put in operation the SAP and NAPs.

The centres will focus on the following topics:

- 1) Biodiversity
- 2) Pollution prevention and control
- 3) Legal regulatory and economic issues
- 4) Information management
- 5) Pollution; monitoring
- 6) Clean production

*Activities:*

Roughly \$250 K will be spent from the GEF funds to cover some basic running costs and activities of the centres. Each centre will hold a conference early in its existence to define issues and to develop a work plan related to its area of expertise. The conferences will be attended by representatives from riparian nations and western experts. A small study tour to Western Europe or North America will also be funded for each centre to familiarise members with specific issues related to the topic it covers. The centres will also host and participate in some of the meetings organised in the course of the GEF project, thus providing cost efficient use of their premises.

*IDRC's role:*

IDRC will supervise the selection of the activity centres, which will be the responsibility of the riparian countries' National Management Committees. IDRC will also participate in the initial conference at each centre, defining strategic directions; participate in some of the training sessions; oversee the activities of each centre to provide quality assurance; assure that the centres' input is considered during SAP and NAPs development; and assist centres in defining training and equipment needs.

*Success Criteria:*

Six activity centres in place and functioning by January 2000. Successful centres will be characterised by a high degree of interaction between experts from the three riparian nations, as well as with western experts, and by successfully organising and participating in study trips to learn from the river management experience of other basins, for example the Danube GEF project. Successfully raising funds from other sources for study trips.

Budget Line # 2101

**Activity 1.4**

Create Dnieper Regional Council and coordinate annual meeting of the Council

*Objective:*

The Dnieper Regional Council will be a large group comprised of representatives of organisations concerned with the River. Membership will include representatives of relevant ministries (Environment, Natural Resources, Industry, Municipal Affairs, Public Health), oblast administrations (23 in total), representatives of civil society through NGOs, scientific institutions, and local governments of large municipalities. The GEF Project Management Unit and Council will also be represented on the Dnieper Regional Council.

The Regional Council will serve as a forum to bring together results of work conducted by the activity centres, thematic working groups, and other GEF activities and issues raised by various forums organised through GEF (see objective 6), providing input and advice into the development of the SAP and NAPs.

*Activities:*

Three annual meetings of Council will be organised by IDRC. It is anticipated that the annual meetings of the Council will be structured around small working group meetings focussed on specific issues and that the working groups' deliberations will be reported at plenary sessions where results and recommendations can be summarised and endorsed by the entire Council.

The Council will comprise approximately 60 members with the following make up:

Oblast officials	23
Civil society + NGOs	16
National Govt reps.	15
Municipal Govt reps.	6
Total:	60

*IDRC's role:*

Much of the IDRC activity will involve communication from the Kyiv office to potential members of the Council and organisation of meetings throughout the Basin to explain the role of the Council and to enlist membership. Organising t



Budget Line # 2102

**Activity 2.3**

Identify pollution "hot spots" for subsequent rehabilitation / investments

*Objective:*

The objective of this activity is to identify, using the World Health Organisation's criteria, pollution hot spots in the Dnieper Basin and to identify those suitable for remediation through direct investment by international financial institutions (IFIs), partnerships with and investment by foreign companies, or self-funded improvements. Self-funding will be realised through cost savings from the introduction of low-cost waste and pollution reduction measures. Environmental audits will help identify these low-cost improvements in management and production processes resulting in reduced pollution and input costs.

Hot spots will include industrial plants, cities, municipal sewage plants, landfills, and sites of intensive animal production, such as feed lots and pig farms. It is expected that a significant number of abandoned industrial and waste disposal sites will be found. Information on pollution from the Chernobyl nuclear accident will be documented, but no new data will be collected due to the already existing extensive information base.

*Activities:*

The activity will be carried out primarily by three consultants (one from each riparian nation). They will receive training as a group at the beginning of the activity and will meet twice during the project to compare their approach and results in order to assure consistency in their final reports. The final report will present information on hot spots in each of the three countries in a single report. The report will feed into the work of the thematic working groups (primarily the pollution prevention and clean production themes) and activities under objective 3 dealing with environmental audits, clean production, and IFI's priority investment portfolios.

Two trips by two international consultants are required to assist the work. The first trip will be to conduct the training, during which a limited number of hot spots will be assessed with the three local consultants working as a team. A second visit towards the end of the project will facilitate the merging of the three reports from the local consultants into a final report.

*IDRC's Role:*

IDRC will engage the foreign and local consultants, monitor progress through field visits, and provide overall quality assurance. It will arrange for the translation, editing, and publishing of the final report.

*Success Criteria:*

Successful training workshop by Feb. 2000.

Project completion date: publishing the final report in June 2000.

Budget Line # 2103

**Activity 3.2**

Feasibility studies / pilot projects: economic instruments to regulate municipal / industrial pollution

*Objective:*

The objective is to conduct feasibility studies and pilot projects using economic instruments to reduce pollution and to link these results to IDRC's ongoing environmental audits and green technologies project. This activity will be closely coordinated with those working groups and activity centres that focus on pollution prevention and control and legal, regulatory, and economic issues.

*Activities:*

Water and sewerage pricing and consumer attitudes toward water use will be reviewed in one major city within the Basin. A sensitivity analysis report will be written to determine the optimal price of water to reduce use and minimise sewerage discharge, particularly by industry. The report will be written with the help of an NGO to capture public and industry concerns. It is proposed the study will be followed by a public education campaign and a pilot project to introduce optimal fees by the city to measure the effect on water use and sewer discharge. Results of the experiment will be discussed with stakeholders (water providers and users) and published in a case study.

A training workshop on environmental audits will be conducted in Russia and Belarus, similar to those which have already been conducted in Ukraine in the course of the IDRC EMDU programme, to develop a regional capacity to reduce pollution. Environmental audits will be performed at three major industrial sites (one in each country) where low-cost management, process, and equipment improvements will be introduced to reduce inputs and waste outputs. Low-cost

selecting sites for audits;  
training of auditors in Russia and Belarus, in conjunction with initiation of the audits;  
having local auditors work with plant managers to see that low-cost changes in plants are made and that waste reduction is documented. Technical advice will be provided by the lead agency;  
organising in each of the riparian countries a seminar to be attended by industry and government managers to demonstrate the use and value of environmental audits and introduction of low-cost waste reduction procedures and technological improvements.

*IDRC's role:*

IDRC will monitor and supervise the activity. Potential additional support is expected from the Danish Government and the British Know How Fund.

*Success Criteria:*

By June 2001, a report on water and sewage pricing, and the results of trial pricing pilot study in a major city;  
Three audits and non-capital improvements made; cost- and pollution reductions documented; trained environmental auditors in the three riparians (at least 5 per country); end of project conference explaining the value of environmental audits attended by representatives of all stakeholders;  
By June 2001, case studies of environmental audits published;  
Additional funds for clean production activities garnered from other donors.

Budget Line # 2103

**Activity 3.10**

Assess operational capacities and practices regarding the transboundary environmental consequences of water abstraction and water returns from treatment plants

*Objective:*

In the Basin, waste water and water treatment plants (wastewater treatment plants) and enterprises with their own treatment facilities ordinarily have water intake pipes that abstract raw water from the Dnieper River and return pipes that deposit it there following treatment. A review of all current and planned future water processing licences needs to be conducted in order to identify the existing and potential impact that such abstraction and return have on the environment and biodiversity.

or general environmental impacts. A workshop will be held in each of the three riparian countries and will bring together interested parties from all riparians and participants from the thematic working groups and activity centres (particularly those dealing with biodiversity; pollution prevention and control; legal, regulatory and economic issues; and pollution monitoring). An international expert will be selected to review the report, advise the local experts, and participate in the first workshop, while the working groups will make recommendations to decision-makers.

*IDRC's Role:*

IDRC will assist with the selection of the local consultants and international expert, provide technical assistance and backstopping in the data analysis, and assist with the organisation of the workshops.

*Success Criteria:*

Three workshops held to discuss the findings of the national experts of odokanal-related transboundary environmental effects by Spring 2001.

A comprehensive report on the current state and future of water abstraction and return and the consequent environmental effects in the Basin, to be included in the SAP by June 2001 and the NAPs, by Oct. 2001.

Budget Line # 2104

***Activity 5.1***

Conduct an assessment of protected areas, priority ecosystems & biodiversity hot-spots, including economic valuation studies

*Objective:*

The objective of this activity is to assess the current situation of biodiversity protection in the Basin and identify knowledge gaps and potential remediation / action plans. The activity will be carried out by three national experts from each riparian country in close collaboration with the biodiversity thematic working group and activity centre. A report on assessment and inventory for each country of existing protected areas, priority ecosystems, and biodiversity hot-spots will be prepared.

*Activities:*

Workshop: in the course of the first strategic workshop organised by the biodiversity activity centre (see 1.3), the thematic working group on biodiversity

Basin-wide workshop: this basin-wide workshop will bring together the national experts and the biodiversity thematic working group to be held at the Biodiversity Activity Centre. Observers from cooperating organisations, NGOs and some analogous GEF Biodiversity programs outside the Basin will be invited to join the meeting. The workshop will discuss the three national inventories of protected areas, select from the list of proposed solutions, compile a short list of pilot projects, agree on a time schedule, and exchange experiences. On the last day attendees will visit a biodiversity site.

Follow-up workshops for national experts: two follow-up meetings will take place to finalise the report in preparation for the SAP.

Pilot initiatives: based on the decisions made at the basin-wide workshop, three pilot initiatives will be conducted (one in each country). They could include establishing new or upgrading existing protected areas in the transboundary zones, steppe floodplain, or the Dnieper estuary; upgrading existing GIS capabilities for protected area management and electronic data management and exchange; introducing remote sensing, automatic sampling, and monitoring stations in transboundary areas and on-line storage and exchange of collected data with early-warning capability; exploring the Adopt-a-Park idea with remote video monitoring of wildlife.

*IDRC's role:*

IDRC will select the international consultants and monitor and supervise the activity.

*Success Criteria:*

Basin-wide workshop organised by May 2000.

Up-to-date assessment of the state of biodiversity protection activities in the Dnieper Basin; identification of overlaps with biodiversity programs funded from other sources, ensuring effective consolidation and coordination of all activities; provision of an integrated input into the Dnieper SAP by Nov. 2000; pilot studies completed by June 2002.

Budget Line # 2104

**Activity 5.2**

Review legal and regulatory framework for Dnieper River Basin biodiversity protection, community support, and public participation

*Objective:*

This activity will be carried out by national experts in two areas: one in legal and regulatory, the other in public participation regarding biodiversity protection in the Dnieper Basin. The consultants will meet twice during the SAP preparation period to compare their approaches and progress and will report to and maintain close contact with the biodiversity thematic working group, the activity centre, and an international adviser. Their report will feed into the SAP and NAPs preparation.

*Activities:*

At its first meeting, the biodiversity activity centre (see 1.3) will select national consultants from each country to work on the legal and regulatory framework and public involvement. Two meetings will be held to bring together the local experts, biodiversity working group representatives, and an international adviser. At the first meeting, they will prepare a plan and outline the scope of their research, while at the second meeting each expert will present the results of their work and propose a course of action for the working group to feed into the SAP and NAPs preparation. Using these directions, the national experts will prepare a report with recommendations in the legal and regulatory areas for the biodiversity working group, as well as public involvement status in the Basin for inclusion in the Dnieper SAP and NAPs.

To provide professional development and training, three people (one from each riparian country) will visit selected European and North-American biodiversity projects to exchange expertise, to study local systems of biodiversity protection, and to attend conferences / symposia.

*IDRC's Role:*

IDRC will select the international consultants, assist with the organisation of the meetings, and monitor and supervise the activity.

*Success Criteria:*

Two meetings held involving local experts, the working group, and international experts by Aug. 2000.

Budget Line # 2104

**Activity 5.3**

Review & assess agricultural practices in context of pollution reduction and soil conservation

- 3a Review and assess agricultural practices in relation to transboundary biodiversity conservation (in context of pollution reduction and soil conservation)
- 3b Review status of fisheries and aquaculture in the region in relationship to biodiversity conservation; identify gaps and problems areas

*Objective:*

These two sub-activities will be conducted separately by national consultants / institutes and their work will directly feed into the SAP development . Each country will have a team of three experts, one from the agriculture sector, one from the fisheries / aquaculture sector, and one dealing with biodiversity. They will be assisted by international experts bringing the same areas of expertise to ensure a multidisciplinary and multisectoral approach to biodiversity protection in the Dnieper Basin.

*Activities:*

The national experts will be selected during the first meeting of the biodiversity thematic working group (see 5.1), where they will have a first meeting with the selected international experts to plan the upcoming research. These consultants will assess agricultural and fisheries as well as aquaculture practices in the Basin, their impact on biodiversity, and suggest potential improvements of unacceptable operations. In the course of the assessments, experts will also conduct field visits to 2-3 selected agricultural and fisheries enterprises to assess possible improvements in present management practices. With help from international consultants, two separate position papers will be prepared for the working group by Oct. 2000 (agriculture sector) and Jan. 2001 (fisheries / aquaculture) for incorporation into the Dnieper SAP.

*IDRC's Role:*

IDRC will assist with the selection of the international experts and monitor the activities, providing technical backstopping.

*Success Criteria:*

Two reports reviewing the conservation implications of current Dnieper Basin

Budget Line # 2104

**Activity 5.4**

Assist countries to develop a regional strategy for protecting key habitats and species in the Dnieper Basin

*Objective:*

This activity marks the completion of the biodiversity thematic working group's main tasks, summarising accomplishments and proposals from all previous activities and presenting a mutually agreed upon regional strategy proposal in the course of a final workshop to be held at the biodiversity activity centre.

*Activities:*

A final summary meeting of the Working Group and national consultants from Activities 5.1 through 5.3 will be organised to prepare a draft of the basin-wide biodiversity protection strategy, to be incorporated in the overall Dnieper SAP. Assistance in the final document preparation will be provided by an international consultant. A follow-up workplan of the working group for the implementation of the Dnieper SAP will also be outlined. The final Regional Biodiversity Strategy will be edited and published in all three national languages and English.

*IDRC's Role:*

IDRC will provide support to the activity centre in the organisation of the final workshop and in the editing and publishing of the report.

*Success Criteria:*

Completion of the regional basin-wide biodiversity protection strategy report by Sept. 2001, which would then be presented to the Dnieper Project Steering Committee.

Report's recommendations incorporated into the SAP and NAPs.

Budget Line # 2105

**Activity 6.1**

Facilitate socio-economic assessment of the effect of transboundary pollution on the Basin's population and the identification of key stakeholders

*Objective:*

This activity will be carried out by contracting the study to a local organisation such as an economic faculty of a university or an NGO



will be conducted to disseminate and discuss the findings where representatives from the major stakeholders (all three countries) and the relevant working groups and activity centres (primarily pollution prevention and control; legal, regulatory and economic issues; clean production; and pollution monitoring). The final report will feed into the SAP and NAPs preparation.

*IDRC's Role:*

IDRC will assist the working groups in the selection of the local contractor and provide quality assurance for the work undertaken, ensuring that all major stakeholders are included in the assessment.

*Success Criteria:*

Writing and publishing an authoritative report in Russian, Ukrainian, Belarusian, and English documenting who the stakeholders are with respect to Dnieper River water quality and the impact of pollution on these stakeholders by Oct. 2000.  
Findings of the report discussed with a wide audience at a workshop, Nov. 2000.

Budget Line # 2105

**Activity 6.2**

Improve information access and dissemination through the WWW and Internet list-servers

*Objective:*

The objective of this activity is to improve communications among institutions involved in GEF activities and enhance information dissemination about environmental activities in the Dnieper Basin.

*Activity:*

This activity will be carried out by establishing a GEF Information Centre in Kyiv at a local participating institution with web access established for each of the national project management committees. The national sites and other agencies participating in the GEF project will transmit project info to the Information Centre, which will maintain a GEF web site. The Centre will also be responsible for setting up any electronic means of communications (list-servers, chat rooms, web conferences) as needed by the institutions working in the Basin. Information in the IDRC-sponsored EMIS system will also be posted on the GEF site, assuming Ukrainian MEPNS consent.

*IDRC's Role:*

GEF Dnieper web site set up and web access provided to the national committees by January 2000.  
Permanent GEF Information Centre organised to maintain the website by September 2000.  
Improved electronic communication among national committees and participating institutions.

Budget Line # 2105

**Activity 6.3**

Hold regular consultations and technical workshops with broad stakeholder involvement

*Objective:*

This activity assists with the work of the Dnieper Regional Council by providing a venue for annual wide-scale stakeholder consultations. In addition to these meetings, two smaller technical / policy meetings involving stakeholders will be organised to deal with the six themes covered by the working groups and the activity centres.

*Activity:*

It is expected that for the three consultations of the Regional Council and stakeholders, western experts would be funded by aid agencies interested in or already involved in the GEF programme. Only local travel, facilities, and direct meeting expenses are covered by the GEF budget, assuming that 60 local people will attend.

The smaller technical / policy meetings will be organised at the activity centres, involving the thematic working group members and selected stakeholders (altogether about 20 people).

*IDRC's Role:*

IDRC will supervise the organisation of the consultations, making sure that all relevant stakeholders are involved, the information is sufficiently disseminated, and feedback loops are maintained. IDRC will also ensure that there are strong linkages between the outcomes of the technical / policy workshops, the work of the thematic working groups, and SAP and NAPs development.

*Success Criteria:*

Regional council providing effective input into development of the SAP t

Budget Line # 2105

**Activity 6.4**

Expand internet access for key stakeholders with priority for those without existing service

*Objective:*

The objective is to improve communications among institutions involved in GEF activities and enhance information dissemination about environmental activities in the Dnieper Basin.

*Activity:*

This project will provide web and e-mail access on an as-needed basis to key stakeholders. The number of sites provided will be highly contingent upon the monthly charges for internet access (currently \$400 per month for a dedicated line in Kyiv). In some cities, e-mail is provided free of charge through firenets provided by various aid agencies.

*IDRC's Role:*

IDRC will provide technical advice and coordination for the selection and establishment of access to the web for GEF partners. An important role of IDRC will be to find affordable internet providers in order to complete this activity within budget. IDRC will also provide initial internet training for novice users.

*Success Criteria:*

Ten links to the internet provided to key GEF partners by March 2001.

Budget Line # 2105

**Activity 6.5**

Publish and disseminate project and Dnieper Basin information (print & on-line)

*Objective:*

The objective is to disseminate information about environmental activities in the Dnieper Basin to a wide audience, encouraging participation and feedback from all stakeholders.

*Activity:*

A Dnieper GEF newsletter will be established in Russian, Ukrainian, Belarusian, and English. Twice a year, a more extensive report on the project and gener

Upon TDA / SAP completion, jargon-free accessible versions will be published and disseminated widely in the three countries.

*IDRC's Role:*

IDRC will select the organisation to publish the newsletter, assist with the final editing of the English issues, and be responsible for the international dissemination of the newsletter. It will also supervise the publication of the jargon-free TDA and SAP. In order to ensure that all publications meet the highest standards, IDRC will need to provide much input into their formulation and final editing.

*Success Criteria:*

Regular newsletter, with first edition published in Feb2000.

Web information appearing by Feb.2000 and updated regularly.

TDA / SAP widely distributed by Dec. 2001.

Budget Line # 2105

**Activity 6.6**

Enhance involvement through well publicised regional Dnieper Basin events

*Objective:*

A number of approaches will be used to promote activities related to cleaning up the River and raising public awareness of Dnieper problems and what citizens can do to become informed and help to fight transboundary pollution.

*Activities:*

Potential activities include:

Support NGO newsletters and other publications;

Development of school curricula materials (one for each country);

With the help of municipal authorities and NGOs, sponsor local events, like a river bank clean up day;

Information will be disseminated about the funded activities through the GEF web page.

*IDRC's Role:*

IDRC will assist with the selection of worthy causes to be supported. These could be brought forward by the national committees, the thematic working groups, and the activity centres, either in line with planned strategies or as need arise

Budget Line # 2105

**Activity 6.7**

Sponsor bi-annual NGO forum for networking and regional capacity building

*Objective:*

The project will promote a network of NGOs and networking between NGOs to share data and information related to the SAP and problems associated with transboundary pollution of the River.

*Activities:*

Five meetings of NGOs will be held to discuss Dnieper problems, to provide input into the SAP / NAPs, and to build NGO participation in and capacity for dealing with Dnieper problems. The meetings will be held at various locations in the Basin. Active participation by Regional Environmental Centres, as these become established and operational, is expected. Participation of NGOs outside the Basin will also be sought, with funding raised from new sources. Information produced at the meetings will be disseminated to all thematic working groups, activity centres, and GEF national committees.

*IDRC's Role:*

IDRC will organise the meetings to ensure appropriate representation by a wide range of NGOs in the region, to encourage capacity building, and to engender networking. IDRC will also promote ongoing networking between meetings.

*Success Criteria:*

Functioning network of NGOs regularly sharing data and information.  
First NGO meeting organised by March 2000.  
Additional funding for NGOs secured.

Budget Line # 2105

**Activity 6.8**

Create and administer a Dnieper Basin small grants program for NGOs and community organisations

*Objective:*

The small grants will be used to fund small-scale activities proposed by NGOs and community organisations related to the rehabilitation and improved transbounda

representatives to the GEF project, along with the CTA and the IDRC onsite manager. The proposals and the final reports will be translated, put on the GEF web site, and disseminated to the relevant thematic working groups and activity centres.

*IDRC's Role:*

IDRC will conduct the RFP, oversee the selection of grants, administer the grants, and, together with local selection committee members, monitor the funded activities. Given the nature of the activity (i.e. managing a large number of very small contracts / grants), it will require more resources from IDRC for accounting, legal, etc., than normal overhead can provide.

*Success Criteria:*

A minimum of 20 grants awarded, which will contribute to reduced pollution in the Basin and better management of resources.

It is anticipated that NGOs can promulgate information on how to manage water resources better, for example how to reduce pollution from raising farm animals. Such dissemination activities related to cleanup or local management of the River will generally be confined to a single country or locality. These activities will, however, reduce transboundary pollution and improve quality of the water entering the Black Sea.

21.01 IDRC Sub-contract		PROJECT TOTAL		YEAR 1		YEAR 2		YEAR 3	
CMBL	Description	(annual meeting)							
		w/m	TOTAL	w/m	Year 1 Total	w/m	Year 2 Total	w/m	Year 3 Total
<b>010</b>	<b>PROJECT PERSONNEL</b>								
<b>11</b>	<b>International Consultants</b>								
11-01	IDRC senior consultants	510.0 days	<b>275,400</b>	200	108,000	203	109,620	107	57,780
11-02	IDRC junior consultants	70.0 months	<b>21,700</b>	19	5,890	39	12,090	12	3,720
11-03	non-IDRC foreign consultants	197.0 days	<b>108,500</b>	100	60,000	77	38,500	20	10,000
11-99	Subtotal		<b>405,600</b>		173,890		160,210		71,500
<b>13</b>	<b>Administrative Support</b>		<b>0</b>		0		0		0
<b>15</b>	<b>Monitoring and Evaluation</b>		<b>6,480</b>		0		3,240		3,240
<b>16</b>	<b>Mission Costs</b>		<b>247,428</b>		121,354		91,955		34,119
<b>17</b>	<b>National Consultants</b>								
17-01	Local experts	193.6 months	<b>101,753</b>	71	36,600	92	49,450	31	15,703
17-02	IDRC local experts	53.9 months	<b>59,580</b>	32	27,080	13	19,250	9	13,250
17-03	IDRC support	34.0 months	<b>34,000</b>	14	14,166	14	13,666	6	6,168
17-04		0.0	<b>0</b>	0	0	0	0	0	0
17-99	Subtotal		<b>195,333</b>		77,846		82,366		35,121
<b>19</b>	<b>Component Total</b>		<b>854,841</b>		373,090		337,771		143,980
<b>020</b>	<b>CONTRACTS</b>								
<b>21</b>	<b>Subcontract A</b>		<b>14,400</b>		14,400		0		0
<b>29</b>	<b>Component Total</b>		<b>14,400</b>		14,400		0		0
<b>030</b>	<b>TRAINING</b>								
<b>32</b>	<b>Other Training</b> (study tours, meetings)		<b>560,960</b>		209,560		172,822		178,578
<b>39</b>	<b>Component Total</b>		<b>560,960</b>		209,560		172,822		178,578
<b>040</b>	<b>EQUIPMENT</b>								
<b>45</b>	<b>(annual meeting)</b>								
45-01	Expendable		<b>26,400</b>		8,800		8,800		8,800
45-02	Non-expendable		<b>154,446</b>		112,043		42,403		0
<b>49</b>	<b>Component Total</b>		<b>180,846</b>		120,843		51,203		8,800
<b>050</b>	<b>MISCELLANEOUS</b>								
<b>51</b>	<b>Sundries</b>								
51-01	Internet Access		<b>81,588</b>		28,338		26,625		26,625
51-02	Dissemination		<b>139,798</b>		49,977		65,392		24,429
51-03	Data Acquisition		<b>10,000</b>		10,000		0		0
51-04	Other		<b>23,100</b>		9,700		6,600		6,800
<b>52</b>	<b>Reporting Costs</b>								

## **ANNEX VI DETAILS OF ACTIVITIES TO BE EXECUTED BY UNIDO AND IAEA**

### **Objective 3/ACTIVITY 1a & 1b**

UNIDO will organise workshops that will focus on the major transboundary pollution hotspots, identify the probable major pollutants and make initial predictions of risk to the environment and human health. The product of the workshops will be used in the preparation of a Priority Investment Portfolio (PIP), which will also incorporate recommendations for pre-feasibility studies.

UNIDO will promote, as part of these activities:

- ♦ **The integration of scientific, economic and social elements related to environmental issues for the assessment and prediction of risk, as well as risk reduction.**
- ♦ **Encourage a shift away from the traditional sector-by-sector environmental management practice to a cross-sectoral approach. This practical and philosophical transformation is essential, in order to deliver the capacity to anticipate and minimise pollutant risks.**
- ♦ **Collaboration with academia and research institutes, which will include, among others, environmental monitoring and remote/satellite surveillance, risk assessment, interpretation of complex information and predictive modelling.**
- ♦ **Identify the key areas that require investment and which will also stimulate new business opportunities related to environmental clean-up technologies.**

In formulating the environmental priorities, UNIDO will encourage a holistic and innovative approach to problem solving where possible and try to ensure that this will be reflected in the pre-feasibility studies. In seeking appropriate solutions to the regional problems, novel low-cost technologies will be considered, as well as more traditional methods for pollutant reduction and remediation. For instance, modern biotechnology has opened new avenues aimed at identifying and using biological material in industrial processes and for decontamination of heavily polluted water and soils by phytoremediation. The technique of phytoremediation uses selected plants to absorb/detoxify the contaminants from the soil or ground water.

### **Objective 3/ACTIVITIES 3, 5, 6 & 8**

UNIDO's services are oriented to develop and implement projects in the field of waste management and waste minimisation in the industrial sector, as well as directly to municipalities and urban administrations. The goal is to diminish the emissions of industrial and hazardous wastes, introduce modern and



- ◆ Assess and review environmental impact assessment policies and recommend reforms.
- ◆ Review and assess management policies, guidelines and practices for managing holding ponds for industrial waste, including disposal/remediation of the sediment produced.

These activities are viewed as being interwoven and UNIDO will address them in an integrated manner. UNIDO will also encourage the introduction of modern and economic technological solutions. These will address the problems of classification, collection, treatment and disposal of municipal solid wastes, agricultural, industrial and hazardous wastes, prevention of possible environmental damage to soil, air and water, including groundwater. Taking into consideration the importance of the practical application of international conventions on hazardous wastes, persistent organic pollutants, etc; UNIDO promotes the evaluation of alternative treatment and disposal solutions for banned and toxic products.

Key objectives here are:

- ◆ integrate the concepts of waste minimisation and pollution control as an important element of industrial processes
- ◆ contribute to the introduction of environmental and ecotoxicological impact assessment and monitoring of chemicals in the industrial sector
- ◆ assist in the selection and introduction of environmentally sound remediation techniques for impacted areas and subsequent monitoring of the results

UNIDO will assist in waste management and minimisation with special attention to the management of urban wastes, management of toxic chemicals, treatment and disposal of non-biodegradable products and assistance for the development of replacement products and technologies for banned agrochemicals. UNIDO will also advise on the introduction of environmental and ecotoxicological risk assessment methodologies in the existing environmental protection centres and promote the creation of regional ecotoxicology networks and qualification of national staff in the application of internationally available procedures to local conditions in the countries of the region. Through the development of regional networks it will be possible to save financial resources and, hence, multiply the effect of the available resources and the impact of the results.

UNIDO will promote, as part of these activities:

- ◆ Improvement and correct application of waste management and minimisation techniques in the industrial sector, which are important elements towards sustainable and environmentally friendly industrial development.
- ◆ Economic waste prevention, treatment, minimisation and disposal procedures to improve the competitiveness of the industrial sector in developing and transitional countries

complex mix of other toxic chemical pollutants is also introduced through shipping activities, agricultural practices and atmospheric inputs of airborne pollution.

River basins supply water for industry, agriculture and domestic use but are also too often used as convenient dumpsites for the waste products of human activities (e.g., mercury, arsenic, cadmium and synthetic organic chemicals), with consequent risks for ecosystems and human health. To further exacerbate the situation, continuing problems of water supply and sanitation, associated with pollution and water-related diseases, are likely to result in considerable human deprivation and death.

A way forward in dealing with the complexity of these problems is through the implementation of effective “Integrated Environmental Management” (IEM). This assesses the changing states of ecosystems using science-based information, linked to socioeconomic benefits for countries sharing or bordering international waterways.

The methods are used in an integrated interdisciplinary way in order to address the consequences of ecosystem change and the ensuing implications for sustainable use of water and development of food resources like agriculture and fisheries, as well as the needs of industry. This will help to alleviate poverty and the harmful impact on human health.

Biotechnology will be a major tool in the new millennium for making industry cleaner and more efficient. Biotechnology processes will be widely used in the paper and chemicals industry, textiles and leather production and processing; and in the metals and energy industries.

UNIDO will assist in identifying industrial applications of biotechnology and promote joint ventures for technology transfer. This will include training programmes for the utilisation of biotechnology developments for remediation of contaminated areas.

UNIDO will promote, as part of these activities:

- ◆ Safety assurance of environmental applications of biotechnology.
- ◆ Conservation and sustainable utilisation of biodiversity.
- ◆ Biotechnology for cleaner industrial production and environmental remediation.

**Effective environmental management has the prerequisite of a sound foundation of scientific research and understanding of environmental processes. UNIDO, a technical UN-Agency, is uniquely placed to bring together the necessary skills and expertise on industrial development and environmental protection essential for the development and application of integrated environmental management.**

### **ACTIVITY 9 OF OBJECTIVE 3**

For the task assigned to IAEA by GEF, the Divisions of Nuclear Installations Safety (NSNI) and Radiation and Waste Safety (NSRW) would be involved in providing technical advice. It is likely that priority should be given to operational safety of nuclear facilities (NSNI), safety of disposable waste and safety of residual waste, i.e. safe restoration of environments with residual radioactivity and safety of tailings from mining and milling (NSRW).

The Agency would be pleased to provide advice on environment-related project activities, particularly those related to assessment and remediation aspects dealing with radioactivity. The Department of Technical Co-operation will co-ordinate all Agency interactions with GEF and work as usual with technical support from the divisions mentioned above and external experts, including specialist from the region. The focal point for implementation of the project is:

Mr. Massoud Samiei,  
Head, Europe Section,  
Division for Europe, Latin America and West Asia,  
Department of Technical Co-operation,  
Tel: + 43 1 2600 22327  
Fax: +43 1 2600 7, e-mail: [M.Samiei@iaea.org](mailto:M.Samiei@iaea.org)

## ANNEX VII. STATUS AND ROLE OF IDRC

### **IDRC's Legal Foundation**

The International Development Research Centre (IDRC) is a public corporation created by an Act of the Parliament of Canada in 1970. The main elements of the Act provide IDRC with its legal mandate "...to initiate, encourage, support and conduct research into the problems of the developing regions of the world and into the means for applying and adapting knowledge to the economic and social advancement of those regions." (full text of the Act is available at <http://www.idrc.ca/institution/eact.html>).

In order to enable IDRC to meet the challenges of its mandate, the Parliament of Canada determined that the Centre would benefit from an extraordinary degree of autonomy. It is not an agent in law of the government, nor are its employees government employees. Yet, despite this measure of political autonomy, IDRC remains accountable to the Parliament of Canada and its operations are audited annually by the Office of the Auditor General.

Unique to IDRC as well is its governance structure. It is led by a 24-member international Board of Governors. Eleven governors, including the Chairperson, are from Canada, while of the remaining 10, historically, 8 or 9 have usually come from developing countries and the others from developed countries.

Current members of the Board of Governors are:

<b>International:</b>		<b>Canadian:</b>
Mervat Badawi	Egypt	Gordon Smith (Chairman)
Octavio Gómez-Dantés	Mexico	Maureen O'Neil (President)
Dan Martin	United States of America	Marie Battiste
Ivy Matsepe-Casaburri	South Africa	Herb Breau
Alister McIntyre	Grenada	Margaret Catley-Carlson
Vulimiri Ramalingaswami	India	Beryl Gaffney
Francisco Sagasti	Peru	Jacques Gérin
Marie-Angélique Savané	Senegal	Huguette Labelle
Paulynn Sicam	Philippines/Canada	Tom McKay
		Jean-Guy Paquet
		Rodger Schwass
		Olav Slaymaker

As established by the Parliamentary Act, IDRC has the power, among other things to: a) enter into contracts or agreements with governments, with international, public, or private organisations and agencies, or with individuals; b) acquire by gift, bequest, or otherwise, and hold, expend, invest, administer, or dispose of, any money, securities, or other property subject to the terms under which the money is made available to IDRC; and c) support or assist research by governments, by international, public or private organisations and agencies, or by individuals.

The core of IDRC's funding is a yearly grant from Parliament. While the grant is critical to IDRC's work, provisions in the Act allow the Centre to pursue other sources of funding. IDRC can receive funds from

IDRC works with governments, universities, private businesses, remote communities, development organisations, and international agencies throughout the world. It has experience in consensus-building and the development of multi-donor consortia for long-term support for research and training programs, and was named by Canada as a lead organisation in the implementation of Agenda 21 at the UN Conference on Environment and Development in 1992. The Centre hires staff from around the world, basing them in Ottawa and in regional offices located in Cairo, Dakar, Johannesburg, Nairobi, New Delhi, Montevideo, and Singapore, as well as in project offices, like that in Kyiv. It employs a multi-disciplinary team of scientists, technicians, managers, and policymakers with broad experience in the physical, social, life, and information sciences and is capable of administering large international projects. For support with its endeavours, IDRC draws upon a network of development experts from around the world; it has access to diverse networks of development thinkers and researchers, scientists, and policymakers worldwide and is unhampered by "tied aid" questions in choosing or hiring partners.

The Centre has provided more than \$1.5 billion in support of over 5,000 research projects in 100 countries for more than 20,000 researchers and 1,000 institutions.

### **The IDRC Vision**

The Centre believes that sustainable and equitable human activity depends on men's and women's control of their own social and economic progress, on equitable access to knowledge of all kinds, and on an indigenous capacity to generate and apply knowledge. The mission of IDRC is "empowerment through knowledge," i.e., helping to optimise the creation, adaptation, and ownership of the knowledge that the people of developing countries judge to be of greatest relevance to their own prosperity, security, and equity. This mission represents an essential contribution to redressing the imbalances in global prosperity and access to knowledge.

It is vital that the peoples of developing and transition countries be in a position to control their own "knowledge-based" development. Therefore, strengthening capacity for research, independent policy analysis, and accessing knowledge are critical. Analytical capacity in these countries must be strengthened to ensure that they can contribute as informed participants in major international debates, e.g., WTO and climate change. They must be able to deal directly with issues of direct domestic concern, like governance and economic policy, where, in the absence of indigenous capacity, the analysis by external actors may be all that is available and will carry undue weight. These considerations influence the program choices that IDRC makes.

IDRC recognises that respect for human rights and their promotion are integral parts of sustainable and equitable development, and are fundamental to research being carried out under conditions of intellectual liberty and unrestricted communication of results.

As written in the Parliamentary Act, IDRC is enjoined "to enlist the talents of natural and social scientists and technologists of Canada and other countries," "to encourage generally the coordination of international development research," and "to foster cooperation in research on development problems between the developed and developing regions for their mutual benefit." These have all provided and will continue to provide direction to the activities of the Centre. The cornerstone of IDRC's future work will be an ever stronger link to the aspirations and needs of the people in the developing countries of the world. During the next five years, directed by the aims enshrined in the IDRC Act of 1970, the Centre will pursue the following strategic goals:

- to foster and to support the production, dissemination and application of research results leading to policies and technologies that enhance the lives of people in developing countries;
- to mobilise and to strengthen the indigenous research capacity of developing countries, especially directed to achieving greater *social and economic equity*, better *management of the environment and natural resources*, and more *equitable access to information*;
- to build selectively on past investments and to explore new opportunities within its program framework, with a view to:
- to foster the development of program initiatives to consolidate or establish regional and interregional networks of research institutions that are focussed on specific problems and are connected among themselves and with the broader Canadian and global knowledge communities;
- to develop a variety of partnership arrangements with donors and research institutions, including the management of consortia and secretariats, which are dedicated to generating and applying knowledge to major development issues in particular topics,eco-regions, or countries.

### **IDRC's Methodology**

Access to knowledge must be equitable. The ability to carry out analysis, to review options critically, and to write and to speak about them publicly - in short, to generate and to use knowledge - makes a vital contribution to social progress. This requires social innovation. There is no such thing as a technological fix. The technical ingenuity of humanity has far outstripped its ability to design and apply the policy, managerial, educational, governance, and institutional innovations required to improve well-being and to redress the stark inequities around us. Each society must devise its own solutions while learning what it can from the experience of others.

Organisations like IDRC must contribute to strengthening the scientific and analytical capacity of developing countries. In the Centre's case, this continues to mean creating opportunities for our developing and transition country partners to carry out research and to work as equals with their peers in Canada and other industrialised countries. Developing countries must be able to be full participants in the discussions and arrangements that are driving, and responding to, profound global changes.

In fulfilling its mission of "empowerment through knowledge," the Centre has concentrated on encouraging and supporting researchers in the developing world to carry out their work in their own institutions and, in so doing, has assisted the developing regions, as stated in the Act of Parliament, "...to build up the research capabilities, the innovative skills, and the institutions required to solve their problems." Unlike most development agencies, which hire outside consultants to study a problem, to conduct training, and to issue a report, IDRC's proven methodology utilises local institutions to determine their own needs and to carry out the necessary work. By looking first to indigenous institutions when providing research grants, IDRC not only helps to build self-confidence in those institutions, but also to strengthen those institutions' research and technical capacities. Moreover, because research is carried out by locals for locals, a greater measure of "buy-in" is insured than if the work, however valid and technically sound, were carried out by outside consultants. A risk in using local capacity is that output quality can suffer: IDRC therefore uses its in-house expertise and world-wide networks of researchers and experts to guide researchers and to provide input and to bridge knowledge or technology gaps as needed.

## **ANNEX VIII. ROLE AND BACKGROUND OF UNIDO**

### **UNIDO's Inputs**

Humanity has increasingly recognised that the global environment is not an infinite well that can be drawn from indefinitely, without damaging the processes and systems that comprise its fragile ecosystems. This concept of a limited world clearly demonstrates the need for sustainable development, that does not endanger the inheritance of our children and future generations. Consequently, UNIDO in looking to the future has developed a strategy that endeavours to address the problems of sustainable development and environmental risk in a purposeful and practical way.

**The first element** of UNIDO's strategy on environment is to provide integrated services comprising comprehensive packages covering its two major substantive areas. These are strengthening competitive industrial capacities by investment and technology promotion; and promotion of sustainable industrial development, by introducing cleaner production and transferring environmental technologies. UNIDO promotes sustainable industrial development through the above approach of integrated services, supported by interdisciplinary teams that encompass the required economic, social and environmental dimensions.

In UNIDO's new service modules for a sound environment, capacity building on the policy level focuses on Environmental Policy Frameworks. The services in this service module build capacities at the regional, national and provincial levels of government to carry out their environmental mandates with regard to industry and within the appropriate geographical boundaries. Capacity building on the institutional level is comprised of three service modules:-

- 1) Environmental Policy Framework**
- 2) Cleaner Production**
- 3) Pollution Control & Waste Management**

Formulation of Environmental Policy is a key issue that is interwoven within many of UNIDO's activities. As such, UNIDO contributes to the environmental dimension of sustainable industrial development. This is effected by supporting developing countries and countries in transition in their efforts to integrate environmental considerations into industrial development policies and to increase the effectiveness of their industrial environmental management policies and programmes.

The prime objective is to build capacities primarily with the nexus of ministries of planning, finance, industry and environment; and with the private sector and its allies in civil society to formulate and implement cost-effective and consensus based environmental policies and regulations for the industrial sectors.

- ◆ building capacities in institutions to analyse the impact of industrial policies on the environment and to modify existing or design new policies that ensure that environmental considerations are taken into account in national industrial development strategies
- ◆ building capacities for appropriate industrial environmental regulation within national environmental regulatory agencies to carry out four major functions:- formulation of sector-specific pollutant discharge standards; issuance of pollutant discharge permits (ideally these should be based on the toxicity of the effluent); compliance monitoring; and enforcement
- ◆ building capacities for cost-effective industrial environmental planning within provincial and state governments to produce information about the costs and consequences of alternative pollutant reduction strategies and to implement the preferred strategy

Within the environmental policy focus area, UNIDO will assist in the formulation of industrial policies that integrate economic, social and environmental concerns. This will endeavour to document the environmental impacts of industrial policies and to formulate complementary measures that could mitigate potential environmental damage and improve conditions for sustainable livelihoods in human settlements.

Within the industrial environmental regulation focus area, UNIDO will assist the Regulatory Agencies to develop standards for industrial emissions, strengthen institutional relationships with relevant Ministries, institutions and stakeholders, undertake compliance monitoring inspections and formulate procedures for enforcement of standards.

This will help the relevant agencies to more effectively manage environmental quality, to strengthen the capacity to gather, store and analyse environmental data for management purposes and to develop and test procedures for improved industrial environmental management, particularly for small and medium enterprises.

Overall, this will enhance capacity for industrial environmental regulation and facilitate capacity for industrial environmental planning at regional, national and provincial levels.

Additionally, the UNIDO will contribute to the efforts of the UN Commission on Sustainable Development to evaluate the integration of environmental considerations into national development policies and plans as requested in Agenda 21.

The “take-home” message here is:

- ◆ Integration of environmental considerations into national industrial development policies still remains, as was stated in “Our Common Future”, one of the most cost-effective ways to achieve national environmental goals.



- ◆ Elimination of policy disincentives, such as underpriced material inputs and application of policy incentives, innovative economic incentives, as well as tax credits and revolving funds. These are all important complements to a national environmental regulatory programme.
- ◆ Generation of sound information about the magnitude of environmental pollution from various pollutant sources as well as the cost of compliance is essential for designing cost-effective management strategies for specific geographic areas.

**Promoting Cleaner Production raises awareness levels, throughout a country's private and public sectors, of the economic and environmental benefits that it can bring. This will also build the necessary capacity in the country to move the industrial and commercial sectors towards modes of cleaner production and consumption.**

At the enterprise level, the UNIDO services concentrate on the Pollution Control and Waste Management service module. This focuses on solving environmental problems in a cost-effective manner, through awareness raising, capacity building, as well as information exchange and networking on pollution control and waste management technology to enterprises.

**The second element** of the environment strategy of UNIDO is to develop a new partnership with governments, private sector and academia from developing nations and countries with economies in transition. This new partnership can be called “steward partnership” as UNIDO will also be a stakeholder and therefore responsible for the impact of the services provided. A new partnership will be developed that will encompass the donor community, United Nations organisations, international financial institutions and NGOs. UNIDO is transparent and provides excellent value, as well as added value through its services.

**The third element** of the environment strategy relates to the role of UNIDO as a United Nations specialised agency with global forum functions. In addition, it is important, particularly in the context of the GEF International Waters Programme, that the various UN organisations (i.e., UNDP, UNEP, IOC-UNESCO, IHP-UNESCO, WMO, WHO & UNIDO), which have interests in Integrated Environmental Management, harmonise their activities in order to effect synergies in this global activity.

A further aim of UNIDO is to provide its services as an executing agency for the GEF implementing agencies (UNDP & UNEP).

Finally, a specialised UN-Agency like UNIDO is uniquely placed to bring together the necessary skills and expertise on industrial development and environmental protection essential for the development and application of integrated environmental management. UNIDO provides knowledge-based expertise on the technologies for water treatment, waste management and cleaner production, through its 3 relevant service modules:-

## ANNEX IX ACRONYMS/ABBREVIATIONS

AC	Activity Centre
APR	Annual Project/Programme Review
BOD	Biological Oxygen Demand
BSEP	Black Sea Environmental Programme
CAD	Canadian dollars
CD	Compact Disc
CIDA	Canadian International Development Agency
CIS	Commonwealth of Independent States
CITES	Convention on International Trade in Endangered Species
CTA	Chief Technical Adviser
DBEP	Dnieper Basin Environment Programme
EBRD	European Bank for Reconstruction and Development
EMDU	Environmental Management Development in Ukraine
EMIS	Environmental Management Information System
EPI	Environmental Performance Indicator
EU	European Union
FAO	Food and Agriculture Organization of UN
GEF	Global Environment Facility
GIS	Geographic Information System
GIWA	Global International Waters Assessment
GNP	Gross national product
GRID	Global Resources Information Database
IA	Implementing Agency (GEF)
IAA	Inter-Agency Agreement
IAEA	International Atomic Energy Agency
IDRC	International Development Research Center
IBRD	International Bank for Reconstruction and Development
IHP	International Hydrological Programme
IUCN	International Union for the Conservation of Nature and Natural Resources
JMC	Joint Management Committee
LBS	Land-Based Sources
LEARN	Learning Exchange and Resource Network
MAC	Maximum Allowable Concentration
MEPNS	Ministry of Environmental Protection and Nuclear Safety (Ukraine)
NAP	National Action Plan
NEAP	National Environmental Action Plan
NFP	National Focal Point
NGO	Non Governmental Organization
NIS	Newly Independent States

PIR	Project Implementation Review
PMU	Project Management Unit
PPER	Project Performance and Evaluation Review
PPRR	Principal Project Resident Representative
RAC	Regional Activity Centre
RBEC	Regional Bureau for Europe and the CIS (UNDP)
RECs	Regional Environmental Centres
SAP	Strategic Action Programme
SBAA	Standard Basic Assistance Agreement
SC	Steering Committee
TACIS	EU Programme for Technical Assistance for the Commonwealth of Independent States
TDA	Transboundary Diagnostic Analysis
TOR	Terms of References
TPR	Tri-partite Review
UNCED	United Nations Conference on the Environment and Development
UNDP	United Nations Development Programme
UNDP-CO	United Nations Development Programme Country Office
UN/ECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
UNESCO	United Nations Education, Science and Culture Organization
UNIDO	United Nations Industrial Development Organisation
UNOPS	United Nations Office for Project Services
USAID	United States Agency for International Development
USD	United States Dollars (US\$)
WG	Working Group
WHO	World Health Organization
WMO	World Meteorological Organization
WWF	World Wide Fund for Nature
WWW	World Wide Web

## INCREMENTAL COST ANALYSIS (FROM PROJECT BRIEF)

### Regional Context and Broad Development Goals

Due to a combination of sectoral, institutional, political and socioeconomic factors, the overall environmental integrity and sustainable development of the Dnieper River basin has been lacking for some time. In recent years, the riparian countries---Russia, Ukraine and Belarus---have made commitments to the long-term rehabilitation and sustainable management of this highly degraded aquatic ecosystem. Due to the prevailing economic situation in the region, these countries at present have very limited human and financial resources to devote to this issue and understandably are targeting the majority of their funds towards principally national goals. As a result, international assistance from a body such as the GEF is needed to assist these countries to work collaboratively in understanding and addressing the key *transboundary* issues of the Dnieper River basin, particularly in the context of the emerging GEF basin-wide approach to the rehabilitation of the similarly degraded downstream Black Sea.

### Baseline

The countries are engaged in a number of nationally, donor and Implementing Agency (UNDP) financed activities which are directly or indirectly related to the Dnieper River basin; some of these activities represent 'baselines' in the context of the current project (see Incremental Cost matrix).

#### *National Activities:*

##### Ukraine:

The Parliament of Ukraine adopted the National Programme of Ecological Rehabilitation of the Dnieper River Basin and Improvement of the Drinking Water on 27 February 1997.

For the implementation of the Programme the amount of 4.2 billion UAH (approx. 2.4 billion USD) is anticipated for the period 1997 - 2010.

In 1998 the amount of 391.9 mln. UAH (approx. 218 mln. USD) is foreseen to be expended in the state budget for the following priority activities:

- construction and reconstruction of buildings and water supplies systems, creation of sewage systems in towns and large villages - 337 mln. UAH (approx. 187 mln. USD)
- implementation of water protection measures on industrial enterprises under the ministries and other central bodies of executive power - 27 mln. UAH (approx. 15 mln. USD)
- realization of water protection measures on rivers and water bodies - 12.8 mln. UAH (approx. 7.1 mln. USD)
- execution of water and land protection measures in the Dnieper basin - 7.6 mln. UAH (approx. 4.2 mln. USD)
- protection and development of nature reserves within the basin - 0.4 mln. UAH (approx. 0.2 mln. USD)
- other measures on nature protection (among which State ecological monitoring, scientific-technical support,

- scientific research and technical support and other measures - 6.5mln. UAH (approx. 3.6 mln. USD)  
(expected to be financed from the 1999 state budget)

#### Belarus:

The following activities and expenditures are planned in 1998:

- Creation of regional laboratories in Gomel town - 160 thousand USD and in Mozyr town - 115 thousand USD
- Creation of the basin database in Minsk for the support of the realization of Dnieper project - 90 thousand USD
- Construction of sewage treatment systems with the use of highly effective technologies for refining of industrial flows in the following towns (in thousand USD):
  - Rechitsy - 215
  - Gomel - 346
  - Pinsk - 187
  - Orsha - 208
  - Zhlobin - 113
  - Osipovichy - 120
  - Borisov - 175
- Water supplies and installation of additional purification of drinking water in Gomel town - 390 thousand USD
- Scientific, regulatory, methodological and software support to the international project - 96 thousand USD

*TOTAL for the above: 2.204 mln. USD*

Overall, in 1998 Belarus plans to spend a total of about 12.3mln. USD for environmental protection activities in the Dnieper river basin

#### Russia:

For the period 1997 - 2000 the outlay for the implementation of programmes for Bryansk and Smolensk regions (the two largest regions upstream in the Dnieper basin) is 704.5mln. USD, which includes the expenses for the construction and evacuation of people from the radio-contaminated territories. In addition, about 95 - 100mln. USD is planned to be allocated from regional budgets, ecological funds and enterprises over a period of 4 years.

#### Other Donors:

In late 1994, the EBRD Board of Directors approved an action strategy for Ukraine which aims to meet the most urgent needs in the agriculture, banking, privatization, energy, environmental protection, privatization, and transportation sectors. In the environmental field, the EBRD is concentrating its efforts in the following directions: a) investment targeting to the environmental protection of key industrial sectors; b) promotion and

Foundation, has focused on the movement through erosion of agrochemicals and radioactive pollutants within agricultural watersheds including the Dnieper basin.

#### IA Country Assistance: Ukraine

Through the GEF several environmental projects have been implemented in Ukraine. Three of these projects have been executed by UNDP through UNOPS: Environmental Management in the Danube River Basin, the Black Sea Environmental Programme and the Dnipro River Basin Management Programme PDF-B. In addition, a project on Improving Environmental Monitoring Capacity in Ukraine was launched by several partners: MEPNS, USAID, US Environmental Protection Agency and the UN Office of Project Services (UNOPS)

Other related activities initiated and supported by the UNDP Office in Kiev include: Introduction of Sustainable Development Principles into Ukrainian Governmental Institutions, Training Component (\$70,000), the Ecological Network (support to the development of the concept of establishment of ecological corridors in Ukraine) (\$105,000); Improving Environmental Monitoring Capacity (\$60,000 plus \$1,044,200 from US-EPA), and, with WMO, a Donors' Meeting on Meteorological and Hydrological Services in Support of Sustainable Development in Newly Independent States (Europe and Central Asia) held in April 1995 in Geneva.

#### IA Country Assistance: Belarus

Related projects currently being coordinated by the UNDP office in Minsk include: Raising Public Environmental Awareness in Belarus (\$115,000), and Sustainable Development of Chernobyl-Affected Areas in Belarus (Local Agenda 21) (\$630,000).

#### IA Country Assistance: Russia

The UNDP office in Russia has only opened just recently so development of projects complementary to the Dnieper River Basin programme will be ongoing.

### **Global Environmental Objective**

The long-term objectives of the project are to remedy the serious environmental effects of transboundary pollution and habitat degradation in the Dnieper River Basin, to ensure sustainable use of its resources, and to protect biodiversity in the basin. The project will enable the implementation of a series of complementary investigative, preventative and curative actions that will be elaborated in a Strategic Action Programme for the Basin region. The SAP will outline and financially characterize both national (baseline) and additional (incremental, e.g. addressing transboundary issues) actions for subsequent funding by the countries and the international community. In addition, the project will participate in the overall strategic 'basin-wide' approach currently under development towards the coordinated protection and rehabilitation of the Black Sea from transboundary sources of degradation.

costs for joint planning activities, development of common approaches to sectoral and inter-sectoral policymaking, data collection and analyses, and co-ordination of efforts among the participating countries.

The proposed project, consistent with GEF guidance, would contribute significantly to the “reduction of stress to the international waters environment” in this region and support the co-operating countries in “making changes in their sectoral policies, making critical investments, [and] developing necessary programmes” to achieve these objectives. The long-term commitment on the part of the concerned governments is demonstrated by: the principles of coordination and cooperation stipulated by the agreement signed by the governments in 1992, the 1995 memorandum which requested UNDP assistance in the development of a GEF Environmental Management Program for the Dnieper River Basin, government participation in the PDF-B Task Force, and the countries’ role in the National Reports and draft Transboundary Diagnostic Analysis and SAP ‘Elements’ which co-operatively identified key issues, likely ‘root causes’ and priority actions. The support of GEF at this stage will play an important catalytic role in the long-term Dnieper rehabilitation effort now underway in the region, and the anticipated participation of international financial institutions, other donors and the private sector will also contribute to this multi-country and multi-stakeholder effort.

The GEF alternative would support a regionally led initiative to promote the sustainable management and conservation of Dnieper River and its basin. It would also provide additional global benefits by making a significant contribution towards the emerging ‘basin-wide’ approach to the long-term rehabilitation of the highly degraded Black Sea ecosystem. It would greatly facilitate the ability of the co-operating countries to address the priority transboundary environmental issues and common natural resources management concerns at the regional level. The GEF alternative would allow for the relatively rapid development of a series of interventions for the implementation of the SAP, to be undertaken with support from a variety of sources. These goals would be realised through support for the following specific project objectives:

1. Create a transboundary management regime and coordinating body;
2. Assist countries in SAP formulation, review and endorsement process;
3. Improve financial/legal mechanisms for pollution reduction and sustainable resource use;
4. Formulation of National Action Plans by Interministerial Committees;
5. Improve framework for conservation of biodiversity in the Dnieper River Basin;
6. Enhance communication among stakeholders and encourage public awareness and involvement in addressing the problems of the Dnieper Basin;
7. Build capacity for SAP implementation

### **System Boundary**

The time boundaries for this project are the three year project period during which it will be implemented. Some of the project benefits will clearly continue to accrue beyond this time boundary. However, all the listed outputs/benefits will be achieved during the three year implementation period.

The geographic boundary of the project is defined by the drainage basin of the Dnieper River Basin within the three participating countries: Russia, Ukraine and Belarus.

1. Coordinated evaluation and management of transboundary priorities
2. Facilitation of the SAP formulation, review and endorsement process
3. Financial and legal mechanisms for improved pollution control strategies
4. Formulation of national strategies for Dnieper River rehabilitation
5. Conservation of Dnieper River basin biodiversity
6. Communication among stakeholders; public awareness and participation
7. Build SAP implementation capacity

The design of the proposed project has taken into full consideration its complementarity with other existing projects in the region, particularly the “Black Sea Basin-wide” approach currently under formulation in the GEF.

### **Incidental Domestic Benefits**

Over the long-term, a variety of domestic benefits would occur through implementation of the proposed project. The most valuable domestic benefits to be gained from the project are associated with substantially strengthened institutional and human capacity in integrated land and water management, increased technical knowledge and public awareness of Dnieper environmental issues, and improved national capacities in environmental legislation and enforcement. Each national Activity Centre would receive domestic benefits in the form of improved national capacities in the Activity Centre area of expertise. In addition, eventual implementation of the National Action Plans would, by definition, deliver both national and global/regional benefits.

### **Costs**

The incremental costs required to achieve all outputs of the project amount to **US\$7,000,000** to be allocated as follows:

	<u>Project Component/Output</u>	<u>US\$</u>
1.	A transboundary management regime and coordinating body for the Dnieper River Basin	\$1,690,000
2.	A Strategic Action Programme for the Dnieper River Basin, endorsed at Ministerial level	\$610,000
3.	Improved financial and legal mechanisms for pollution reduction and sustainable resource use	\$1,960,000
4.	National Action Plans (NAP's) formulated by Interministerial Committees	\$525,000
5.	Framework for enhanced capacity for conservation and protection of biodiversity in the Dnieper Basin	\$275,000
6.	Enhanced communication between stakeholders and increased public awareness and involvement	\$721,481
7.	Capacity built for SAP implementation	\$700,000
	<b>Project Support costs</b>	<b>\$518,510</b>



**x 1: Incremental Cost Matrix—Preparation of a Strategic Action Programme (SAP) for the Dnieper River basin and Development of SAP Implementation Mechanisms.**

<b>Costs/ Benefits</b>	<b>Baseline (B)</b>	<b>Alternative (A)</b>	<b>Increment (A-B)</b>
<b><u>Domestic Benefits</u></b>	<ol style="list-style-type: none"> <li>1. Environmental management policies, strategies and programmes in Dnieper basin States are uncoordinated; by themselves, national efforts are insufficient to mitigate threats to the river system.</li> <li>2. No existing integrated strategic approach at national level to protection and remediation of Dnieper River Basin.</li> <li>3. National capacities to effect integrated land and water body management measures are limited.</li> <li>4. National stakeholders poorly sensitised to environmental concerns.</li> <li>5. Insufficient financial and legal mechanisms for Dnieper River basin protection and rehabilitation..</li> </ol>	<ol style="list-style-type: none"> <li>1. Co-ordination of river management efforts between and within riparian countries.</li> <li>2. Efforts targeted at identifying and mitigating the root causes of environmental degradation in the Dnieper River basin.</li> <li>3. Institutional and human capacity building in the arena of integrated land and water body management.</li> <li>4. Targeted environmental education and awareness efforts in the Dnieper basin.</li> <li>5. Assess, test and develop legal and financial mechanisms for pollution reduction and sustainable resource use in Dnieper River basin countries.</li> </ol>	<ol style="list-style-type: none"> <li>1. Improved coordination of Dnieper River basin activities at national level.</li> <li>2. Strategies in place for programs to address root causes of Dnieper River degradation; baseline identified.</li> <li>3. National capacities to implement a holistic environmental management regime are strengthened; NAP's developed.</li> <li>4. Civil society more responsive to environmental protection measures (improving the socio-political environment for pursuing long-term sustainable development objectives).</li> <li>5. Improved national capacities for using legal and financial mechanisms towards Dnieper River basin rehabilitation; Priority Investment Portfolio prepared and donors identified.</li> </ol>
<b><u>Global/Regional Benefit</u></b>	<ol style="list-style-type: none"> <li>1. The public lacks an understanding of the transboundary impacts of anthropogenic activities within the Dnieper River basin.</li> <li>2. Limited avenues for public</li> </ol>	<ol style="list-style-type: none"> <li>6. Raise awareness of the findings of the Transboundary Analysis and sensitise stakeholders to the need for regional action to mitigate river degradation.</li> <li>7. Develop communication,</li> </ol>	<ol style="list-style-type: none"> <li>1. Wide civil society support in the three riparian countries facilitates the planning and implementation of management measures (enabling transboundary issues to be addressed).</li> <li>2. Public participation in Dnieper</li> </ol>

Costs/ Benefits	Baseline (B)	Alternative (A)	Increment (A-B)
	<p>involvement in environmental management of the river system.</p> <p>3. Lack of regional institutions to co-ordinate joint action to reduce and prevent transboundary impacts.</p> <p>4. Policy/ legal /economic framework for co-ordinating river management is inadequate; enforcement of existing legislation is poor.</p> <p>5. Lack of integrated strategic approach to Dnieper River basin management and rehabilitation at regional scale.</p> <p>6. Lack of capacity to finance the transactions costs of regional co-operation.</p> <p>7. Lack of regional communication and coordination among and between Dnieper River basin stakeholders/civil society.</p> <p>8. Dnieper River basin activities not integrated into basin-wide approach to rehabilitation of Black Sea.</p> <p>9. Limited understanding of biodiversity hot spots and protected area needs at regional scale.</p> <p>10. Dnieper river environmental data highly dispersed; collection</p>	<p>consultation and participation mechanisms for engendering public participation in environmental planning and management.</p> <p>8. Create institutional mechanisms to drive and co-ordinate regional action.</p> <p>9. Improve understanding of policy/ legal/ economic mechanisms required for integrated sustainable river basin management.</p> <p>10. Identify strategic measures to address root causes of transboundary degradation of the Dnieper River system.</p> <p>11. Identification of innovative financing mechanisms for regional management.</p> <p>12. Improve linkages between regional stakeholders through meetings, Internet and print communications.</p> <p>13. Include Dnieper River basin states in Black Sea basin-wide approach coordination activities.</p> <p>14. Assess Dnieper River basin protected areas, priority ecosystems and biodiversity hot spots.</p> <p>10. Create regional Dnieper River</p>	<p>River basin management increases the sense of ownership of civil society over management and rehabilitation efforts.</p> <p>3. Establishment of regional institutional framework for addressing transboundary impacts.</p> <p>4. Policy/ legal /economic framework for addressing transboundary problems established.</p> <p>5. Regional Strategic Action Plan with commitments to baseline (national, other donors) and incremental (GEF) interventions.</p> <p>6. Financial sustainability of regional waterbody management measures and institutions is better assured.</p> <p>7. Enhanced stakeholder coordination and communication at regional level.</p> <p>8. Improved protection of Black Sea international water body via participation of key river basin in strategic approach to region.</p> <p>9. Improved understanding of biodiversity protection and management needs at regional level enabling follow-up action at national and regional levels.</p> <p>10. Improved regional capacity for</p>

<b>Costs/ Benefits</b>	<b>Baseline (B)</b>	<b>Alternative (A)</b>	<b>Increment (A-B)</b>
	and utilization of Dnieper data uncoordinated at regional level.	basin environmental database	data collection, integration, analysis and use in decision-making.
<b>OBJECTIVE 1:</b> Transboundary management regime and co-ordinating body	• USD 301,000	• USD 1,991,000	• USD 1,690,000
<b>OBJECTIVE 2:</b> Formulate, review & endorse SAP	• USD 0	• USD 610,000	• USD 610,000
<b>OBJECTIVE 3:</b> Financial and legal mechanisms for pollution reduction	• USD 15,000,000	• USD 16,960,000	• USD 1,960,000
<b>OBJECTIVE 4:</b> Formulation of National Action Plans	• USD 7,294,200	• USD 7,819,200	• USD 525,000
<b>OBJECTIVE 5:</b> Improve conservation of biodiversity in the Dnieper River Basin	• USD 4,205,000	• USD 4,480,000	• USD 275,000
<b>OBJECTIVE 6:</b> Communications/ public awareness	• USD 115,000	• USD 836,481	• USD 721,481
<b>OBJECTIVE 7:</b> Build capacity for SAP implementation	• USD 0	• USD 700,000	• USD 700,000
<b>GRAND TOTALS</b>	• USD 26,915,200	• USD 33,396,681	<ul style="list-style-type: none"> <li>• USD 6,481,481 (Incremental costs to be financed by GEF)</li> <li>• USD 7,628,000 (co-financing)</li> </ul>



