THE WORLD BANK/IFC/M.I.G.A.

OFFICE MEMORANDUM

DATE: September 27, 2001

TO: Mr. Ken King, Assistant CEO, GEF Secretariat Att: GEF PROGRAM COORDINATION

FROM: Lars Vidaeus, GEF Executive Coordinator

EXTENSION: 3-4188

SUBJECT: Regional: Nile Transboundary Environmental Action Project (Burundi,

D.R. Congo, Egypt, Ethiopia, Eritrea, Ethiopia, Kenya, Rwanda, Sudan,

Tanzania, Uganda)

Submission for Work Program Inclusion

Please find enclosed the electronic attachment of the above mentioned Project Brief for work program inclusion. I am pleased to make this submission on behalf of the UNDP and the World Bank. As you know, UNDP and the World Bank have worked together in close partnership since 1996 on the broader Nile Basin Initiative, and the present project is one of seven basin-wide grant funded projects which the World Bank and UNDP have prepared for funding. We would appreciate receiving any comments by October 9, 2001.

Tons:

The proposal is consistent with the *Criteria for Review of GEF Projects* as presented in the following sections of the Project Brief:

• Country Drivenness:

- GEF Project Brief section Strategic and Institutional Context (p. 3) describes the
 process of increasing cooperation in the Nile Basin and the commitment to and ownership
 of the process and the present project by the Nile Basin countries and the Nile Basin
 Initiative, NBI (Nile-COM, Nile-TAC, Nile-SEC).
- GEF Project Brief section Stakeholder Participation (p. 31) and Annex F –
 Stakeholder Involvement in Project Formulation (P. 87) summarizes the project's
 explicit emphasis on local and regional participation and describes the involvement of a
 wide range of stakeholders in project design.

• Endorsement:

- Annex D (p. 71) includes GEF National Focal Point letters of endorsement from Burundi,
 D.R. Congo, Egypt, Ethiopia, Kenya, Rwanda, Sudan, Tanzania and Uganda. Eritrea is currently an active observer in the Nile Basin Initiative and is expected to formally join in the near future.
- Program Designation & Conformity:

- GEF Project Brief section Nile Basin Initiative (p. 4) describes the Nile Basin Shared Vision and agreed regional objectives of the NBI
- Annex E (p. 82) contains the Policy Guidelines for the Nile River Basin Strategic
 Action Program whereby the present GEF Project is one of the basin-wide projects of
 the basin-wide Shared Vision Program of the Nile.
- GEF Project Brief section *Project Objective and Rationale* (p. 16) outlines the project objective and the project's conformity with GEF Operational Program 9, the "Integrated Land and Water Multiple Focal Area Operational Program."

Project Design:

- GEF Project Brief section *Project Context* (p. 10) outlines the process of the Transboundary Environmental Analysis during project preparation on which the project design is based.
- GEF Project Brief section Components, Outputs and Activities (p. 19) provides a description of the project design.
- Annex B (p. 60) is the logical framework for project design.
- Annex G (p. 45) provides the organizational chart of the project.

• Sustainability:

- GEF Project Brief section Lessons Learned (p. 37) recognizes that an element of project sustainability is based on lessons learned, which have been incorporated into the project design.
- GEF Project Brief section *Risks and Sustainability* (p. 28) is describing potential risks and the project's sustainability efforts to reduce the risk during and after project implementation.

• Replicability:

- GEF Project Brief section Nile Basin Initiative (p. 4) describes the activities to be undertaken under the Nile Basin Initiative and further outlines the role of the present GEF project supporting the creation of an enabling environment through which sound developments and sustainable investments can be fostered.
- GEF Project Brief section Components, Outputs and Activities (p. 19) describes the project activities, which will guide additional sub-basin investment actions in the future.

• Stakeholder Involvement:

GEF Project Brief section Stakeholder Participation (p. 31) and Annex F –
Stakeholder Involvement in Project Formulation (p. 87) summarizes the project's
explicit emphasis on local and regional participation, and describes the involvement of a
wide range of stakeholders in the project design.

• Monitoring & Evaluation:

- GEF Project Brief section Monitoring, Evaluation and Dissemination (pg. 36)
 describes the monitoring and evaluation events, which will also serve as benchmarks
 initiating phase 2 of the project.
- Annex B (p. 60), in the Performance Indicator and Means of Verification columns, provides explicit description of indicators and reporting – including specific outcome indicators for phase 1.

• Financing Plan:

- GEF Project Brief section Incremental Costs and Project Financing (p. 33) and in particular Table 5 summarizes the project budget by component, output and project phase.
- Annex B1 (p. 65) contains the overview over the phased funding approach.

• Cost-effectiveness:

GEF Project Brief section Baseline Course of Action (p. 12) and Annex A –
 Incremental Cost Analysis (p. 42) explain how the project has been designed in order
 to be cost-effective in its intervention.

• Core Commitments and Linkages:

- GEF Project Brief sections Strategic and Institutional Context (p. 3) and Project Context (p. 10) outline the regional goals of the Nile Basin Initiative and the riparian commitment to the project and to its role to provide the environmental framework for sustainable development in the basin. These sections also outline the linkages between the basin-wide and sub-basin programs.
- Consultation, Coordination and Collaboration between IAs:
 - GEF Project Brief sections on Evolving Regional Cooperation (p. 4) and on Implementation Arrangements (p. 32) describe the role and active cooperation of the IAs during project preparation and support of the Nile Basin Initiative.
 - GEF Project Brief section on *Implementation Arrangements* (p. 32) outlines the roles of the IAs in supporting the project.

• Response to Reviews:

- Annexes C(p. 66) and C1 (p. 71) contain the STAP technical review and response to the review.
- GEF Secretariat review at pipeline entry: At the PDF B approval the Secretariat Team recommended that the preparation address the following prior to Work Program entry:
 - o "Public involvement": An explicit component of the GEF project is addressing public awareness and stakeholder involvement (component 3). This is explained under the GEF Project Brief sections *Components, Outputs and Activities* (p. 19) and also section *Stakeholder Participation* (p. 31)
 - o "Linkages with the Lake Victoria Environmental Management Program (LVEMP)". These are addressed throughout the text as well as specifically addressed in paragraphs 32 35 (p. 16) of the GEF Project Brief.

In consideration of the existing GEF funding constraints and after consultations between the IAs, the project has been reformatted to take a two phase programmatic approach.

Please let me know if you require any additional information to complete your review prior to inclusion in the work program. Many thanks.

Distribution:

Messrs.: E. Torres, UNDP

A. Djoghlaf, UNEP (Nairobi)

K. Elliott, UNEP (Washington, DC)

M. Gadgil, STAP

M. Griffith, STAP (Nairobi)

Y. Vyas, AfDB

cc: Messrs./Mmes. J.S. Racki, D. Grey, (AFTU1); A. Kiss, A. Hillers, C. Crepin, C. Bingham (AFTES); I. Andersen (AFTU2); S. Shetty (MENA); R. Khanna, H. Ibrekk, M. Hatziolos (ENV)

PROJECT BRIEF

1. IDENTIFIERS

PROJECT NUMBER

PROJECT NAME Regional (Burundi, D.R. Congo, Egypt, Eritrea,

Ethiopia, Kenya, Rwanda, Sudan, Tanzania and Uganda): Nile Transboundary Environmental Action

Project, Phase I

DURATION 5 years

GEF IMPLEMENTING AGENCIES UNDP for components 1.1, 3, 4, and 5

World Bank for Component 1 (except 1.1) and

Component 5

EXECUTING AGENCIES Nile Secretariat (with support by UNOPS)

REQUESTING COUNTRIES Burundi, D.R. Congo, Egypt, Eritrea, Ethiopia, Kenya,

Rwanda, Sudan, Tanzania and Uganda

ELIGIBILITY Eligible under para 9 (b) of GEF Instrument

GEF FOCAL AREA International Waters

GEF PROGRAMMING FRAMEWORK OP 9, Integrated Land & Water

2. SUMMARY

The Nile River is one of the world's great assets. Throughout history it has nourished livelihoods, an array of ecosystems and a rich diversity of cultures in ten countries. The Basin encompasses 3 million square kilometers—one-tenth of Africa's total landmass—and serves as home to an estimated 160 million people. These people face considerable challenges, with half of the riparian states being among the world's ten poorest countries and much of the region characterized by instability and rapid population growth. Efforts to relieve poverty by promoting more rapid economic development in the Basin are being undermined by increasingly severe environmental degradation.

Despite these constraints, the Nile holds significant opportunities for cooperative development and the riparian states have come to recognize the benefits to be gained from greater regional integration. Various subgroups within the Basin have engaged in cooperative activities during the last 30 years and in 1997 the riparian states began, with UNDP support, to work towards a permanent legal and institutional framework for the Basin. In 1999 the riparians took a further key step by launching the *Nile Basin Initiative* (NBI), a transitional mechanism that includes all of the Nile countries as equal members in a regional partnership to promote economic development and fight poverty¹. The NBI is comprised of the Council of Ministers of Water Affairs of the Nile Basin (Nile-COM), a Technical Advisory Committee (Nile-TAC), and a Secretariat (Nile-SEC). The NBI is guided by a Shared Vision "to achieve sustainable socioeconomic development through the equitable utilization of, and benefit from, the common Nile Basin water resources."

¹ Eritrea attended its first Council of Ministers Meeting in August 2000 and has indicated its intention to participate.

The Nile countries are now moving forward to implement a Strategic Action Program through the NBI, comprised of a number of basin-wide activities as well as subsidiary programs geared towards joint investment opportunities. Financing for these activities is being sought through the International Consortium for Cooperation on the Nile (ICCON). An initial set of seven basin-wide projects (the Shared Vision Program or SVP) has been endorsed by Nile-COM and is being prepared for implementation in these sectors: environmental action (this proposal), power trade, efficient water use for agriculture, water resources planning and management, communications, applied training, and socio-economic development and benefit sharing. The total cost of these projects is expected to be about US\$122 million.

At the same time, two groups of Nile countries - one in the Eastern Nile and the other in the Nile Equatorial Lakes region - are identifying joint and mutually beneficial investment opportunities (Subsidiary Action Programs or SAPs). Project preparation will begin during 2001 in these areas: irrigation in a regional context; integrated water resources management/watershed management; wastewater treatment, pollution control, and water quality management; water use efficiency improvement; flood and drought management; water hyacinth and water weed control; hydropower development and power pooling; and sustainable management and conservation of lakes and linked wetlands. The total cost of these projects is expected to be in billions of dollars, but this will be more clearly defined as the program unfolds.

PROPOSED PROJECT

The Nile countries recognize that future development of the Basin must be environmentally sustainable. Identifying the environment and development synergies, and thus the sustainable development opportunities in the Basin, has therefore emerged as a major priority. A Transboundary Environmental Analysis (TEA) has been carried out by the Nile riparians with funding from GEF PDF resources and support from UNDP and the World Bank. The TEA report constitutes a collective synthesis of basin-wide environmental trends, threats and priorities. The TEA also identifies the elements of an Agenda for Environmental Action in the Nile Basin, to be implemented over the next decade or more under the NBI's Strategic Action Program in coordination with other development activities.

The objective of this project is to provide a strategic environmental framework for the environmentally sustainable development of the Nile River Basin, to improve the understanding of the relationship between water resources development and environmental conservation in the Basin, and to provide a forum to discuss development paths for the Nile with a wide range of stakeholders. Focusing on transboundary issues provides the riparian countries with a major opportunity to make significant progress towards their economic and environmental goals in ways that have proved difficult to achieve independently.

This project will strengthen riparian cooperation and coordination by supporting a series of measures focusing on various aspects of transboundary environmental management. Project activities include capacity building, training, education and awareness raising, knowledge and information sharing, development of a decision support system, communications, environmental monitoring and field activities at selected pilot sites. Diverse stakeholder groups will be encouraged to work together, both within their own countries and with counterparts in other

riparian countries, to help build the mutual understanding, relationships and trust that are essential to joint problem-solving.

A PROGRAM APPROACH

The GEF program will encourage more effective basin-wide stakeholder cooperation on transboundary environmental issues by supporting priority actions in five main areas: (1) institutional strengthening, (2) community-level land, forest and water conservation, (3) environmental education and awareness, (4) wetlands and biodiversity conservation and (5) water quality monitoring.

The design of the GEF intervention has been based on a phased programmatic approach, to allow early progress and successes to be identified, nurtured and consolidated prior to further expansion. The first phase of the program will consist of full implementation of two components – institutional strengthening (component 1) and water quality monitoring (component 5), together with partial implementation of two components – land, forests and water conservation (component 2) and environmental education and awareness (component 3). Once this first phase has achieved its benchmarks, a second phase will launch and complete an additional component – wetlands and biodiversity conservation (component 4) – and will complete components 2 and 3.

Phased Programmatic Approach to GEF Program

	Phase 1	Phase 2
(1) Institutional strengthening	X	X
(2) Community-level land, forest and water conservation	X	X
(3) Environmental education and awareness	X	X
(4) Wetlands and biodiversity conservation		X
(5) Water quality monitoring	X	

In the context of the SAPs, distinct GEF interventions are also envisaged in the areas of (a) watershed management, (b) wetlands, biodiversity and protected areas management, and (c) water hyacinth control. However, these subsidiary action interventions are not yet mature and will need further dialogue and capacity building to materialize. The funding requested in the present proposal covers Phase 1 of the GEF Nile program. Based on performance of the program, a second submission for Phase 2 as well as for some of the suitable SAP projects may be made to the GEF.

3. COSTS AND FINANCING (MILLION US\$)

GEF	
Project Costs (Phase 1 – the present proposal)	16.80
Project Costs (Phase 2 to be requested at a later stage)	9.69
Sub-total	26.49
Co-financing for Nile Basin Initiative (NBI)	
Relevant SVP Projects ²	
NBI/SVP Socio-Economic Development - Macroeconomic Integration	11.00
Water Resources Planning and Management	24.40
Nile River Basin Cooperative Framework, Phase I (UNDP)	3.50
Nile River Basin Cooperative Framework, Phase II (UNDP)	0.50
NBI/SVP Efficient Water Use for Agriculture	5.00
NBI/SVP Confidence Building &	
Stakeholder Involvement	7.00
NBI/SVP Applied Training	20.00
NBI/SVP Transboundary Environmental Action ³	<u>12.70</u>
Sub-total Sub-total	84.10
GEF + Co-financing Subtotal	110.59
	110.59
NBI/SVP program preparation costs	
NBI/SVP program preparation costs PDF B (GEF)	0.35
NBI/SVP program preparation costs PDF B (GEF) UNDP	0.35 0.15
NBI/SVP program preparation costs PDF B (GEF) UNDP World Bank	0.35 0.15 2.57
NBI/SVP program preparation costs PDF B (GEF) UNDP	0.35 0.15
NBI/SVP program preparation costs PDF B (GEF) UNDP World Bank ESMAP	0.35 0.15 2.57 1.02
NBI/SVP program preparation costs PDF B (GEF) UNDP World Bank ESMAP Canada	0.35 0.15 2.57 1.02 0.67
NBI/SVP program preparation costs PDF B (GEF) UNDP World Bank ESMAP Canada Denmark Finland	0.35 0.15 2.57 1.02 0.67 0.20
NBI/SVP program preparation costs PDF B (GEF) UNDP World Bank ESMAP Canada Denmark	0.35 0.15 2.57 1.02 0.67 0.20 0.30
NBI/SVP program preparation costs PDF B (GEF) UNDP World Bank ESMAP Canada Denmark Finland Germany	0.35 0.15 2.57 1.02 0.67 0.20 0.30 0.06
NBI/SVP program preparation costs PDF B (GEF) UNDP World Bank ESMAP Canada Denmark Finland Germany Nethe rlands	0.35 0.15 2.57 1.02 0.67 0.20 0.30 0.06 1.00 0.97
NBI/SVP program preparation costs PDF B (GEF) UNDP World Bank ESMAP Canada Denmark Finland Germany Netherlands Norway	0.35 0.15 2.57 1.02 0.67 0.20 0.30 0.06 1.00
NBI/SVP program preparation costs PDF B (GEF) UNDP World Bank ESMAP Canada Denmark Finland Germany Nethe rlands Norway Sweden	0.35 0.15 2.57 1.02 0.67 0.20 0.30 0.06 1.00 0.97

² A short description of these projects is provided in Annex K

³ Co-financing by Canada confirmed; under discussion with the Netherlands

The present project is a joint GEF Implementing Agency submission on behalf of UNDP and the World Bank. The two IAs will continue to work in close partnership for the implementation of this project. The two agencies have established a joint International Waters Partnership located in Washington DC consisting of Bank and UNDP staff at the premises of the World Bank through which all their joint work on the Nile is coordinated. The present project will be implemented through the Partnership.

The project will be managed as an integrated whole, with the two agencies holding responsibility for the components and funds as indicated below:

COMPONENT	GEF	GEF Fi	nancing	UNDP	WORLD
	IA	Phase 1	Phase 2		BANK
1. Institutional Strengthening					
1.1 Regional capacity building	UNDP	4.62	2.32	6.94	
1.2 Knowledge management	WB	0.99			0.99
1.3 Decision Support System – River Basin Model	WB	3.65			3.65
1.4 Macro/sectoral policies and the environment	WB	0.44			0.44
Component Sub-total		9.69	2.32	6.94	5.08
2. Land, Forests and Water Conservation	UNDP	1.72	2.00	3.72	
3. Environmental Education and Awareness	UNDP	2.46	1.00	3.46	
4. Wetlands and Biodiversity Conservation	UNDP		4.37	4.37	
5. Water Quality Monitoring Basin-wide	WB	2.92			2.92
GEF Phase 1 – total		16.80		8.80	8.00
GEF Phase 2 – total		9.69		9.69	
TOTAL		26.49		18.49	8.00

4. FOCAL OPERATIONAL POINTS ENDORSEMENT

Burundi (26 July 2001)

Jerome Karimumuryango, Directeur General de l'INECN, Ministry of Environment

Congo (12 March 2001)

Salomon Banamuhere Baliene, Ministère des Affaires Foncières, Environnement, Conservation de la Nature, Pêche et Forêts

Egypt (12 July 2001)

Ibrahim Abdel Gelil, Chief Executive Officer, Egyptian Environmental Affairs Agency (12 July 2001)

Eritrea

Mebrahtu Iyassu, Executive Director, Eritrea Agency for the Environment, Ministry of Foreign Affairs

Ethiopia (27 July 2001)

Tewolde Berhan G. Egziabher, General Manager, Environment Protection Authority

Kenya (17 January 2001)

Benard O. K'Omudho, Director, National Environment Secretariat, Ministry of Environment & Natural Resources

Rwanda (29 June 2001)

Nsanzumuganwa, Emmanual, Secretary General, Ministry of Energy, Water and Natural Resources

Sudan (16 July 2001)

Yassin Eisa Mohamed, International Cooperation Directorate, Ministry of Finance and National Economy

Tanzania (20 June 2001)

A.R.M.S. Rajabu, Permanent Secretary, Vice President's Office

Uganda (26 July 2001)

Chris K. Kassami, Permanent Secretary, Ministry of Planning and Economic Development

5. IA CONTACT

Inger Andersen, Partnership Coordinator UNDP-World Bank International Waters Partnership E-mail <iandersen1@worldbank.org> or <inger.andersen@undp.org>

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ACRONYMS AND ABBREVIATIONS

CG Consultative Group
DSS Decision Support System
EAC East African Cooperation

EN-SAP Eastern Nile riparian grouping for project development: includes Egypt,

Sudan and Ethiopia

FAO United Nations Food and Agriculture Organization

GEF Global Environment Facility

HEP Hydro-Electric Power Development

ICCON International Consortium for Cooperation on the Nile

ILWM Integrated Land and Water Management Program for Africa

IMS Information Management System

IUCN World Conservation Union

LVEMP Lake Victoria Environmental Management Project

NBI Nile Basin Initiative

NEL-SAP Nile Equatorial Lakes Region – riparian group for project development:

includes the six countries in the southern portion of the Basin – Burundi, D.R. Congo, Kenya, Rwanda, Tanzania and Uganda – as well as the

downstream riparians, Sudan and Egypt

NGO Nongovernmental organization

Nile-COM Council of Ministers of Water Affairs of the Nile Basin Nile-TAC Nile Basin Initiative Technical Advisory Committee

Nile-SEC
Nile Basin Initiative Secretariat
NRBAP
Nile River Basin Action Plan
PCC
Project Coordination Committee
PCU
Project Coordination Unit
SAP
Subsidiary Action Program

Sida Swedish International Development Agency

SVP Shared Vision Program

TEA Transboundary Environmental Analysis
UNDP United Nations Development Programme

USAID United States Agency for International Development

WWF World Wide Fund for Nature

PREFACE

In an historic effort, the ten countries of the Nile have come together within the Nile Basin Initiative to realize a shared vision "to achieve sustainable socio-economic development through the equitable utilization of, and benefit from, the common Nile Basin water resources." Recognizing the tremendous benefits that can be reaped from cooperation, yet fully aware of the challenges ahead, the Nile countries have embarked on a remarkable journey to translate their shared vision into concrete activities and projects that will build confidence and capacity across the basin (the Shared Vision Program), as well as initiate concrete investments and action on the ground at local levels (Subsidiary Action Programs).

Presented herein is one of the projects within the Shared Vision Program. The full project portfolio includes⁴:

- ➤ Nile Transboundary Environmental Action
- ➤ Nile Basin Regional Power Trade
- ➤ Efficient Water Use for Agricultural Production
- ➤ Water Resources Planning and Management
- ➤ Confidence-Building and Stakeholder Involvement (Communications)
- ➤ Applied Training
- ➤ Socio-Economic Development and Benefit-Sharing.

At the same time, groups of countries - one in the Eastern Nile and another in the Nile Equatorial Lakes region - have identified joint investment opportunities. These Subsidiary Action Programs (SAPs) will consist of investment projects that confer mutual benefits at the sub-basin level, each involving two or more countries. Identified areas of cooperation include irrigation and water use in agriculture, hydropower development and power trade, watershed management, flood and drought management and sustainable management of lakes and wetlands.

As a whole, the Shared Vision Program aims to create an enabling environment for cooperative management of the Nile basin, and for development and investment on the basin and sub-basin level. Though each project is different in focus and scope, all contribute to building a strong foundation for regional cooperation by supporting basin-wide engagement and dialogue, developing common strategic and analytical frameworks, building practical tools and demonstrations, and strengthening human and institutional capacity. The Nile Transboundary Environmental Action project creates the framework and enabling environment for basin-wide *environmental* management on which sustainable development and investments on subsidiary levels can take place.

The seven projects of the Shared Vision Program build upon each other to form a coordinated program. They address the major water-related sectors and cross-cutting themes deemed critical

⁴ See Annex K for project profiles. Figure 1 depicts a schematic of the implementation arrangements for the SVP.

by the Nile riparians to ensure an integrated and comprehensive approach to water resources development and management, and that this development serves as a catalyst for broader socio-economic development and regional cooperation. Together, the projects of the Shared Vision Program seek to forge a common vision for - as well as build the capacity to achieve - the sustainable development the Nile Basin for the benefit of all. They pave the way for the realization of the Vision through investments on the ground within the Subsidiary Action Programs.

The detailed preparation of the Shared Vision Program was accomplished through a unique, multi-country, multi-sectoral and highly participatory process led by the Nile Council of Ministers and Technical Advisory Committee and executed by the Nile Secretariat. More than seventy national experts, including eight technical specialists from nine countries, were involved in detailed project preparation. For many, it was the first time that they were able to discuss common concerns with their colleagues from neighboring and co-riparian countries. The energy and hope for the future engendered by this preparation process were a visible demonstration of the power of cooperation, strong riparian ownership, and the commitment of the Nile countries to jointly pursue their common goal.

But the preparation of the Shared Vision Program is just a beginning. Implementing these projects and ensuring that tangible benefits are realized is the next challenge. It is a challenge that requires deepening partnerships with the international development community. Promoting cooperation among the countries of the Nile will inherently be a complex process. However, such cooperation is essential if sustainable development and management of the Nile Basin are to be achieved.

PROJECT BRIEF

BACKGROUND

- 1. The Nile River is one of the world's great assets. From ancient human civilizations until today, the flows of the river system have nourished livelihoods and played a central role in a rich diversity of cultures. Evidence of persistent human endeavor is apparent throughout the Basin. While this endeavor has brought significant benefits, the task of developing and managing the Nile River on a sustainable basis for the Basin's peoples remains daunting. Famine, extreme poverty, instability, rapid population growth, and accelerating environmental degradation are characteristic features of the Basin today. Half of the Nile Basin states are among the 10 poorest in the world. Facing these considerable threats to human welfare requires visionary and courageous leadership as well as the emergence of a regional perspective on the management and development of the Nile.
- 2. Ten riparian countries share the Nile River: Burundi, D.R. Congo, Egypt, Eritrea, Ethiopia, Kenya, Rwanda, Sudan, Tanzania, and Uganda. This transboundary character poses a considerable challenge: achieving truly sustainable management of a river system whose development potential for so many different people has created sharply different aspirations and expectations both within and beyond the Basin. At the heart of the challenge is the imperative of poverty eradication. The sustainable development of the Nile River can help alleviate poverty by providing enhanced food, power and water security as well as employment, although the magnitude of this task intensifies as populations in the Basin continue to grow and urbanization and industrialization continue to intensify.
- 3. The transboundary nature of the Basin also provides an extraordinary opportunity to promote regional economic development in one of the world's poorest regions. The Nile above Aswan is one of the least developed rivers in the world. Effective water and environmental management can bring benefits to all involved riparians, which means that there is real "winwin" potential in the Basin. There is an opportunity to transform the Nile, through collaborative and visible actions on the ground, into a unifying force that builds on regional and international interdependencies and promotes economic activities enabling co-Basin states to participate as partners in emerging regional and global trade. Continued unilateral development of the river, however, is more likely to engender unsustainable development, which in the long run could perpetuate poverty and promote contention.

STRATEGIC AND INSTITUTIONAL CONTEXT

4. Cooperative management of the Nile River Basin is one of the greatest challenges of the global international waters agenda. The Nile has enormous potential to foster regional social and economic development through advances in food production, transportation, power production, industrial development, environmental conservation and other related activities. To realize this potential, the riparians have come to recognize that they must take concrete steps to address current challenges and that cooperative, sustainable development holds the greatest prospect of delivering mutual benefits to the region.

EVOLVING REGIONAL COOPERATION

- 5. Appreciating the benefits of cooperation, various sub-groups within the Nile Basin have engaged in cooperative activities over the past thirty years. An early regional UNDP-funded project, Hydromet, was launched in 1967 with involvement of most of the riparian states. This project terminated in 1982 and the participating countries continued the activities with their own funding. In 1992 the Council of Ministers of Water Affairs of the Nile Basin (Nile-COM) launched the Cooperation Committee for the Promotion of the Development and Environmental Protection of the Nile Basin. In 1993, the first in a series of ten annual Nile 2002 Conferences sponsored by the Canadian International Development Agency (CIDA) provided an informal mechanism for dialogue and exchanges of views among the riparian countries as well as with the international community.
- 6. The Nile River Basin Action Plan (NRBAP) was prepared in 1995 with support from CIDA, comprising 22 technical assistance projects totaling US\$100 million. One of the projects prioritized in the Action Plan aims to establish a Nile River Basin Cooperative Framework. This US\$3.4 million project was initiated in 1996 with UNDP funding, enabling the Nile riparians to establish a forum for a process of legal and institutional dialogue aimed at reaching agreement on core legal principles and institutional arrangements. A draft "Cooperative Framework" was produced in early 2000 and submitted to the Nile-COM, encompassing general principles, rights and obligations, and institutional structure. This draft framework has moved the riparians a long way and important compromises have been reached. However, some key issues remain to be resolved, and the process is continuing. One goal of this process is the establishment of a permanent institution for the Nile Basin within an Agreement on the Nile River Basin Cooperative Framework.
- 7. In 1997 the World Bank agreed to a request by the Nile-COM to lead and coordinate donor support for this Committee's activities, and to organize a donor meeting—the International Consortium for Cooperation on the Nile (ICCON)—to raise financing for cooperative projects. As "cooperating partners," the Bank, UNDP, and CIDA have subsequently facilitated dialogue and cooperation among the riparians, to create a climate of confidence within which a cooperative framework can be established and sustained.

THE NILE BASIN INITIATIVE

8. In 1998, recognizing that cooperative development held the best prospects of bringing mutual benefits to the region, all riparians (except Eritrea) joined in a dialogue to design a transitional institutional mechanism until a permanent Cooperative Framework is in place. In an historic step they jointly created an inclusive regional partnership, to facilitate the common pursuit of the sustainable development and management of Nile waters. The transitional mechanism, launched in 1999, is comprised of the Nile-COM, a Technical Advisory Committee (Nile-TAC), and a Secretariat (Nile-SEC) based in Kampala, Uganda. The overall process is known as the Nile Basin Initiative (NBI)⁵. The formation of the NBI and ongoing riparian dialogue was initially supported by the World Bank, the United Nations Development Programme (UNDP), and CIDA as the original "cooperating partners," but the circle of donors is rapidly expanding (see also para. 17.).

⁻

⁵ The NBI is a transitional institutional arrangement until a formal Agreement on the Nile River Basin Cooperative Framework with a permanent basin-wide institution is established.

- 9. The NBI provides an agreed basin-wide framework to fight poverty and promote economic development in the region. The NBI also provides a process to facilitate substantial investment in the Nile Basin to realize regional socio-economic development. The Initiative is guided by a Shared Vision "to achieve the sustainable socio-economic development through the equitable utilization of, and benefit from, the common Nile Basin water resources." The NBI represents a deep commitment by the Nile riparian countries to foster cooperation and sustainable development of the Nile River for the benefit of all. The primary objectives of the NBI are:
 - (a) To develop the water resources of the Nile Basin in a sustainable and equitable way to ensure prosperity, security, and peace for all its peoples.
 - (b) To ensure efficient water management and the optimal use of the resources.
 - (c) To ensure cooperation and joint action between the riparian countries, seeking win-win gains.
 - (d) To target poverty eradication and promote economic integration.
 - (e) To ensure that the program results in a move from planning to action.

THE STRATEGIC ACTION PROGRAM

- 10. The NBI provides a transitional institutional mechanism, an agreed vision and basin-wide framework, and a process to facilitate substantial investment in the Nile Basin to realize regional socio-economic development. The establishment of the NBI begins the complex, challenging and long-term process of building confidence and realizing mutual benefits through shared projects. To translate its Shared Vision into action, the NBI has launched a Strategic Action Program, which includes two complementary components: (1) a basin-wide Shared Vision Program (SVP) creating a basin-wide enabling environment for sustainable development, and (2) Subsidiary Action Programs (SAPs)⁶ for joint investment⁷ (figures 1 and 2). The present project therefore lays a sustainable environmental foundation for future cooperative joint investments as planned through the SAPs. While the SVP is comprised largely of grant-based activities to foster trust and cooperation and build an enabling environment for investment, the SAPs are the vehicle for the Nile Basin countries to engage in concrete activities for long-term sustainable development, economic growth and regional integration.
- 11. The first set of SAP actions identified and presented to the first ICCON meeting are but the start of a process, which is expected to grow and expand as economic gains from collaboration take root. The economic and intellectual linkages and networks that the SVP and the SAPs will create across major economic sectors in the region will provide the "glue" which will contribute to bringing about greater regional cooperation, stability and prosperity. Cooperative water resources management can also serve as a catalyst for greater regional integration, both economic and political, with potential benefits possibly far exceeding those derived from the river itself. On the background of increased stability and regional integration

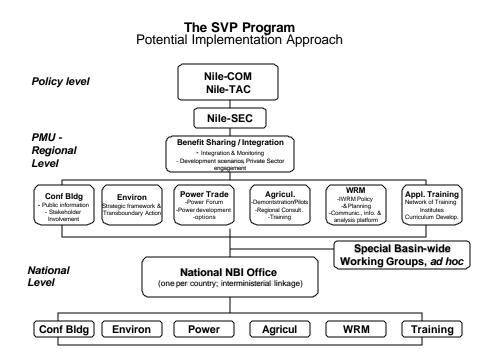
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⁶ In the Nile Basin context, the Transboundary Environmental Analysis is equivalent to the Strategic Action Program preparation process used elsewhere by the GEF. SAP has a different meaning in the Nile Basin context. 7 Annex K provides project and program profiles for the SVP and SAPs

there are significant opportunities for private as well as government funded regional investment activities, where cross-sectoral linkages as well as multi-purpose projects are promising win-win opportunities for all involved counterparts. As the NBI moves forward, it is anticipated that subsequent ICCONs will progressively expand from a meeting of riparians and donors to a meeting of riparians and investors as regional cooperation gains ground and the investment climate stabilizes.

12. The SVP includes a series of technical assistance and capacity building projects to be implemented basin-wide to help establish an enabling environment for cooperative development. The SVP project portfolio includes seven projects (Figure 1 and Table 1). Each project has been formulated through a multi-country, multi-sectoral, participatory process led by working groups, each of which included a Nile-TAC member and sector experts from the NBI countries. These projects address issues related to (a) transboundary water and environmental management (the subject of this proposal), (b) power trade, (c) efficient use of water for agriculture, (d) water resources planning and management, (e) confidence building and stakeholder involvement, (f) applied training, and (g) benefit sharing and integration. All projects aim to provide a common foundation - including common analytical frameworks, practical tools and demonstrations, and human capacity - to support regional cooperation; serving to forge a common vision and ensure long-term sustainability.

Figure 1: Overview of the basin-wide Shared Vision Program



13. The SAPs will be initiated in parallel to the SVP, implementing investment projects that confer mutual benefits at the sub-basin level while following the guidance of the overall NBI Policy Guidelines endorsed by the Nile-COM (see Annex E). The Nile riparians have formed two SAPs. The Eastern Nile (EN-SAP) includes Egypt, Sudan and Ethiopia; while the Nile Equatorial Lakes Region (NEL-SAP) includes the six countries in the southern portion of the

Basin -- Burundi, D.R. Congo, Kenya, Rwanda, Tanzania and Uganda -- as well as the downstream riparians, Sudan and Egypt.

Figure 2: Nile Basin Initiative - Overview

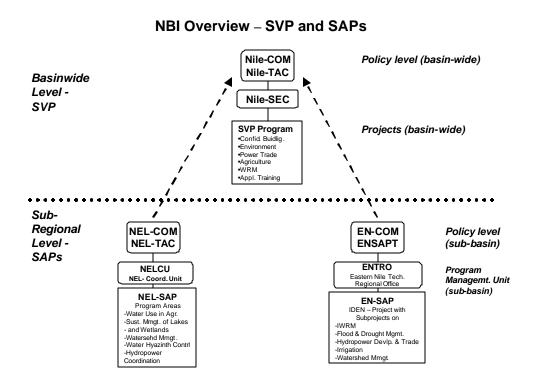


Table 1. Overview of Nile Basin Initiative Shared Vision Program Projects

ТҮРЕ	FUNCTION	PROJECT	OBJECTIVES	INDICATIVE COST US\$MILLION
T E C	Nile Transboundary Environmental Action Project	Provide a strategic framework for environmentally sustainable development of the Nile River Basin. Support basin-wide environmental action linked to transboundary issues in the context of the NBI Strategic Action Program	39	
H N I	Building a Foundation for	Efficient Water Use for Agricultural Production	Provide a conceptual and practical basis to increase water availability and efficient water use for agricultural production	5
C A	Transboundary Regional Cooperation:	3. Nile Basin Regional Power Trade	Establish the institutional means to coordinate the development of regional power markets among the Nile Basin countries.	12
• Basin-wide engagement and dialogue • Common strategic and analytical frameworks • Practical tools & demonstrations • Institutional and human capacity building • Common vision and long-term sustainability I T A T I V E	Water Resources Planning and Management	Enhance the analytical capacity for basin-wide perspective to support the development, management, and protection of Nile Basin waters.	28	
	5. Confidence Building & Stakeholder Involvement (Communications)	Develop confidence in regional cooperation under the NBI and ensure full stakeholder involvement in the NBI and its projects.	7	
	6. Applied Training	Strengthen institutional capacity in selected subject areas of water resources planning and management in public and private sectors and community groups Create or strengthen centers with capacity to develop and deliver programs on a continuing basis	20	
		7. Socio-Economic Development and Benefit Sharing	Strengthen Nile River basin-wide socio-economic cooperation and integration through: (a) joint identification, analysis, and design of cooperative development options and priorities (b) development of criteria, methods, and frameworks for sharing benefits/costs, and managing attendant risks	11
TOTAL ESTIMATED SVP PROJECT COSTS*			122	

14. The progress made by the EN-SAP and the NEL-SAP in identifying investment projects is summarized in Table 2.

Table 2. Nile Basin Subsidiary Action Programs (SAPs)

Subsidiary Action Program Program Areas and Indicative List of Projects			Indicative Implementation Cost Million US\$
NEL-SAP – Suggested Project P	Proposals ⁸		
1. Water Use in Agriculture	1.1 Enhanced Agriculture Productivity through Rainwater Harvesting and Small Scale Irrigation.	1.2	45.0
2. Sustainable Management and Conservation of Lakes and Linked Wetlands	2.1 Fisheries Project for Lake Albert	1.0	15.0
3. Watershed Management	3.1 Development of a Framework for Cooperative Management of the Water Resources of the Mara River Basin		3.0
	3.2 Kagera River Basin Integrated Water Resources Management		4.0
	3.3 Malakisi-Malaba-Sio Basins Integrated Water Resources Management		3.0
4. Water Hyacinth and Water Weed Control	4.1 Water Hyacinth Abatement in the Kagera River Basin	0.7	4.0
5. Hydropower Development	5.1.Hydropower Development,	11.0	Tbd
and Power Trade	5.2.Transmission Interconnection	3.2	Tbd
Subtotals		17.1	Tbd
ENSAP – Suggested Project I	Proposals ⁹		
Area of Cooperation	Sub-Projects		
Integrated Water Resources	Eastern Nile Planning Model Sub-Project	0.4	5 – 6
Management	Baro-Akobo Multipurpose Water Resources Development Sub-Project	3.0	>400
Flood and Drought Management	Flood Preparedness and Early Warning Sub-Project	0.4	7 – 14
Hydropower Development and Regional Power Trade	Ethiopia-Sudan Transmission Interconnection Sub-Project	10	150
	Eastern Nile Power Trade Investment Programme	2.6*	Tbd
Irrigation and Drainage Development	Irrigation and Drainage Sub-Project	1.2*	Tbd
Watershed Management	Watershed Management Sub-Project	2.1	>400
Subtotals		19.7	Tbd

^{*}Estimated costs – to be revised.

15. The activities of the Nile Basin Initiative also include an "international discourse" to promote international support for and dialogue on the sustainable development and management of Nile waters. A first meeting on the "international discourse" took place in January 2001 and was co-convened by the World Wide Fund for Nature (WWF), the World Conservation Union (IUCN) and the World Bank with funding from the Rockefeller Foundation. The meeting included participants from 27 nongovernmental organizations (NGOs), academia, professionals and institutions from within and outside the Basin. The meeting offered a good chance to begin a dialogue on development options. A second "international discourse" meeting was held in May

⁸ Nile Equatorial Lakes investment project totals are early indicative figures subject to revision.

⁹ Eastern Nile SAP investment projects are still under definition and investment totals will be further refined. These figures are therefore not included in the Incremental Cost Analysis.

2001 in Uganda hosted by IUCN/Uganda and was attended by regional and international NGOs. The meeting also prepared and endorsed a funding proposal which is to be presented to donors for financing of the discourse process. The meeting also formulated an NGO statement that was presented to the international community at the first ICCON meeting in June 2001.

- 16. The ICCON has been established to support the NBI's Strategic Action Program. Its first meeting took place in June 2001. The ICCON is a unique forum, organized by the World Bank at the riparians' request, and envisioned as a long-term partnership of the riparian states and the international community. The first meeting of the ICCON secured funding for the portfolio of basin-wide Shared Vision projects and for the preparation of the first set of projects identified under the SAPs. The first ICCON meeting also celebrated cooperation and demonstrated international solidarity for cooperative development in the Nile Basin.
- 17. Support for the Nile Basin Initiative has been characterized by partnership since it began. The initial "cooperating partners" (CIDA, UNDP and World Bank) played the role of concerned facilitators, assisting the process of dialogue. As the NBI moved into the preparation of the Strategic Action Program, the partnership has expanded to include the governments of Denmark, Finland, Germany, Italy, the Netherlands, Norway, Sweden, the United Kingdom, and the United States, together with the United Nations Food and Agriculture Organization (FAO) and the Global Environment Facility (GEF). Through the first ICCON, the circle of partners has widened as the international development community committed further support to Shared Vision projects and to the preparation of SAP projects.

PROJECT CONTEXT

18. The Nile countries recognize that future development of the Basin must be environmentally sustainable. Identifying the environment and development synergies, and thus the sustainable development opportunities in the Basin, is now a major priority. Focusing on transboundary issues provides the riparian countries with a major opportunity to make significant progress towards their economic and environmental goals in ways that have proved difficult to achieve independently. Consensus has emerged in support of a set of activities in the riparian countries to (a) provide a strategic framework for the environmentally sustainable development of the Nile River Basin as part of the Shared Vision Program, (b) improve the understanding of the relationship of water resources development and the environment throughout the Basin, and (c) provide a forum to discuss development paths for the Nile Basin with a wide range of stakeholders.

TRANSBOUNDARY ENVIRONMENTAL ANALYSIS

19. To take this process forward, a Transboundary Environmental Analysis (TEA)¹⁰ was initiated by the Nile riparian countries in December 1999 under the NBI's Shared Vision Program, with funding from GEF PDF resources and support from UNDP and the World Bank. The main objective was to help translate existing national environmental commitments and interest into regional and basin-wide analytical frameworks, and eventually basin-wide actions. The TEA¹¹ was prepared through a highly participatory and transparent process to ensure

¹⁰ In the Nile Basin context, the Transboundary Environmental Analysis is equivalent to the Strategic Action Program preparation process used elsewhere by the GEF. SAP has a different meaning in the Nile Basin context.

¹¹ Obtainable from Inger Andersen: <iandersen1@worldbank.org> or <inger.andersen.@undp.org>

maximum consultation and involvement, which in turn would translate into maximum relevance, ownership and commitment. The TEA report constitutes a collective synthesis of basin-wide environmental trends, threats and priorities, and a product in terms of a set of national and international actions to be carried out under basin-wide cooperation. The Transboundary Environmental Analysis was approved by the Nile Council of Ministers meeting held in Khartoum in March 2001. The present Project Brief is based on the findings of the TEA (see also Annexes I and J and the Maps at the end of this document).

The TEA emerged from two related sets of activities. The first consisted of broad and 20. participatory national consultations led by a National Expert in each of the nine participating Nile countries, with findings and recommendations documented in National Reports then synthesized by an international consultant. The national consultations were carried out in parallel to assessments of priority needs in the other sectors included in the Shared Vision Program: power trade; efficient use of water for agriculture; water resources planning and management: confidence building and stakeholder involvement; applied training; and benefit sharing and integration. All of the national consultations and assessments were guided by Nile-TAC representatives, with basin-wide coordination by an international lead consultant in each sector. The National Experts consulted with key stakeholders in national and local government agencies, NGOs and research organizations, as well as people working on related projects and programs. At least one workshop was held in each country to which a variety of stakeholders were invited. These consultations built on existing national environmental planning processes within the countries as well as sectoral master plans, many of which were themselves based on broad consultative processes. The second activity, which was supported by the United States Agency for International Development (USAID), involved a scoping study leading to preparation of a multi-country technical background paper based on readily accessible and public domain information and on findings from selected country visits.

AGENDA FOR ENVIRONMENTAL ACTION IN THE NILE BASIN

- 21. The TEA provided the basis for identifying the elements of an Agenda for Environmental Action in the Nile Basin, to be implemented over the next decade or more under the NBI's Strategic Action Program in coordination with other development activities. The Agenda recognizes the critical need for high-level commitment and improved public awareness for successful long-term management and conservation of the Basin's natural resources and ecosystems. It emphasizes the integration of environmental concerns into the development process through capacity building, and more effective environmental monitoring, assessment and planning with enhanced local participation, through demonstration projects involving the full range of key stakeholders, and through policy reforms. The Agenda for Environmental Action includes a broad range of actions that will need to be carefully coordinated with the other elements of the NBI's Shared Vision Program and the SAPs, as well as the complementary initiatives of other local, national and international partners. The emphasis throughout is on stakeholder awareness and involvement, water and environmental management, training and education, capacity building, information sharing and institutional development.
- 22. The GEF eligible priority transboundary activities to be addressed in the initial phase of the Agenda for Environmental Action are the subject of this proposal. Additional activities can begin as success is achieved in this first phase, as transboundary collaboration and cooperation matures, as national capacities increase and as more funding becomes available. Successful

implementation of the Agenda for Environmental Action will require mobilization of a range of human and financial resources to support priority activities. A balance between preventive and curative measures must be part of long-term development strategies. Domestic funding, at the national and local level, should be anticipated in most nations to be the primary source for investment activities. These funds can be supplemented by loans and grants from international financial institutions and bilateral donors to support the implementation of priority investments. Additional GEF eligible activities at the sub-basin level are beginning to emerge. Future activities need to be closely coordinated with and seek complementarity to the present GEF project as well as the ongoing large GEF regional project in the Lake Victoria region (LVEMP - see paras 32 - 35). LVEMP has in many areas laid groundwork for cooperation on transboundary environmental issues around Lake Victoria and has been the vehicle for IDA support to Lake Victoria environmental management for several years. As investment needs in the Lake Victoria region are identified through the present projects or other NBI activities, these will be integrated into the emerging second phase of LVEMP 2 as appropriate.

BASELINE COURSE OF ACTION

ENVIRONMENTAL THREATS

- 23. The varied and valuable environmental resources of the Nile Basin are subject to a series of threats with significant consequences for future development of the Basin. The proximate or immediate causes of these threats have been studied extensively and are reasonably well understood, even though reliable data are scarce and some of the transboundary linkages require further elaboration. Agricultural and grazing lands are being degraded, water quality is declining, wetlands and forests are being lost, the overexploitation of natural resource is continuing, pollution from urban, industrial and agricultural sources is increasing, waterborne diseases are proliferating, and the harmful impacts of floods and droughts are intensifying. Many of these threats have a direct impact on human health and welfare, while others undermine people's ability to secure their livelihoods, with poorer people most affected by the deteriorating environmental conditions. Collectively, these threats represent a substantial barrier to the long-term achievement of sustainable development in the Nile Basin countries. A summary of the major direct threats to the environment of the Nile Basin is provided in Table 3 and Annexes I and J, with respective maps attached at the end of this document.
- 24. The underlying or driving forces behind the threats to the Nile Basin's environmental resources are complex and difficult to make generalizations about with any degree of certainty. Environmental threats have often been attributed to rapid human population growth and persistent poverty, although the linkages between poverty and the environment are complex and vary considerably from place to place. Looking beyond population and poverty, there is now increasing acceptance that the underlying causes of environmental threats are often related to institutional, governance, awareness and information issues as well as sectoral and macroeconomic policies. Gaining a better understanding of the complex interactions between these factors and the Nile Basin's environmental resources is critical to the design of effective remedial actions. Efforts that focus on the technical aspects of natural resource management and conservation can then be complemented by parallel efforts targeting the policy issues and institutional structures that play a key role in managing those resources in a more sustainable and equitable manner.

Table 3. Summary of Basin-wide Common Causes and Priority Environmental Threats
Reported for Basin Countries

Reported for Basin Countries			
Common Causes for Environmental Threats			
Basin-wide causes	Policy, governance, institutional and capacity constraints, insufficient environmental education		
	and awareness, limited access to environmental knowledge and information (including relevant		
	scientific data), unclear tenure and inadequate access to resources for local stakeholders,		
	inadequate management of protected areas and other environmental hot spots		
Priority Environmen	tal Threats by Country		
Burundi	Deforestation, soil erosion, degradation of river banks and lakeshores, mining, wildlife hunting		
DR Congo	River and lake pollution, deforestation, soil erosion, wildlife hunting		
Egypt	Water and air pollution, filling of wetlands, desertification, waterlogging and soil salinity,		
	sanitation, river bank degradation		
Ethiopia	Deforestation, overgrazing, soil erosion, desertification, sanitation, loss of biodiversity (including		
	agrobiodiversity), floods, droughts		
Kenya	River and lake pollution (point and non-point source), deforestation, desertification, soil erosion,		
	sedimentation, loss of wetlands, eutrophication and water weeds		
Rwanda	Deforestation, soil erosion, degradation of river banks and lake shores, desertification, wildlife		
	hunting, overgrazing		
Sudan	Soil erosion, desertification, pollution of water supplies, wildlife hunting, floods, droughts,		
	sanitation, deforestation,		
Tanzania	Deforestation, soil degradation, desertification, river and lake pollution, poaching and shortage of		
	potable water		
Uganda	Draining of wetlands, deforestation, soil erosion, encroachment into marginal lakeshore and		
	riverine ecosystems, point- and non point-source pollution		

TRANSBOUNDARY ENVIRONMENTAL ISSUES

- 25. Several key transboundary environmental issues have been identified in the Nile Basin:
 - (a) **Exchange of information and knowledge sharing** among and between key resource users, research institutions and other stakeholders throughout the Basin regarding best practices and lessons from experiences is very limited. Relatively few local stakeholders have access to adequate means of communications.
 - (b) Point and non-point source pollution can cross national boundaries and affect downstream riparians. Soil erosion and non-point source pollution are serious problems in many areas in the Basin. Deforestation and soil erosion can lead to increased sedimentation and greater flood risks downstream, while sediments also accumulate in wetlands and reservoirs. Urbanization and industrialization often lead to greater pollution of the Nile River and its tributaries as pollution prevention and treatment measures generally do not keep pace with this development. Increased use and improper application of pesticides and fertilizers, especially in the large irrigation schemes in the northern reaches of the Basin, lead to increased runoff and pollution of drainage canals. All of these impacts have the potential to reach and harm downstream water users. Data and information related to the transboundary aspects of these issues are scarce and awareness of downstream impacts generally lacking. Only limited work has been done to identify environmental hot spots or to carry out systematic water quality monitoring at environmentally-sensitive sites of transboundary and regional significance. Moreover, there is insufficient understanding of the river basin dynamics to assess the downstream environmental impacts of future river system interventions or changes in watershed management regimes.

- (c) Lack of capacity to perform adequate environmental impact assessments for planned investments and installations, although variable between the countries, is generally widespread throughout the Basin. This is either due to missing or outdated regulations or to insufficient enforcement of existing ones. While some countries have adopted environmental impact assessment guidelines relatively recently, the institutional capacity to enforce and monitor the process has been identified as generally poor. As a result, the capacity to assess the transboundary environmental impacts of planned basin-wide investment programs is currently insufficient to support a transition toward sustainable development.
- (d) Water hyacinth and other invasive aquatic weeds have spread throughout many parts of the Nile Basin, impairing the functions of natural ecosystems, threatening fisheries and interfering with transportation. Programs are underway in the Basin to combat these invasive species and considerable progress has been made in the Lake Victoria region, largely supported by activities funded by the Lake Victoria Environmental Management Project.
- (e) Water-dependent ecosystems throughout the Nile Basin contribute to the stability, resistance and resilience of both natural and human systems to stress and sudden changes. In particular, significant transboundary benefits derive from the Basin's wetlands' roles in maintaining water quality, trapping sediment, retaining nutrients, buffering floods, stabilizing micro-climates and providing storm protection. The ecological and economic role of wetlands in supporting sustainable development in the Basin is not well understood or widely appreciated.
- (f) **Key plant and animal species** often have habitats in adjoining countries, requiring cross-border protected areas and other conservation measures for effective management. For example, the Nile is a principal flyway for birds migrating between central Africa and Mediterranean Europe, and Nile wetlands in a variety of countries provide indispensable habitats for these birds.
- (g) **Water-borne diseases** such as malaria, diarrhea and bilharzia (schistosomiasis) are prevalent throughout the Basin and thus of major concern the Nile countries. Actions to curb these remain a priority in most of the Nile countries.
- (h) Lack of awareness and understanding of the transboundary environmental consequences of the decisions being taken over land and water resource management in all of the riparian countries is a major barrier to strengthening environmental management.
- (i) **Environmental impacts of macro and sectoral policies** on the Nile Basin's land and water resources—including transboundary impacts linked to trade, transport and migration—are poorly understood.

BASELINE ACTIVITIES

26. All of the riparian countries have carried out various national environmental planning processes aimed at diagnosing and prioritizing environmental problems. These include national

environmental action plans, national conservation strategies, national biodiversity strategies and action plans, tropical forestry action plans, and so on. Many of these processes have been based on broad national consultations. The main environmental threats in each country are therefore reasonably well known, even though reliable data is often lacking and some of the underlying causes of the threats are less well understood.

- 27. A wide variety of projects and programs have attempted and are attempting to address various environmental threats in the Nile riparian countries, many with support from bilateral or multilateral development agencies. The overwhelming majority of these initiatives have been implemented at a national rather than transboundary level. These baseline activities are listed in Annex A The achievements, lessons and experiences of these activities have been carefully considered in the design of the project. Achieving the project's objectives in the absence of these initiatives would have entailed far higher costs.
- 28. A set of very sizable and important baseline activities for this project is the NBI's SAP investment projects (described above), still under development. These are expected to include substantial investments over several decades. The proposed SAP includes projects on efficient water use in agriculture, wetlands conservation, water hyacinth control, watershed management, hydropower development and river simulation projects. The present GEF project will provide a basin-wide framework for these follow-on investment activities (see Table 2 for further details). Two other particularly notable initiatives have been launched in the Lake Victoria region of the Nile Basin. These are discussed below
- 29. As part of a complementary, longer-term process, the governments of Kenya, Tanzania and Uganda have recently re-established formal cooperation through the East African Community (EAC). The objectives are to develop policies and programs aimed at widening and deepening co-operation among partner states in the political, economical, social and cultural fields; research and technology; defense, security and legal and judicial affairs for their mutual benefit. As such many cooperative actions are already implemented such as moves towards free movement of goods and labor, a passport union and other similar integrating actions. The Lake Victoria Basin has been targeted as a Growth Zone common to the three EAC countries. A joint Lake Victoria Development Strategy and Action Plan for Sustainable Development (LVDP) is under preparation. The goal of LVDP is to promote cooperation in the joint and efficient management and sustainable utilisation of natural resources for the coordinated management of the Lake Victoria Basin. This regional initiative is supported by several donors and the management of catchments that straddle international borders such as the Mara Basin could be placed under the overall institutional framework of the EAC.
- 30. To promote the investments necessary EAC has entered into a Partnership Agreement with the Governments of Sweden (through Sida), France and Norway as well as the World Bank and the East African Development Bank (April 2001). The partners are committed to support the development of the region in the long term in a coordinated manner.
- 31. The Partnership Agreement between the EAC and the Development Partners is a long term initiative for the three EAC States to act as a single block to address issues of common interest of the member countries with some support from the Development Partners. The key areas for regional cooperation are expected to include strengthening emerging networks and institutions, mapping pollution sources and other patterns of unsustainable resource use, priority setting and development of a framework for investment in industry, agriculture, infrastructure,

fishery and tourism. All the countries in the geographical area of the Lake Victoria Basin are concerned by these developments and would under appropriate arrangements benefit from this approach.

- 32. The Lake Victoria Environmental Management Program (LVEMP) is a comprehensive program that covers Lake Victoria and its catchment in Kenya, Tanzania and Uganda. Its main objective is ,using a regional transboundary approach, the rehabilitation of the ecosystem for the benefit of the inhabitants and national economies. The project addresses the major threats facing the Lake Victoria ecosystem, including overfishing, eutrophication and algae levels, pollution and invasive exotic species such as the water hyacinth. The on going project commenced in 1994 with a Tripartite Agreement and is funded by GEF and IDA in addition to national contributions. A follow up project (LVEMP2) is proposed and preparation is being launched.
- 33. The present NBI GEF project will seek to build explicitly upon the lessons learned by, and achievements of, the LVEMP, allowing replication across the ten-country Nile basin. Activities in Kenya, Tanzania and Uganda that are part of specific LVEMP components will not receive additional support. However, the basin-wide activities in the present project will clearly include Kenyan, Tanzanian and Ugandan participation, which will also aid in transfer of knowledge and lessons learned. As investment and other support needs, including activities to address transboundary issues, are further identified in the Lake Victoria Basin through the present project or other NBI projects, these will be integrated into the preparation of LVEMP2 wherever appropriate. In this way, LVEMP2 will be a primary vehicle for Bank support to NBI Subsidiary Action Program investment in the Lake Victoria Basin.
- 34. In order to optimize coordination and maximize complementarity of the present basin-wide project and LVEMP, the LVEMP focal points of each of the countries (Kenya, Tanzania and Uganda) will be invited to participate in yearly Project Coordination Committee meetings of the present Nile Transboundary Environmental Action project. In this way the present NBI GEF project will build on and disseminate the transboundary experiences and actions of LVEMP to the basin-wide level.
- 35. Thus the Bank, using IDA and GEF resources, will be financing transboundary water and environment actions within the Nile Basin within one 'concentric' framework, at different levels:
 - (a) At the Basin-wide level (10 countries);
 - (b) At the Sub-basin level (e.g. 6 countries in the Nile Equatorial Lakes); and
 - (c) At lower levels, in the LVEMP (1 and 2) case at the level of Lake Victoria (3 countries).
- 36. Further information on the baseline projects can be found in Annex A.

PROJECT OBJECTIVE AND RATIONALE

37. The objective of the project is to provide a strategic environmental framework for the management of the transboundary waters and environment challenges in the Nile River Basin. The project will improve the understanding of the relationship of water resources development and the environment in the Basin, and provide a forum to discuss development paths for the Nile

with a wide range of stakeholders. The environmental framework established by the project will also promote: (a) enhanced basin-wide cooperation and environmental awareness essential to the successful implementation of the Agenda for Environmental Action in the Nile Basin through the NBI's SVP, SAPs and other programs, and (b) a basin-wide institution, the NBI, with substantially enhanced environmental management capacities.

- 38. More effective cooperation and coordination between the riparian countries is badly needed if the Nile Basin's environment is to be conserved in ways that help improve the quality of life of the inhabitants. This project will strengthen riparian cooperation and coordination by supporting a series of measures focusing on various aspects of transboundary environmental management. Project activities will include capacity building, training, education and awareness raising, knowledge and information sharing, communications, environmental monitoring and activities at selected pilot sites. All project components will require site selection and stakeholder participation from at least two riparian countries; while many will involve all of the countries. Consistent emphasis will be given to encouraging diverse stakeholder groups to work together, both within their own countries and with counterparts in other riparian countries, as an essential contribution to building the mutual understanding, relationships and trust that are essential to collaborative problem-solving in the future.
- 39. The project (phases 1 and 2) will encourage more effective basin-wide stakeholder cooperation on transboundary environmental issues by supporting the implementation of the actions prioritized by the TEA, in the following areas:
 - 1. Institutional Strengthening to Facilitate Regional Cooperation.
 - 2. Community-level Land, Forest and Water Conservation.
 - 3. Environmental Education and Awareness.
 - 4. Wetlands and Biodiversity Conservation.
 - 5. Water Quality Monitoring Basin-wide.
- The present GEF project will be implemented through a programmatic and phased 40. approach, to allow early progress and successes to be consolidated prior to further expansion. The first phase of the GEF program (to be supported under the present Project Brief) will consist of full implementation of the water quality monitoring (component 5), together with partial implementation of three components – institutional strengthening (component 1), land, forests and water conservation (component 2) and environmental education and awareness (component 3). At the end of the third project year, an assessment of the achievements of the present GEF project, as well as in the larger Nile Basin Initiative, will be made against a number of agreed benchmarks. Contingent upon satisfactory performance of the program, a second submission for the second phase as well as for some of the suitable SAP projects will be made to the GEF. This second phase will launch and complete an additional component – wetlands and biodiversity conservation (component 4) – and will complete components 1 (ongoing subcomponent 1.1 only), 2 and 3. The second phase submission to the GEF may also include some of the suitable SAP projects. Preliminary performance indicators for Phase 1 completion are provided in Annex B (Logical Framework Analysis); these will be further refined during project appraisal and formulation.

41. It is recognized that the NBI is a long-term undertaking and that progress toward the set goals will take decades. Detailed performance benchmarks will be defined during the project design and will relate to the GEF project components. (For further discussion of the performance benchmarks, please see section on Monitoring, Evaluation and Dissemination in paras. 71 - 74 of the present Project Brief.)

RATIONALE FOR GEF SUPPORT

- 42. GEF participation will broaden the range of partners supporting the NBI, facilitate an increased emphasis on analysis and management of transboundary environmental issues throughout the Basin and assist in the full integration of environmental concerns into design and implementation of the large-scale program of investments to be planned in the immediate future. The Nile basin holds significant opportunities for 'win-win' development that could enhance food production, energy availability, transportation, industrial development, environmental conservation, and other related development activities in the region. A first set of investment projects is currently under way within the SAPs.
- 43. The Project fully supports the objectives of GEF Operational Program Number 9, the "Integrated Land and Water Multiple Focal Area Operational Program." Consistent with the priorities of Operational Program 9, GEF can "be a catalyst for action to bring about the successful integration of improved land and water resource management practices on an area-wide basis." It specifically addresses the goal of the Operational Program to assist a "group of countries to utilize the full range of technical, economic, financial, regulatory, and institutional measures needed to operationalize sustainable development strategies for international waters and their drainage basins." Special attention is given to "integrated land and water resources management" and the special protection of sensitive areas as "land degradation resulting in damage to the water resources" is often a transboundary problem that requires "political commitments on the part of neighboring countries to work together, establish factual priorities, and decide on joint commitments for action."
- 44. The NBI, consistent with GEF guidelines, will "achieve changes in sectoral policies and activities as well as in leveraging donor and regular Implementing Agency participation" and its "projects focus on integrated approaches for the use of better land and water resources management practices on an area-wide basis." "Community involvement and stakeholder participation" are especially important and the GEF basin-wide project is aiming to "derive lessons learned in testing workable mechanisms to improve community, NGO, stakeholder [including the private sector, and inter-ministerial participation in planning, implementing and evaluating projects." As an outcome of the basin-wide project and in line with Operational Program Number 9 "political commitments on the part of neighboring countries to work together, establish factual priorities, and decide on joint commitments for actions" will be supported. A "strengthened multi-country institutional arrangement is ... appropriate measure for support." The program has been designed to "test various interventions and learn from implementation." It will also provide critical support for activities in two GEF priority development regions—Sub-Saharan Africa and the Middle East and North Africa.
- 45. Both the proposed project and the NBI itself are highly relevant to and consistent with the goals of the recently-established Integrated Land and Water Management (ILWM) Program for Africa. Concerned by the tremendous pressure exerted on Africa's natural resources base and the concomitant ethical, political, economic, security and global environmental implications, a

March 1999 meeting of the GEF CEO and the Heads of Agencies of UNDP, UNEP, and the World Bank agreed to prioritize development of a coordinated "Action Program" to promote and support holistic and integrated approaches to reversing land and water degradation in Africa in close collaboration with other key partners. The resulting ILWM Program is expected to aid African countries to accelerate efforts to reverse land and water degradation, with tangible results on the ground taking a programmatic approach. The ILWM Program concept uses a two-phase approach: (a) a demonstration phase with expedited program development and implementation process, and (b) a program expansion phase emphasizing development and implementation of scaled-up activities. Another related initiative in Africa is the "African Stockpile Program: Funding the prevention and disposal of obsolete pesticides from African countries (ASP)" under the framework of the Stockholm Convention on Persistent Organic Pollutants (POPs). The ASP is currently in preparatory phase (GEF CN under OP 14 approved end of July 2001, PDF-B request under development). Its major feature is a multi-stakeholder (UNEP Chemicals, FAO, WWF, PAN-UK, UNIDO, CLI, Basel Convention Secretariat, OUA, UNECA,) strategic partnership framework led by the World Bank, which will provide the rules of the 10-year program design. The present Nile Transboundary Environmental Action project will draw on these and other ongoing and planned GEF and non-GEF regional activities.

COMPONENTS, OUTPUTS AND ACTIVITIES

- 46. As described above, the full basin-wide GEF program (phases 1 and 2) consists of a total of 5 components as follows.
 - 1. Institutional Strengthening to Facilitate Regional Cooperation.
 - 2. Community-level Land, Forest and Water Conservation.
 - 3. Environmental Education and Awareness.
 - 4. Wetlands and Biodiversity Conservation.
 - 5. Basin-wide Water Quality Monitoring.
- 47. To build capacities incrementally while providing an opportunity to build on early progress, the present proposal for Phase 1 of the project includes full implementation of components 5 as well as partial implementation of components 1, 2 and 3 (as described in para 40). The remaining components will be included in Phase 2, subject to satisfactory project performance and achievement of benchmarks in Phase 1.

1: Institutional Strengthening to Facilitate Regional Cooperation

1.1 Regional Capacity Building for Transboundary Environmental Management (phase 1 and 2)

48. This component will help develop deeper and more effective cooperation on transboundary environmental management among and between the Nile riparian countries, including governments, NGOs, researchers and other stakeholders. Specifically, the component will (a) strengthen the capacity of the NBI to coordinate and implement the national components of the project, and (b) ensure effective cooperation with the other elements of the NBI Shared

Vision Program, the NBI SAPs, and the other active environment and development programs in the Basin. Project activities will establish and support the activities of:

- (a) A Project Coordination Committee (PCC), composed, among others, of national focal points, scientific experts, donors, etc., with a rotating chair.
- (b) A small Project Coordination Unit (PCU) consisting of a Regional Project Coordinator, a Chief Technical Advisor, three Thematic Lead Specialists (corresponding to the three project components in Phase 1 of the project), and support staff for procurement, finance and administration.
- (c) Ad hoc basin-wide Thematic Working Groups (possibly one for each of the project components), to provide expertise on the implementation of project components, to highlight country-specific needs and to jointly plan activities, evaluate progress and exchange lessons learned from national experiences.
- (d) One National Project Coordinator for each country, to interact between the PCU, the Thematic Working Groups and the respective national organizations implementing the project components.
- 49. The national focal point ministry for the project will host the office of the National Project Coordinator. These focal point ministries are as follows:
 - (a) Burundi: l'INECN, Ministry of Environment.
 - (b) Congo: Ministère des Affaires Foncières, Environnement, Conservation de la Nature, Pêche et Forêts.
 - (c) Egypt: Egyptian Environmental Affairs Agency.
 - (d) Eritrea: Eritrea Agency for the Environment.
 - (e) Ethiopia: Environment Protection Authority.
 - (f) Kenya: Ministry of Environment & Natural Resources.
 - (g) Rwanda: Ministry of Energy, Water and Natural Resources.
 - (h) Sudan: Higher Council of Environment and Natural Resources.
 - (i) Tanzania: National Environment Management Council.
 - (j) Uganda: Ministry of Water, Lands and Environment.
- 50. These national institutions have taken an active role in preparing the present project and will play a key coordinating role in its implementation. Civil society organizations will play an active role in the implementation of component 2, while NGOs and youth groups, schools and universities, in addition to the ministries of education, will play a role in implementation of component 3. The decision support system and knowledge management activities (parts of component 1) will be managed by the respective ministries of water affairs in cooperation with the ministries of environment and agriculture, as envisaged under the Water Resources Planning and Management project of the SVP (see also Table 1).

51. In most of the Nile countries, a national Nile Committee has been established, consisting of all the relevant ministries and civil society organizations, including the ministries dealing with finance, planning, agriculture, environment and of course, water resources. These Committees have discussed and prepared the national positions on overall policy with respect to the emerging Nile cooperation, including the Cooperative Framework, the NBI, the SVP projects and the SAPs. Most countries plan that these Committees will continue to play a coordinating role for the NBI. In most of the countries, the ministry of water affairs acts as convener and secretary for the national Nile Committees. Additionally, NBI National Offices will be established in each of the Nile basin countries and will be supported through government funds (see figure 1). These will function as the cross-sectoral and inter-ministerial national coordination and exchange hubs assuring that all NBI sub-projects and activities on the national level are well implemented and complimentary in their approach (see Annex K for a summary of the SVP and SAPs).

1.2 Knowledge Management (phase 1)

- 52. This component will provide key project participants and other stakeholders with improved access to relevant environmental and resource management information as well as enhanced abilities to communicate with one another. Project activities will:
 - (a) Facilitate the establishment of basin-wide environmental communication email/internet services (in collaboration with the Water Resources Planning and Management Project, which will establish the structure and technical standards for the SVP communications network and information management system, see also 2.1 below).
 - (b) Establish and maintain an electronic environmental knowledge base and repository for resources and documents.
 - (c) Publish an environmental SVP electronic newsletter and establish a website.

1.3 Decision Support System and River Basin Modeling¹²(phase 1)

53. This component will afford a substantial learning process and support improved decision making by developing a basin-wide decision support system (DSS), including a River Basin Model. This first participatory, basin-wide development effort of the River Basin Model aims at a simplified representation of the Basin's hydrology and river system behavior based on available data. The model will allow assessments of potential future impacts of collaborative projects that may have transboundary implications, and will provide quantitative river flow information to support more detailed environmental assessments. A broad acceptance and use of

¹² Key components of the DSS development process include: (a) strengthening of the institutional framework and human capacity for DSS development and application, including the establishment of a Regional DSS Unit, National Focal Point Institutions and a network of users; (b) development and application of a comprehensive information management system (IMS), including communication networks, data and knowledge bases, geographical information systems, and user interfaces; (c) development and application of a regional Nile River Basin planning model; and (d) establishment of guidelines for the collection, processing, analysis and exchange of relevant data and information. The total costs of the DSS development are estimated to be US\$21 million US (out of the total costs of the Water Resources Planning and Management project of US\$28 million). This GEF project will support the River Basin Model component of the DSS (US\$3.6 million) as outlined below and provide the environmental content for the IMS as discussed above in Output 1.2 (Knowledge Management). The remaining components of the DSS will be funded from different sources.

the River Basin Model will depend on demonstration of its usefulness and successful application at regional, sub-regional and national levels. Relevant applications, including its use in SAP projects or the evaluation of development and management options, will provide an important testing and validation basis. Broader, multi-sectoral databases and finer scale models may be developed in subsequent projects to address site-specific issues. Sub-component activities will include the following:

1.3.1 Development of the River Basin Model component of the Nile Basin DSS and staff training

- (a) Assess the modeling needs and system requirements through a consultative process with the riparian states, review existing models, and prepare design specifications and a development plan for the River Basin Model.
- (b) Develop the River Basin Model with full participation from a core team of national lead specialists.
- (c) Train core staff from the region to be able to understand, use, maintain and assist in further model development.

1.3.2 Linkage of the Regional DSS Unit with national networks

(a) Develop the National Expertise and capacity to use and maintain the Model through national training sessions and workshops in each country.

1.3.3 River Basin Model applied and result recognized as useful by decision makers

(a) Identify relevant projects/programs for model application, use the River Basin Model and present the results to decision makers.

1.3.4 Regional and national level training and consolidated DSS use

- (a) Fill critical data gaps, within budgetary constraints, and identify the means to ensure that gap filling and additional data collection is done on a continuous basis to ensure long-term sustainability of the River Basin Model.
- (b) Monitor, evaluate, and identify future needs. Recommend further model and capacity development needed to support detailed environmental, ecological and socio-economic assessments.

1.4 Macro and Sectoral Policies and the Environment (phase 1)

54. This component will encourage strengthening of national policies that affect environmental conservation, as a component of sustainable economic development and as a key step towards a more informed environmental policy debate. Project activities will support a regional/transboundary study of the national and international policies determining the patterns of economic development and environmental change in at least three of the riparian states (in coordination with the SVP Benefit-sharing/Integration project).

2: Community-level Land, Forest and Water Conservation (Phase 1 and 2)

- 55. Pilot activities at selected transboundary sites will demonstrate the feasibility of local-level approaches to land and water conservation, including mitigation actions for soil erosion, non-point source pollution and invasive water weeds. National NGO networks will be strengthened and NGO-government collaboration improved. This component includes regional institutional strengthening (2.1) and one set of problem identification and site selection activities (2.2) that build on the basin-wide transboundary environmental analysis. These sets of activities will provide the basis for planning and implementing community-level actions to be financed by a micro-grant fund (2.3). Special effort will be made to ensure that NGOs and grassroots organizations supported through this program include women's groups and organizations operating in the region.
- 56. In view of the interlinked nature of component 2 with the activities planned under the Shared Vision Program project on "Efficient Water Use for Agricultural Production" (see also Table 1, project 3), a cost-sharing arrangement has been established between these two projects for the management of this component. Moreover, activities under the two projects will be designed with complementarity, in order to mutually reinforce one another.
- 57. Sub-component activities will include:

2.1 Enhanced Basin-wide Capabilities and Cooperation

- (a) Conduct regional workshops for government and NGO personnel for training and information sharing on lessons learned in land and water conservation and issues of eutrophication and water weeds, including identification and mitigation of root causes, participatory planning and implementation of projects, as well as identification of areas most at risk and cost-effective site-specific mitigation measures. Special attention will be made to ensure that women's groups and NGOs are reached through the workshops and training.
- (b) Strengthen or, where necessary, help to establish national networks of NGOs involved in land and water conservation, including access to email/internet. Provide equipment, technology and information technology training.
- (c) Promote exchanges of knowledge and lessons learned among and between the national NGO networks, including organization and management, funding options and sources, access to cost-effective technical solutions, best practice on community-level land, forest and water conservation, etc.

2.2 Priority Actions for Addressing Transboundary Soil Erosion

- (a) Carry out rapid assessments and mapping of critical erosion and deposition sites, with analysis of site-specific root causes (mapping in coordination with the SVP Water Resources Project and using existing GIS facilities).
- (b) Select pilot sites to focus activities addressing specific erosion problems.

2.3 Micro-Grant Fund to Support Local Land and Water Conservation Measures at Priority Transboundary Sites (based on the criteria and priorities emerging from 2.1 and 2.2)

- (a) Develop terms of reference and management arrangements for a Nile Basin Micro-grant Fund for enhanced local land and water conservation measures in a transboundary context. Overall program to be managed by a representative board made up of Basin and agency representation, with national fund management and grant disbursement arrangements. Collaboration with the GEF Small Grants Program and other micro-grants programs will be established to draw on experiences and best practice. During Phase 1 of the project GEF is providing a relatively small contribution to the start- up of the Micro-grant Fund and is building on GEF experiences within the UNDP-Small Grants Program to aid establishment of efficient and effective procedures, while CIDA is providing the main financial support for the Micro-grant Fund and activities on the ground.
- (b) Select grant applications that prioritize projects that (i) focus on transboundary problems and sites, including those identified under Component 2.2, (ii) provide for community participation in their design, implementation and evaluation, (iii) pay attention to the needs of women and/or indigenous peoples and practices, (iv) draw on local or Nile Basin scientific and technical resources, and (v) include provision for capacity development. In view of the important role which women play in household management, firewood and water management, agriculture and vegetable gardening, special effort will be made to ensure that women beneficiaries are reached through the micro-grant funding.
- (c) Emphasize piloting, best practice and exchanges of lessons learned. Successful or promising initiatives can be scaled up as a part of the NBI SAP.
- (d) The types of activities to be supported will include:
 - (i) Water weeds: (1) support for local community and private sector initiative for water weed control (focusing on infestations in Burundi, D.R. Congo, Rwanda and Sudan), through biological, mechanical or other forms of removal; (2) support for exchange with other regions, projects and countries, where successful water weed removal efforts have been undertaken.
 - (ii) Land management, soil conservation, reforestation/afforestation and land degradation control: (1) physical and biological soil conservation measures; (2) support to production/procurement of multi-purpose tree seedlings; (3) flood check dams and water harvesting to decrease soil erosion; (4) prevention of non-point source pollution from agriculture; (5) organic farming demonstration sites (inter-cropping etc.); (6) agroforestry demonstration plots; (7) extension services to promote agricultural practices leading to less soil loss, better nutrient retention, and less fertilizer and pesticide use; (8) Integrated Pest Management (IPM) demonstration sites.
 - (iii) Development and use of alternative energy and construction materials.

- (iv) Support for local environmental planning and awareness.
- (v) Exchange of lessons learned and field visits to demonstration sites.

3: Environmental Education and Awareness (Phase 1 and 2)

58. This component will make an important contribution to deepening public awareness and understanding of the community of interest and the ecospace which the Nile creates. It will help inform a generation that has broader Nile-related transboundary environmental understanding and create a constituency in support of environmental conservation. Component activities will be coordinated with the NBI Shared Vision Program's Stakeholder Awareness and Communications Project. Activities will:

3.1 Deepen Public Awareness and Understanding of Transboundary Environmental Issues

- (a) Establish national Working Groups representing likely users/implementers of environmental education and awareness programs, including relevant government departments, educators and NGOs, to explore and agree on the development and dissemination of programs.
- (b) Form basin-wide teams to design and develop common environmental education and awareness programs and materials aimed at public and school audiences, emphasizing transboundary links and connections which the Nile naturally forms, using TV, radio and web pages in addition to traditional media, to complement existing initiatives.
- (c) Train team participants in development and implementation of environmental education and awareness programs.
- (d) Through a variety of delivery mechanisms, (nature clubs, schools, the scout movement, youth movement, university modules, etc) launch environmental education and awareness programs in participating countries. In view of the fact that schools are often not co-educational in the Nile countries, attention will be paid to ensure that boys and girls are equally reached through the education and awareness programs.

3.2 Enhanced Networking among Universities and Other Educational and Research Institutions

- (a) Establish a basin-wide working group with representatives from principal universities and research institutions to coordinate university programs in environmental science, engineering, and policy studies.
- (b) Develop programs that encourage the exchange of students in environmentally related disciplines among the principal universities of the riparian nations (to be coordinated with the NBI SVP Communications and Applied Training project, possibly with some resources from 2.3). Attention will be paid to ensure gender balance among the exchange students selected.

(c) Facilitate basin-wide and sub-basin teams of university-based educators and researchers working on issues related to environmental monitoring, geographic information analysis, and knowledge dissemination, and form connections between these teams and international sources of remote sensing information (to be coordinated with the NBI SVP Decision Support System and Applied Training activities).

Funding for components 4 and 5 below does not form part of the current project proposal (Phase 1), but forms part of the overall GEF program for the Nile Basin. Based on performance in Phase 1 of the project, a subsequent proposal for Phase 2 will be submitted to the GEF after year 3 in the present project.

4: Wetlands and Biodiversity Conservation (Phase 2)

59. This component will improve the understanding and awareness of the role of wetlands in supporting sustainable development and improve management at selected transboundary wetland sites, cross-border protected areas and key migratory bird sites. The emphasis of the entire pilot program is on the management of significant transboundary ecosystems that straddle borders and on important wetlands in the river system. Activities will include:

4.1 Enhanced Regional Cooperation and Capabilities

- (a) Based on the analysis contained in the TEA, select three key conservation areas to be targeted by the project.
- (b) Establish a basin-wide network of stakeholder representatives/experts in biodiversity conservation, wetland management, sustainable use of natural resources and sustainable livelihood initiatives involving local communities (to include government officials, protected area managers, NGOs, researchers, etc).
- (c) Develop education, training and awareness programs emphasizing the transboundary aspects of Nile Basin conservation, including habitat and species management, conservation and multiple use management of wetlands, and integration of protected area management with local social and economic development as well as sound wetland conservation and management.

4.2 Better Understanding and Broader Awareness of the Role of Wetlands in Supporting Sustainable Development

(a) Carry out in-depth ecological and economic studies of one or two of the most important Nile wetlands, to explore (i) ecological processes, including wetlands' role in flood control and waste treatment (including the impact of wetland modification and loss on these roles), (ii) the economic value of wetlands, and (iii) major threats to wetlands and their underlying social and economic causes.

4.3 More Effective Management of Wetlands and Transboundary Protected Areas

(a) Prepare site-specific participatory management plans for selected pilot sites, emphasizing multiple-use objectives where applicable, using a process that

facilitates dialogue among key stakeholders to build consensus on the problems and opportunities of community participation and action in and around the selected sites.

- (b) Undertake baseline assessments on the status and trends of biodiversity and the related social, economic and institutional issues at each selected site.
- (c) Support actions at selected sites, including: (i) baseline assessments, including flora and fauna rapid assessments, (ii) provision for key stakeholders to participate in planning and implementation of management activities, (iii) training for wetland and other protected area management staff, (iv) environmental education and public awareness programs, including schools programs, flora and fauna field guides, etc., (v) activities by local communities and sustainable livelihood projects aimed at generating local benefits from conservation and mitigating wetland and other protected area threats, (vi) support for boundary setting and demarcation, basic facilities, equipment and on-the-job training for protected area staff, (vii) sensitization of guards and other staff to local social and economic issues.

5: Water Quality Monitoring Basin-wide (Phase 1)

60. This component will make an important contribution to improving water quality monitoring across the Nile Basin. Capacities for water quality vary widely in the Basin and this component will help upgrade the skills and capacities of key stakeholders. One essential outcome will be the establishment of standard analytical methods and improved capacities to monitor a limited number of key water quality parameters using uniform analytical methods across the Basin. Additionally, cost recovery options for water quality monitoring and possibilities of creating incentives for pollution prevention will be better understood. Improved water quality information will enable better decision making by governments and other resource users, particularly with respect to transboundary environmental management. A limited basin-wide water quality monitoring program at selected environmental hotspots of transboundary significance will be initiated. Project activities include:

5.1 Enhanced National Capacities for Water Quality Monitoring

- (a) Review current national efforts and capacities for monitoring source and nonpoint source pollution, summarize and map regular sampling points in the Basin, and construct preliminary map of known water quality along the Nile River.
- (b) Develop common analytical methods for water quality monitoring measurements and quality assurance (to be coordinated with NBI SVP Water Resources Project, LVEMP, and other current national and regional activities).
- (c) Identify list of relevant and realistic key surface water quality parameters to be monitored by common methods in the Basin; develop catalogue of recommended common analytical methods for water quality monitoring, a quality assurance program, and training materials (including sampling methods, data recording and electronic storage); and review and pilot test methods in one national laboratory in each country.

- (d) Develop common formats for a water quality database in each country for storage and processing of water quality parameters (using the capacities and infrastructure provided through LVEMP, FAO, and the SVP Water Resources Project to ensure regional integration).
- (e) Provide technical support to national environmental agencies designing water quality monitoring programs for point and non-point source pollution for various water uses and industrial sectors, including identification of strategic sampling points (aided by DSS including models developed under the SVP Water Resources Project, Pillar E).
- (f) Conduct regional training workshops on water quality monitoring and application of common analytical methods developed for staff from environmental organizations, academic institutions and targeted industries.
- (g) Increase understanding of possible cost recovery mechanisms for water quality monitoring and for the creation of incentives for pollution prevention: Prepare best practice resource materials and examples of respective environmental legislation, rules, and regulations; compile list of sector specific pollutants and range of existing standards for discharge monitoring and permitting from regional and international experiences; present options to create incentives for pollution prevention and cost recovery mechanisms for water quality monitoring.
- (h) Review lessons learned and conduct study tour related to water quality accidents/recoveries and to well-run monitoring facilities.

5.2 Water Quality Monitoring Program at Environmental Hotspots of Transboundary Significance Initiated

- (a) Review existing water quality monitoring stations and systems in the Nile Basin and evaluate and recommend additional resources.
- (b) Initiate a Nile River water quality monitoring program at a selected number of environmental hotspots of transboundary significance. Strategic sampling points may focus on (i) the outlet/inflow of major Nile Basin lakes, marshes and other features (to be coordinated with LVEMP), (ii) selected biodiversity hot spots, e.g., significant wetlands, migratory birds' route and cross-border protected areas (to be coordinated with components 2 and 4), and (iii) points known to experience major change in quality or quantity (using existing data/information facilities listed in component 1). It is expected that the SAPs will design follow-on investment programs addressing specific water quality interventions in the future.

RISKS AND SUSTAINABILITY

RISKS

61. There are some important risks that may result in the project not meeting its desired outputs:

- (a) Commitment of the Nile-Basin countries. Project success will be critically dependent on the countries' continued commitment to the collaboration with other Nile Basin member countries, and to achieving the objectives of the SVP, as laid down by the Nile-COM and the Nile-TAC. This is intimately related to political stability. Many countries in the region are facing insecurity and contention, political uncertainty, extreme poverty, diseases, etc. All these conditions are not conducive to a long-term project aimed at improving an enabling environment on a regional basis. On the other hand, this and other NBI projects seek to contribute towards building trust among the Nile Basin countries. It is therefore of crucial importance that this process have tangible benefits. The emphasis on regional cooperation, the collaborative efforts that have been made to design the project and the regional ownership that is the result thereof are powerful instruments for not only achieving the project's objectives, but also for accomplishing the longer term trust and understanding.
- (b) **Institutional leadership.** The project depends on the capability of government institutions and staff to provide visionary leadership. This may not be forthcoming in a setting where there is general lack of incentives for staff, research and innovation and supporting infrastructure. Through regional learning from study tours, exchange visits and consultations, the project endeavors to create institutional capacity and leadership that will form the basis for implementation of project activities. It should be pointed out that the project intends to seek visionary leadership within, and not outside the boundaries of the Nile Basin.
- (c) **Regional coordination capacity.** The institutions of the NBI supported by the Nile-SEC have effectively managed a complex, multi-country sectoral process to prepare the seven projects of the Shared Vision Program. This demonstrates capacity for basin-wide coordination. Effective implementation of the SVP projects, however, will be a challenge. The creation of a strong Project Coordination Unit has been incorporated into the project design while continued strengthening of the regional capabilities of the NBI institutions will be addressed at the SVP level.
- (d) **National institutional capacity.** Recognizing that some countries in the Basin face institutional capacity constraints, the project has been designed to strengthen institutional and human resources capacity in the recipient countries. Component 1.1 of the present project, "Regional Capacity Building for Transboundary Environmental Management" is specifically designed to develop a culture of good practice within national environmental management institutions.
- (e) **Insecurity and conflict.** Seven of the ten countries in the Nile region are at present, or have recently been, involved in internal or external conflict. This brings both operational and political risks to a process and a project of this size. However, there is an awareness at the highest political levels of the Nile countries of the possibilities of a "cooperation and peace dividend" which the broader NBI can leverage, and thus there is a high-level commitment to maintaining the momentum of the process, in spite of the political landscape and reality of the moment. Leaders in the Nile Basin countries have made it clear that they see the

NBI as a tremendous opportunity to bring further cooperation, economic exchange and eventually greater integration and interdependence, which can yield high returns in terms of growth, food security, sustainable development and peace. Both of the Implementing Agencies are well represented in the countries concerned and manage large programs delivering development and humanitarian assistance. Moreover, as far as the regional Nile process is concerned, UNDP and the Bank have been involved since 1995 and 1997 respectively, and are confident of the agencies' ability to deliver this GEF project, as well as the larger NBI, in an efficient and effective manner.

SUSTAINABILITY

- 62. Sustainability issues include the following:
 - **High level government commitment.** The most important aspect underpinning (a) the sustainability of the present project is that it is set within a much larger initiative, to which the governments of the Nile countries have committed themselves at the highest level. The governments see the NBI as offering the possibility of moving beyond isolated planning and unilateral actions in a noncooperative and possibly conflictual setting, towards cooperative development planning in the utilization of this transboundary resource, seeking win-win opportunities in the spirit of benefit sharing. The GEF project must therefore be seen as a component within a much larger initiative, which has been underway since 1995, with the initial endorsement of the Cooperative Framework project. The governments of the region have taken extremely bold steps, seeking to move beyond the acrimony of the past towards cooperation. In making their commitments to the NBI, including the present project, the riparian countries have committed themselves to discovery of cooperative solutions, sustainable governance of a shared resource, and work towards further integration. While intangible and unquantifiable, these commitments are the most important elements within the present project to buttress the long-term sustainability of the intervention.
 - (b) **Funding of regional institution.** The Nile riparian countries have made a conscious decision to self-finance the recurrent running costs of the regional Secretariat. The riparian governments are contributing an annual amount to the operations and the budget of the Secretariat. This decision has been taken to assure true ownership and control of the process. Additional cost recovery mechanisms are currently being explored.
 - (c) **Project ownership.** Sustainability of project initiatives will greatly depend on the approach adopted during project design and implementation. First and foremost is the question of project ownership. Through a resolutely participatory process of project design, every effort has been made to ensure that riparian country stakeholders genuinely "own" the project. Local communities, NGOs and the private sector have been engaged in the national and local consultations underlying the TEA. These and other key stakeholders will need to be genuinely engaged in project implementation and encouraged to take on ownership. Project

- ownership will also be demonstrated through continued national commitment to the Nile Basin institutional set-up.
- (d) **Tangible benefits.** Another important concern is whether the project outcomes will indeed result in tangible benefits for local communities. It is recognized that the initial beneficiaries of the project will be selected government agencies and ministries, private sector and local communities. For long-term sustainability, project benefits must reach local farmers and private sector. Incorporating regional experiences at the national level will need to form an important element of this strategy.
- (e) **Recurring costs.** Some project components will entail recurring costs past the life-span of the project. Where this is the case, mechanisms for long-term cost recovery will be explored and piloted during the duration of the project. It is expected that, where the project has led to tangible benefits on the ground, recurring costs are likely to be covered by the beneficiaries of the project.
- (f) **Regional cooperation.** Project sustainability will depend on maintaining and strengthening the growing cooperation among the Nile-Basin countries. There is a strong commitment and a clear notion of "crossing the Rubicon" among the riparians—a sense that so much has been invested already that the NBI, including the present project, must succeed for the process to move forward. Regional commitment to the process is high, with the specifics of cooperation anchored in the Policy Guidelines endorsed by the Nile Council of Ministers (see Annex E). The core institutions governing the overall Nile Basin Initiative (Nile-COM, Nile-TAC and Nile-SEC) as well as the Policy Guidelines have emphasized the importance of transparent operational procedures, open communication networks and information sharing as key principles to guide long-term regional cooperation.

STAKEHOLDER PARTICIPATION AND IMPLEMENTATION ARRANGEMENTS

STAKEHOLDER PARTICIPATION

- 63. Extensive participation by a wide range of stakeholders is an explicit emphasis of the entire project. Stakeholders have already participated in the national consultation processes linked to the TEA, and the implementation of the project will build on these contacts and relationships (See Annex F for list of stakeholders consulted in the preparation of the TEA and the present project).
- 64. Significant project components aim to broaden and deepen stakeholder involvement in environmental management. The basin-wide Working Groups that will coordinate each of the project components (see below) will all include a range of stakeholder representatives. Local stakeholders, especially communities and smaller NGOs, are explicitly targeted beneficiaries for the Micro-grant Fund. A wide range of stakeholders is also expected to be involved in and benefit from the information and knowledge management component as well as the environmental education and awareness program. Representatives of all major stakeholder groups will also have opportunities to participate in monitoring and evaluating the project.

IMPLEMENTATION ARRANGEMENTS

- 65. **GEF Implementing Agency responsibilities.** Building on the successful implementation of the PDF phase of the project, the full GEF project will continue to be jointly implemented by the two GEF implementing agencies, UNDP and the World Bank, each with its specialized expertise and comparative advantage in the thematic areas of intervention. The PCU will provide technical and managerial support to the Nile-Sec in overseeing the implementation of the project. The PCU will be responsible for contracting, fund management, procurement, disbursement, program administration and project level monitoring.
- 66. As this is a joint UNDP-World Bank supported project, the relative strengths of each agency have been drawn upon for the design of the present project. The backstopping, management and support to the project will draw on the comparative advantages of each agency, including such matters as in-house technical expertise, technical experience in relevant project components, on the ground presence, ability to handle small contracts expeditiously, etc. The Washington-based UNDP-World Bank Nile Team will backstop both the components for which the UNDP and the Bank act as GEF Implementing Agencies. The two partner agencies will support project implementation as follows:

1. Institutional Strengthening to Facilitate Regional Cooperation

5. Water Quality Monitoring Basin-wide (Phase 1)

4. Wetlands and Biodiversity Conservation (Phase 2)	(UNDP)
3. Environmental Education and Awareness (Phase 1 and 2)	(UNDP)
2. Land, Forest and Water Conservation (Phases 1 and 2)	(UNDP)
1.4 Macro/sectoral policies and the environment (Phase 1)	(World Bank)
1.3 Decision Support System - River Basin Model (Phase 1)	(World Bank)
1.2 Knowledge management (Phase 1)	(World Bank)
1.1 Regional capacity building for transboundary environmental managemen (Phase 1 and 2)	t (UNDP)

67. **Implementation at regional level**. A project organizational chart is shown in Annex G. It should be noted that the final arrangement will be coordinated with other SVP projects under the direction of Nile-TAC. The NBI transitional institutional structure, comprised of the Nile-COM and Nile-TAC and supported by the Nile-Sec, will provide overall policy guidance to the project.

(World Bank)

68. **Project management** arrangements have been designed to (a) provide basin-wide guidance and leadership, (b) facilitate decentralized project implementation within the riparian countries participating in each component, and (c) coordinate effectively with the activities of the NBI SAPs as well as other elements of the NBI Shared Vision Program. To achieve these aims, the following management structure is envisioned:

- (a) The transitional NBI institutional structure—comprising the Nile-COM and the Nile-TAC, supported by the Nile-Sec—will provide overall policy guidance to the project and ensure egional as well as inter-sectoral integration of the entire Shared Vision Program.
- (b) The PCC will oversee the Project with a membership composed of national focal points, scientific experts and donors.
- (c) A number of *ad hoc* basin-wide Thematic Working Groups (possibly one corresponding to each of project components 2 to 5) will be established with representatives from each participating country, to plan and facilitate joint activities, review and evaluate progress, and exchange lessons from national experience. These Working Groups will play a key leadership role in the implementation of the project components.
- (d) A small PCU will implement the project in liaison with the Nile-Sec. The PCU will consist of a Regional Project Coordinator (reporting to the PCC), a Chief Technical Advisor, three Thematic Lead Specialists (corresponding to the three project components in Phase 1 of the project) and support staff. The PCU will begin by developing a detailed project work plan, including a detailed monitoring plan.
- (e) One National Project Coordinator in each country will provide a critical link between the Thematic Lead Specialists based in the PCU, the basin-wide Thematic Working Groups, and the national organizations and individuals involved in implementing the various project components within the respective countries. Project implementation will ensure participation of all government and private sector stakeholders, including ministries of water, agriculture, and forestry, local communities, and NGOs.

NATIONAL INSTITUTIONS

69. A large number of national government and NGO institutions will participate in the different components of the project. Annex H provides an overview of some of the agencies and institutions that the project would aim to involve in the implementation phase.

INCREMENTAL COSTS AND PROJECT FINANCING

(The following data are provisional pending the inclusion of cost estimates for the planned EN-SAP projects in the baseline)

70. The total baseline of the project is estimated at US\$403.0 million and the alternative scenario is estimated at US\$513.6 million. The incremental cost is estimated at US\$110.6 million. In addition to the US\$350,000 grant from the PDF Block B, already disbursed, GEF is requested to finance a total of US\$26.5 million, which is divided into two distinct project phases. The total for Phase 1 is US\$16.8 million while the total for Phase 2 is US\$9.7 million. Total cofinancing is US\$84.1 million (of which US\$71.4 million will support other SVP/NBI projects, while an additional US\$12.7 million has been raised at ICCON as a non-GEF funded increment

to the present GEF project). The costs of monitoring and evaluation, supervision and quality control, contingencies as well as execution costs are included in these amounts.

Table 4 Incremental Costs and Project Financing (US\$ millions)

Component	Base	Alternative	Incremental	Co-financing	NBI SVP	GEF
	Line ¹³	Scenario ¹⁴	Cost ¹⁵		Co-financing	
1	93.0	116.4	23.4	0.0	15.0	8.4
1a (DSS)	0.0	28.0	28.0	0.0	24.4	3.6
2	205.9	222.0	16.1	7.4	5.0	3.7
3	0.9	31.3	30.4	0.0	27.0	3.4
4	74.2	81.3	7.1	2.7	0.0	4.4
5	29.0	34.5	5.5	2.6	0.0	2.9
TOTAL	403.0	513.6	110.6	12.7	71.4	26.5

13 For this analysis, the "Business-as-Usual" scenario has been used as Baseline.

¹⁴ The Alternative Scenario is equal to the Baseline plus the Incremental Cost.

¹⁵ The total Incremental Cost includes the costs to the GEF and Co-financing.

Table 5. Summary Budget (in US\$)

Components Table 5. Summary Budget (in	TOTAL	GEF	Non-GEF
PHASE 1	IOIAL	GEF	Non-GEF
1. Institutional Strengthening (Phase 1)			
1.1 Regional capacity building for transboundary env. management	4,616,059	4,616,059	0
1.2 Knowledge management	994,139	994,139	0
1.3 Decision Support System - River Basin Model	3,646,986		0
		3,646,986	0
1.4 Macro/sectoral policies and the environment	436,686	436,686	0
	9,693,370	9,693,370	0
2. Land, Forests and Water Conservation (Phase 1)	2.656.270	1 104 007	2 461 272
2.1 Basin-wide cooperation and NGO networks	3,656,370	1,194,997	2,461,373
2.2 Transboundary soil erosion	305,210	305,210	0
2.3 Micro-grant fund for local conservation initiatives	5,137,982	215,236	4,922,746
	9,099,561	1,715,442	7,384,119
3. Environmental Education and Awareness (Phase 1)			
3.1 Public awareness and understanding	2,062,563	2,062,563	0
3.2 Networking universities and other research institutions	402,742	402,742	0
	2,465,305	2,465,305	0
4. Wetlands and Biodiversity Conservation (Phase 1)			
4.1 Regional cooperation and capabilities	0	0	0
4.2 Wetlands in sustainable development	0	0	0
4.3 Management of wetlands & cross-border Pas	0	0	0
	0	0	0
5. Water Quality Monitoring Basin-wide (Phase 1)			
5.1 Capacity building for water quality monitoring	1,506,249	1,506,249	0
5.2 Transboundary water quality monitoring initiated	4,007,266	1,418,221	2,589,045
ora Transcoundary water quarty monitoring invalue	5,513,514	2,924,470	2,589,045
	3,313,311	2,721,170	2,307,013
PHASE 1 TOTAL	26,772,249	16,799,086	9,973,163
PHASE 2	20,7 72,2 15	10,777,000	>,> 10,100
1. Institutional Strengthening (Phase 1)			
1.1 Regional capacity building for transboundary env. management	2,320,090	2,320,090	0
1.1 Regional capacity building for transpoundary cuty. Intallagement	2,320,090	2,320,090	0
	2,320,090	2,320,090	0
2. Land, Forests and Water Conservation (Phase 2)			
2.3 Micro-grant fund for local conservation initiatives	• • • • • • • •	2 000 000	0
2.3 Micro-grant rund for local conservation initiatives	2 (444) (444)	77 (11 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
G	2,000,000	2,000,000	0
	2,000,000	2,000,000	0
			0
3. Environmental Education and Awareness (Phase 2)	2,000,000	2,000,000	0
	2,000,000	2,000,000	0
3. Environmental Education and Awareness (Phase 2)	2,000,000	2,000,000	0 0
3. Environmental Education and Awareness (Phase 2) 3.1 Public awareness and understanding	2,000,000	2,000,000	
3. Environmental Education and Awareness (Phase 2) 3.1 Public awareness and understanding 4. Wetlands and Biodiversity Conservation (Phase 2)	2,000,000 1,000,000 1,000,000	2,000,000 1,000,000 1,000,000	
3. Environmental Education and Awareness (Phase 2) 3.1 Public awareness and understanding 4. Wetlands and Biodiversity Conservation (Phase 2) 4.1 Regional cooperation and capabilities	2,000,000 1,000,000 1,000,000	2,000,000	0
3. Environmental Education and Awareness (Phase 2) 3.1 Public awareness and understanding 4. Wetlands and Biodiversity Conservation (Phase 2) 4.1 Regional cooperation and capabilities 4.2 Wetlands in sustainable development	2,000,000 1,000,000 1,000,000 1,185,766 2,735,816	2,000,000 1,000,000 1,000,000 1,185,766 0	
3. Environmental Education and Awareness (Phase 2) 3.1 Public awareness and understanding 4. Wetlands and Biodiversity Conservation (Phase 2) 4.1 Regional cooperation and capabilities	2,000,000 1,000,000 1,000,000 1,185,766 2,735,816 3,183,786	2,000,000 1,000,000 1,000,000	0 0 2,735,816 0
3. Environmental Education and Awareness (Phase 2) 3.1 Public awareness and understanding 4. Wetlands and Biodiversity Conservation (Phase 2) 4.1 Regional cooperation and capabilities 4.2 Wetlands in sustainable development	2,000,000 1,000,000 1,000,000 1,185,766 2,735,816	2,000,000 1,000,000 1,000,000 1,185,766 0	0
3. Environmental Education and Awareness (Phase 2) 3.1 Public awareness and understanding 4. Wetlands and Biodiversity Conservation (Phase 2) 4.1 Regional cooperation and capabilities 4.2 Wetlands in sustainable development	2,000,000 1,000,000 1,000,000 1,185,766 2,735,816 3,183,786	2,000,000 1,000,000 1,000,000 1,185,766 0 3,183,786	0 0 2,735,816 0
3. Environmental Education and Awareness (Phase 2) 3.1 Public awareness and understanding 4. Wetlands and Biodiversity Conservation (Phase 2) 4.1 Regional cooperation and capabilities 4.2 Wetlands in sustainable development	2,000,000 1,000,000 1,000,000 1,185,766 2,735,816 3,183,786	2,000,000 1,000,000 1,000,000 1,185,766 0 3,183,786	0 0 2,735,816 0

Table 6. Summary Budget by Implementing Agency

	GEF	GEF Fi	nancing		
COMPONENT	Implemen-	Pha	ses	UNDP	World
	ting Agency	Phase 1	Phase 2		Bank
1. Institutional Strengthening					
1.1 Regional capacity building	UNDP	4.62	2.32	6.94	
1.2 Knowledge management	WB	0.99			0.99
1.3 Decision Support System - River Basin Model	WB	3.65			3.65
1.4 Macro/sectoral policies and the environment	WB	0.44			0.44
Component Sub-total		9.69	2.32	6.94	5.08
2. Land, Forests and Water Conservation					
2.1 Basin-wide cooperation and NGO networks	UNDP	1.19		1.19	
2.2 Transboundary soil erosion	UNDP	0.30		0.30	
2.3 Micro-grant fund for local conservation initiatives	UNDP	0.22	2.00	2.22	
Component Sub-total		1.72	2.00	3.72	
3. Environmental Education and Awareness					
3.1 Public awareness and understanding	UNDP	2.06	1.00	3.06	
3.2 Networking universities and other research	UNDP	0.40		0.40	
institutions					
Component Sub-total		2.46	1.00	3.46	
4. Wetlands and Biodiversity Conservation					
4.1 Regional cooperation and capabilities	UNDP		1.19	1.19	
4.2 Wetlands in sustainable development	UNDP				
4.3 Management of wetlands & cross-border PAs	UNDP		3.18	3.18	
Component Sub-total			4.37	4.37	
5. Water Quality Monitoring Basin-wide					
5.1 Capacity building for water quality monitoring	WB	1.51			1.51
5.2 Transboundary water quality monitoring initiated	WB	1.42			1.42
Component Sub-total		2.92			2.92
Phase 1 – total		16.80		8.80	8.00
Phase 2 - total	9.69			9.69	
TOTAL		26.49		18.49	8.00

MONITORING, EVALUATION AND DISSEMINATION

- 71. A basin-wide monitoring and evaluation program will be developed and implemented. Activities will include developing a structured work plan and reporting formats, defining performance indicators, adopting a standard methodology for data collection and analysis, and supporting capacity building in monitoring and evaluation. An independent mid-term and final evaluation will be conducted, with broad dissemination of findings and lessons learned.
- 72. Key to the mid-term evaluation will be an assessment of performance against agreed benchmarks. The mid-term evaluation will be undertaken in the third project year to provide an assessment of achievements made through the funding of the present GEF project, as well as in the larger Nile Basin Initiative. Based on program performance, a second submission for the two remaining components as well as for some suitable SAP projects may be made to the GEF.
- 73. It is recognized that the NBI is a long-term undertaking and that progress toward the set goals will take decades. Detailed performance benchmarks will be defined during project design and will relate to the GEF project components. The following parameters will shape the definition of the performance benchmarks:

- (a) Broader appreciation of transboundary impacts of water management actions and improved monitoring.
- (b) Increased regional cooperation in environmental and water management fields.
- (c) Increased basin-wide community action and cooperation in land and water management.
- (d) Greater basin-wide professional networks of environmental and water professionals.
- (e) Exchanges on common environment and water issues among Basin university and school networks—south-south and north-south.
- (f) Greater appreciation of river hydrology and more informed discussion of development paths.
- (g) Expanded information and knowledge base on land and water resources available to professionals and NGOs.
- 74. Monitoring against the broader goals set out in the Shared Vision Program will be undertaken in the Socio-Economic Development and Benefit Sharing Project of the SVP, funded outside the scope of the present GEF project. In that broader monitoring exercise, the following parameters will help assess how the countries have progressed toward the long-term goals of the SVP.
 - (a) Increased and active discourse on economic development scenarios, win-win investments and trade-offs coupled with increased capacity in water policy formulation.
 - (b) Increased riparian cooperation through on the ground preparation of projects and programs for joint physical, social and economic infrastructure.
 - (c) Increased private sector investment in co-riparian states.
 - (d) Development of common platform of understanding of Nile riparian issues in the Basin.
 - (e) Strengthened and competitive economies.
 - (f) Reduced regional conflict and tension.
 - (g) An agreed long-term legal and institutional set-up for Nile Basin cooperation.

LESSONS LEARNED

75. Lessons learned from the NBI to date, from the region and from the broader GEF international waters project portfolio were reflected in project design. The lessons that are of the greatest relevance to the project include:

- (a) Development of a shared vision. This important step allows development and expression of a common overarching goal for cooperation and a common view of the objectives of riparian involvement in a transboundary dialogue and/or institution. Goals need to take full account of historical, environmental, and socioeconomic development constraints and opportunities.
- (b) Moving from challenges and constraints to opportunities. Long-term conflict over scarce resources creates challenges, but also provides opportunity for cooperation, thereby unlocking a huge development potential. In spite of a history of conflicting water demands and difficulties, the Nile riparian countries have come together to forge a new environment of cooperation seeking win-win benefits. The Nile countries have committed themselves to identifying and pursuing cooperative investment opportunities. However, embedded in this is the realization that much work is required to transform the situation of the past into a new culture of cooperation. The Shared Vision Program was designed to provide the "software" and the enabling environment that will foster sound transboundary cooperation and development among the Nile riparian states. A first step in a cooperative dialogue may be to facilitate a move from a primarily country focus toward wider needs and interests based upon which opportunities for collaboration can be better identified.
- (c) Sharing benefits not sharing water. A dialogue that moves away from a stalemate in sharing a limited resource to sharing its benefits—especially in situations where water quantity is at stake—can provide a much more constructive base for continued cooperation and open an avenue for regional integrated planning. This also implies the need for "widening the circle" from water departments alone to broader sectoral involvement, such as agriculture, environment, planning, energy, infrastructure, and education.
- (d) Institutional and legal framework. The dialogue and commitment to agree on a basic legal and institutional framework should be supported and where necessary capacity should be built to assist in this process. Partnership and trust among countries requires a "leveling of the playing field" in terms of information and skills among riparian partners. Entering into dialogue and eventually agreeing on a framework for cooperation demonstrate national and regional political commitment and facilitate the initiation of more concrete investment discussions.
- (e) Investment and appropriate frameworks—an iterative and mutually supportive process A legal and institutional framework needs investment and investment needs a legal and institutional framework. The parallel processes of dialoguing on a cooperative framework while also building a vision and incentive for agreement in form of a cooperative strategic action and investment program can be mutually supporting. In the Nile context, work was begun in 1996 on a legal and institutional framework. As this evolved, a parallel track addressing investment issues was begun in 1997. The two tracks, while closely linked, reinforced one another.
- (f) Acceptance of principle of subsidiarity and agreed policy guidelines. The acceptance of the commonly known European principle of subsidiarity has proven

immensely useful in the Nile context. Once political agreement was found and a common set of Policy Guidelines agreed, within which all agreed to operate, this provided the opportunity to explore subsidiary actions, which would involve those countries affected by and involved in the proposed activities.

- (g) Trust. Developing trust and personal relations among riparian delegations from countries that have often been in conflict for decades or more is a key ingredient to moving the process further. Trust and confidence among and between riparian parties and between riparians and donor partners need to be built and long-term involvement of specific individuals can be very important.
- (h) Long-term commitment to process and product. Involvement in regional processes requires a substantial commitment in terms of time, and long-term provision of financial and human resources. The dialogue process and support for development of trust underpin an enabling environment for cooperation, and a sense of ownership and commitment by all parties to a process that may require years to bear fruit. Sustained riparian commitment expressed on a political level (i.e. beyond the technical ministries) allows for growing confidence in the process and facilitates a broader level of support from national and donor partners. For donor agencies, a key requirement is that they be able to stay with the process. Long-term support that will not be subject to political and institutional changes must be a mainstay of any donor involvement. As much of this work is based on relationships and trust built up over years with key riparian players, the donor institution must be able to keep key staff involved for required periods of time if the support is to yield maximum benefits.
- (i) Partnerships. Building broad partnerships among and within the riparian countries and with key international agencies and donors is essential for a coordinated process and implementation of programs and for utilizing the comparative advantage of donor institutions. Public support and broad ownership in the countries should be encouraged and built early in the process.
- (j) Management structures and implementation arrangements. Financial sustainability, careful attention to institutional set-ups and selection of staff, and consideration of efficient, transparent and accountable management structures are all essential. Regional projects often have high overhead costs given the inherent complexity of their tasks. Moreover, there is often a push to place a project activity in each participating country. The present project has been designed with minimum organizational structures, and will instead draw on consultancy expertise (preferably regional consultants) when required. Location of in-country project activities will be based on careful planning efforts, with a view to balancing optimum results with the broadest possible geographical coverage.

LIST OF ANNEXES AND ATTACHMENTS

REQUIRED ANNEXES

- A. INCREMENTAL COST ANALYSIS
- B. LOGICAL FRAMEWORK MATRIX
- **B1. PHASED FUNDING OVERVIEW**
- C. STAP REVIEW
- C1. RESPONSE TO STAP REVIEW
- D. GOVERNMENT REQUESTS

OPTIONAL ANNEXES

- E. POLICY GUIDELINES FOR THE NILE RIVER BASIN STRATEGIC ACTION PROGRAM
 The Policy Guidelines, endorsed by the Council of Ministers of Water Affairs in February
 1999, provide a basin-wide framework for moving forward with cooperative action and set
 forth the primary objectives of the Nile Basin Initiative.
- F. STAKEHOLDER INVOLVEMENT IN PROJECT FORMULATION
 This annex describes the process of preparing the entire Shared Vision Program portfolio and the GEF project in particular. A list of all stakeholders consulted during the transboundary environmental analysis is attached.
- G. ORGANIZATIONAL CHART TRANSBOUNDARY ENVIRONMENTAL ACTION PROJECT The organizational structure for the proposed Transboundary Environmental Action Project is depicted in chart form.
- H. ORGANIZATIONAL CHART SHARED VISION PROGRAM
 The organizational structure for the entire Shared Vision Program is depicted in chart form.
- I. TRANSBOUNDARY ANALYSIS NILE BASIN ENVIRONMENTAL THREATS
 This annex contains an overview table describing the basin-wide environmental threats identified by the National Experts during the transboundary analysis. The locations given correspond to the basin and country maps developed during project preparation.
- J. TRANSBOUNDARY ANALYSIS COMMON CONCERNS BY SUB-REGION
 This is a table summarizing prevalent environmental threats on a sub-regional scale.
- K. DESCRIPTION OF SHARED VISION PROGRAM AND SUBSIDIARY ACTION PROGRAM

MAP

The environmental threats of transboundary significance identified in the Transboundary Analysis are depicted on the basin-wide map. Individual maps have been developed during project preparation and are available upon request.

STRATEGIC ACTION PROGRAM FOR THE NILE RIVER BASIN (IBRD 30967)

AVAILABLE UPON REQUEST¹⁶

NILE BASIN SHARED VISION PROGRAM

TRANSBOUNDARY ENVIRONMENTAL ANALYSIS (REPORT)

A Transboundary Environmental Analysis (TEA) has been carried out by the Nile riparians. The Transboundary Environmental Analysis report constitutes a collective synthesis of basin-wide environmental trends, threats and priorities. The TEA also identifies the elements of an Agenda for Environmental Action in the Nile Basin, to be implemented over the next decade or more under the NBI's Strategic Action Program in coordination with other development activities.

COUNTRY MAPS

Country maps have been prepared highlighting environmental threats of transboundary significance in each of the Nile Basin countries. These are summarized in the basin-wide map attached to the present project brief.

BURUNDI (IBRD 30966) CONGO, D.R. (IBRD 30961) EGYPT, A.R. OF (IBRD 30957) ETHIOPIA (IBRD 30960) KENYA (IBRD 30963) RWANDA (IBRD 30965) SUDAN (IBRD 30958) TANZANIA (IBRD 30964) UGANDA (IBRD 30962)

¹⁶ The Transboundary Environmental Analysis report can be obtained from Inger Andersen, Partnership Coordinator, UNDP-World Bank International Waters Partnership: iandersen@worldbank.org or inger.andersen@undp.org

ANNEX A INCREMENTAL COST ANALYSIS

BROAD DEVELOPMENT GOALS

The Nile River Basin is home to about 160 million people in Burundi, D.R. Congo, Egypt, Eritrea, Ethiopia, Kenya, Rwanda, Sudan, Tanzania, and Uganda, with six of these countries among the world's poorest. The Basin contains an extraordinarily rich and varied range of ecosystems, with mountains, tropical forests, woodlands, savannas, high and low altitude wetlands, arid lands and deserts, culminating in a delta partially below sea level. Extreme poverty, combined with rapid population growth, war, civil strife, drought and famine, has put enormous pressure on these environmental resources, which in turn represent the only source of livelihood for many millions of Africa's most impoverished people. As a result, there is an urgent need to integrate environmental concerns into poverty alleviation and sustainable economic development strategies, specifically through improved land and water resource management practices.

Recognizing their common concerns and interests, the Nile riparian countries have recently taken a historic step towards cooperation with the establishment in 1999 of the Nile Basin Initiative (NBI), which provides an agreed framework to fight poverty and promote economic development. The NBI provides a transitional institutional mechanism, an agreed vision and basin-wide framework, and a process to facilitate substantial investment in the Nile Basin to realize regional socio-economic development. The establishment of the NBI begins the complex, challenging and long-term process of building confidence and realizing mutual benefits through shared projects. To translate its shared vision into action, the NBI has launched a Strategic Action Program, which includes two complementary components: (1) a basin-wide Shared Vision Program (SVP), and (2) Subsidiary Action Programs (SAPs).

The SVP includes a series of technical assistance and capacity building projects to be implemented basin-wide to help establish a foundation for transboundary regional cooperation and provide a common vision to ensure long-term sustainability; they incorporate common analytical frameworks, practical tools and demonstrations, and institutional and human capacity building. The SVP project portfolio will include seven projects. Four of these projects are thematic in nature, addressing issues related to transboundary water and environmental management (the subject of this proposal), power trade, efficient use of water for agriculture, and water resources planning and management; the remaining three are facilitative, supporting efforts to strengthen confidence building and stakeholder involvement, applied training, and benefit sharing and integration.

The SAPs will be initiated in parallel to the SVP, implementing investment projects that confer mutual benefits at the sub-basin level while following the guidance of the overall NBI Policy Guidelines endorsed by the Nile-COM (see Annex F). The Nile riparians have formed two SAPs. The Eastern Nile (EN-SAP) includes Egypt, Sudan and Ethiopia; while the Nile Equatorial Lakes Region (NEL-SAP) includes the six countries in the southern portion of the Basin—Burundi, D.R. Congo, Kenya, Rwanda, Tanzania and Uganda—in cooperation with the downstream riparians, Sudan and Egypt.

The identification of environment and development synergies and sustainable development opportunities has emerged as a major NBI priority. Although political, economic and social differences persist between them, the Nile riparian countries share several critical environmental problems and threats that reinforce the need for regional collaborative efforts. The riparians have recognized that focusing on issues of common concern provides them with a major opportunity to make significant progress towards their economic and environmental goals in ways that have proved difficult to achieve independently.

A Transboundary Environmental Analysis (TEA) has been carried out by the Nile riparians as part of the SVP, with support from UNDP, World Bank and other international partners, and with funding provided by the Global Environment Facility. This process identified the elements of an Agenda for Environmental Action in the Nile Basin, based on a collective synthesis of environmental trends, threats and priorities. This Agenda includes a recommended program of complementary preventive and curative actions to address current and emerging environmental issues. It delineates key measures for institutional strengthening, human resource development and expansion of public awareness at regional, national and local levels. The Agenda is to be implemented over the next decade or more under the NBI's Strategic Action Program in coordination with other development activities.

The project will support the priority transboundary activities to be addressed in the initial implementation phase of the Agenda for Environmental Action. The objectives are to provide a strategic environmental framework for environmentally sustainable development of the Nile River Basin, improve understanding of the relationship of water resources development and environment in the Basin, and provide a forum to discuss development paths for the Nile with a wide range of stakeholders. The project seeks to conserve the Basin's unique but critically threatened environmental assets while helping to ensure that its natural resources are used in an optimal and sustainable way to foster economic development and mitigate the appalling levels of poverty that pervade the region.

BASELINE SITUATION

The baseline situation consists of existing projects and programs for the riparian countries included in country-level plans and strategies for economic development, environmental conservation and natural resource management, supplemented by other activities being planned or conducted by individual governmental agencies at national and local levels as well as private enterprises and NGOs. The total baseline is estimated at US\$403 million as detailed in Table 1, Project Baseline Summary at the end of this Annex. This amount includes US\$77 million for the estimated costs of defined NBI NEL-SAP projects currently under preparation. The total estimated costs of the NBI EN-SAP projects also form part of the baseline, however, finalized cost estimates are still not available.

Perpetuation of the baseline would limit the NBI's ability to encourage more effective integrated land and water management within overall economic development strategies on a basin-wide scale. The majority of support for natural resource management and environmental conservation would continue to focus on independent national-level activities. Some sub-regional activities will be implemented through the NEL-SAP and the EN-SAP projects in addition to important existing East African activities involving Kenya, Tanzania and Uganda (such as the GEF-funded

Lake Victoria Environmental Management Project and the Sida-funded Lake Victoria Initiative). However, none of these activities will be implemented on a *basin-wide* scale, which is the key to success of the entire NBI. The ability of the Nile riparians to effectively address transboundary environmental issues requiring coordination at the basin-wide level would remain limited, especially for those environmental issues related to future investments in land and water management. Key cross-border environmental issues such as environmental information sharing, community-level land and water management (including the spread of aquatic weeds), environmental education and awareness, transboundary benefits from wetland conservation (including threats to migratory species) and water quality monitoring would not therefore be addressed adequately or at the appropriate scale.

1. Institutional Strengthening to Facilitate Regional Cooperation

The baseline for this component amounts to US\$93 million, with two main types of project intervention: first, capacity building and institutional support to the water resources and environment sectors; second, water resources assessments combined with planning, modeling, forecasting and simulation, including environmental planning and monitoring. This baseline of action is, significantly, largely national in character and is unevenly distributed within the Basin. Apart from Bank and FAO-funded regional projects that were specifically designed in the context of the wider Nile program, there are no other projects in the institutional strengthening category which specifically target the coordination of transboundary elements required for cooperative management of shared water resources.

2. Community-level Land, Forest and Water Conservation

The baseline is very large under this rather broad category, as would be expected, consisting of projects totaling US\$206 million, including three sub-regional NEL-SAP projects with estimated costs of US\$61 million. Many of these projects target agricultural productivity or expansion through irrigation or other intensification as the basis for food security and poverty alleviation. Other projects in this category attempt integrated land and water management with an emphasis on soil conservation, as well as land rehabilitation and community-based efforts in afforestation, reforestation and forest management. While it is recognized as cross-cutting, multi-sectoral and interdisciplinary, the IDA portion of the Lake Victoria Environmental Management Project is categorized as baseline under this component.

3. Environmental Education and Awareness

The TEA identified less than US\$1 million in current, externally-funded baseline activities for this category. This is mainly because most environmental education and awareness activities are being undertaken on a relatively small scale by large numbers of NGOs and community organizations and are widely dispersed within the Basin. There is no central project database documenting these activities. While existing and emerging environmental NGOs are undoubtedly very active in environmental education and awareness in a number of the Nile Basin countries, their activities seem almost exclusively to be limited to local and national levels. There is no program beginning to build awareness of interdependence and opportunities for cooperation across national boundaries. The proposed NBI project on Communication and Stakeholder

Involvement will be the first of its kind, attempting to develop common messages and common dialogues among the people of the Nile Basin.

4. Wetlands and Biodiversity Conservation

Non-GEF-funded baseline actions under this component are comparatively large at US\$74 million, including a US\$16 million NEL-SAP fisheries project for Lake Albert. This is an impressive total for a region as pervaded by poverty and food security concerns as the Nile Basin. The focus of these projects is mainly environmental management and planning, targeting wetlands and other protected areas, with an emphasis on both conservation and sustainable uses. The projects are distributed very unevenly within the Basin, however. Apart from the Lake Albert initiative, the only project with a transboundary focus is a GEF project addressing East African cross-boundary protected areas (since this is GEF-funded, however, it does not form part of the baseline). The critical linkages between transboundary water resource management and the Basin's acutely threatened and dwindling natural ecosystems is of such importance that the significance of the transboundary wetland conservation (including biodiversity) issues can scarcely be overestimated.

5. Water Quality Monitoring Basin-wide

The baseline of action for this component amounts to US\$29 million, almost entirely in Egypt, indicating the low priority given to the transboundary aspects of water quality in the wider Nile Basin. At a sub-basin level, the GEF and IDA-funded Lake Victoria Environmental Management Project addresses water quality issues in the Lake Victoria basin (again, the GEF portion does not form part of the baseline). Relatively little attention has been given to this issue in the wider Nile Basin, however, even though it is of growing concern, particularly in the Basin's more heavily populated and farmed areas. Pollution and water quality issues are becoming especially critical at and around large-scale irrigation schemes with intensive use and storage of agrochemicals (e.g., in Egypt and Sudan), as well as larger urban and industrial settings throughout the Basin. Only in Egypt is a large water quality monitoring program in place. Although the adverse impacts are often fairly local and not basin-wide phenomena, water quality issues are major human health and environmental concerns at these sites.

ALTERNATIVE SCENARIO

Non GEF-Funded Alternative

Nile Basin Initiative's Strategic Action Program and Cooperative Framework

The project alternative is augmented by a significant part of the project portfolio of the NBI's Shared Vision Program (SVP) and the Cooperative Framework project (Phases I and II). Together, these consist of seven technical assistance and capacity building projects aiming to create a basin-wide enabling environment for cooperative development.

Non-GEF-funded portion of the Alternative (Co-financing, in US\$m)

PROJECT	AMOUNT (\$US m)	CORRESPONDING PROJEC COMPONENT	
NBI/SVP Socio-Economic Development - Macroeconomic Integration	11.0	Institutional Strengthening	1
Water Resources Planning and Management	24.4	Institutional Strengthening	1
Nile River Basin Cooperative Framework, Phase I	3.5	Institutional Strengthening	1
Nile River Basin Cooperative Framework, Phase II	0.5	Institut ional Strengthening	1
NBI/SVP Efficient Water Use for Agriculture	5.0	Land Management	2
NBI/SVP Confidence Building & Stakeholder Involvement	7.0	Awareness	3
NBI/SVP Applied Training	20.0	Awareness	3
NBI/SVP Transboundary Environmental Action	12.7	Water Quality; Land&Forest Biodiversity	2,4 & 5
Total	84.1	_	

As described in the body of this Project Brief, the NBI's Strategic Action Program includes Subsidiary Action Programs in addition to the SVP. The EN-SAP and NEL-SAP have identified sub-basin projects and funding for initiating project pre-feasibility studies and/or preparation has been secured at the first International Consortium for Cooperation on the Nile (ICCON) in June 2001. Details of the SAP projects had not become available at the time of drafting this Project Brief. However, it is already evident that the SAP projects in water resources management, agriculture, communications, macro-economic planning and other economic development sectors will add significantly to the alternative as well as to the baseline, depending on project type.

GEF-Funded Alternative

The alternative consists of the steps needed to establish a sound basin-wide environmental framework consistent with current and projected patterns of economic development. This would be accomplished through GEF support to facilitate the priority transboundary actions outlined in the Agenda for Environmental Action in the Nile Basin, combined with additional resources from the projects outlined above, which are funded through the ICCON mechanism by other international as well as domestic sources. These steps would generate sustainable global benefits embodied in mitigation of the environmental problems identified in the TEA. GEF participation would finance the incremental costs needed to remove barriers to regional environmental conservation and sound natural resource use, including transaction costs for joint planning activities, development of common approaches to sectoral policies, further cross-border data collection and analysis, knowledge management and information sharing at a regional level, and coordination of efforts among the participating countries.

The GEF alternative would support a regionally led initiative to promote more effective management and conservation of the natural resources and environmental assets of the Nile

Basin. This would greatly facilitate the ability of the NBI and the cooperating countries to address transboundary environmental issues and common natural resource management concerns at a basin-wide level. The GEF alternative would allow the Agenda for Environmental Action in the Nile Basin to be initiated and undertaken with support from a variety of sources. GEF support would also increase the visibility of and demonstrate the opportunities for more effective transboundary environmental management in the Basin. In this way the project would complement the innovative and far-reaching regional NBI investment programs currently being prepared and about to be undertaken on a significant scale in a variety of economic development sectors, including water, agriculture and hydropower. The alternative would also test and demonstrate a variety of approaches to Nile transboundary environmental management issues, of which the most successful and promising could be scaled up or replicated in subsequent NBI Strategic Action Program investments.

The project will encourage more effective basin-wide stakeholder cooperation on transboundary environmental issues by supporting implementation of actions prioritized by the TEA in the following areas:

1. Institutional strengthening to facilitate regional cooperation

Transboundary threats to be addressed. Overall basin-wide capacities for environmental management are quite limited and there have been relatively few efforts to exchange environmental information and experiences among and between key resource users, research institutions and other stakeholders throughout the Basin. Understanding of the dynamics of the river system is insufficient to assess the downstream environmental impacts of future river system interventions or changes in watershed management regimes. The environmental impacts of macro and sectoral policies on the Nile Basin's land and water resources are poorly understood.

Objective and global benefits. This project component will strengthen NBI's capacity in basinwide program management, regional coordination, knowledge management, understanding of the Nile Basin system and policy analysis. The largest sub-component will link with the non-GEFfunded SVP Water Resources Management Project to develop a basin-wide Decision Support System, with GEF resources used to support the development and application of a River Basin Model including the training of management teams from the riparian countries. This will help provide a regional perspective on water resources management as well as the assessment of transboundary environmental impacts of investment projects, and will support the exploration of alternative development strategies. A Nile Basin environmental knowledge base accessible to all key stakeholders will be developed. Transboundary impacts of national economic and sectoral policies linked to trade, transport and migration will be further analyzed and regional dialogues initiated with policymakers and other donor organizations. The component will also facilitate effective implementation and coordination of all project activities at a national level. The active participation of basin-wide Thematic Working Groups will further enhance regional cooperation and technical transfer among the countries involved with respect to each of the other five project components. Baseline costs of this component are US\$93 million and incremental costs are US\$51.4 million (including US\$28 million for the Decision Support System) of which US\$9.7 million are requested from the GEF for Phase 1 funding.

2. Community-level land, forest and water conservation

Transboundary threats to be addressed. Relatively few local stakeholders have access to adequate means of communication. For local stakeholders, tenure is often unclear and access to resources inadequate. Soil erosion is a chronic problem throughout the Basin. Deforestation and soil erosion can lead to increased sedimentation and greater flood risks downstream, while sediments also accumulate in wetlands and reservoirs. Water hyacinth and other invasive aquatic weeds have spread throughout many parts of the Nile Basin.

Objective and global benefits. This component will help to strengthen national and international NGO networks within the Basin, including access to internet/email (with information technology equipment funded from non-GEF sources). Regional land and water conservation training workshops will emphasize transboundary cooperation as well as government-NGO partnerships. The component will also support in-depth examination of transboundary soil erosion and sediment transport. Major sources and root causes will be further analyzed by teams from the participating countries, and priority sites will be identified for pilot activities. A Micro-grant Fund will be established with GEF and Canadian (to be confirmed) support to finance pilot initiatives in the priority land and water conservation areas identified by the TEA, including aquatic weed infestations. Key grant selection criteria will include participation of local communities, targeting of issues with direct cross-border impacts, identification of lessons and best practices, and the potential for promising initiatives to be scaled up or replicated within the NBI SAP. Baseline costs of this component are US\$206 million and incremental costs are US\$16 million of which US\$1.7 million is requested from the GEF for Phase 1 funding, while an additional US\$2 million will be requested from the GEF for Phase 2 funding.

3. Environmental education and awareness

Transboundary threats to be addressed. In all the riparian countries, lack of awareness and understanding of the transboundary environmental consequences of decisions concerning land and water resource management is a major barrier to strengthening environmental management.

Objective and global benefits. This component will develop and deliver education and awareness programs that emphasize the way in which environmental issues are shared by the Nile riparian countries. Economic and ecological linkages with neighboring countries upstream and downstream will be emphasized, as well as the riparians' mutual dependence on the natural resources and environmental assets of the entire Basin. A variety of media will be used in programs developed by basin-wide teams of educators for delivery throughout the Basin (translated to appropriate languages). This component aims not only to highlight the importance of sustainable environmental management, and the role of every individual and community in trying to achie ve this, but also contribute to breaking down the mistrust between countries that has long proved a constraint to more effective basin-wide collaboration. The component will also support basin-wide networking among universities and other research institutions, with exchanges of information, teachers and students. Baseline costs of this component are US\$1 million and incremental costs are US\$30 million of which US\$2.5 million are requested from the GEF for Phase 1 funding, while an additional US\$1 million will be requested from the GEF for Phase 2 funding.

4. Wetlands and biodiversity conservation

Transboundary threats to be addressed. Water-dependent ecosystems throughout the Nile Basin contribute to the stability, resistance and resilience of both natural and human systems to stress and sudden changes. In particular, significant transboundary benefits derive from the Basin wetlands' role in maintaining water quality, trapping sediment, retaining nutrients, buffering floods, stabilizing micro-climates and providing storm protection. The ecological and economic role of wetlands in supporting sustainable development in the Basin is not well understood or widely appreciated. Key plant and animal species with habitats in adjoining countries often require cross-border protected areas and other conservation measures for effective management. Adequate management of protected areas and other environmental hot spots is generally lacking.

Objective and global benefits. This component will support further analysis of the key economic and ecological role of wetlands in the transboundary Basin system and promote awareness of the need to conserve and manage these natural resources, building on the promising national wetland programs that have already been established in a few of the riparian countries. The regional capacity for monitoring and managing wetland resources will be strengthened through technical assistance and training. Programs emphasizing the multiple-use management of internationally significant wetlands will be developed and presented through basin-wide workshops attended by wetland managers and other key stakeholders. Pilot activities will be undertaken to demonstrate best practice management of a small number of sites with a strong emphasis on local stakeholder involvement. Baseline costs of this component are US\$74 million and incremental costs are US\$7 million, of which US\$4.4 million will be requested from the GEF for Phase 2 funding.

5. Water quality monitoring basin-wide

Transboundary threats to be addressed. Physical impacts from land and water management as well as aquatic pollutants can cross national boundaries downstream. Urbanization, industrialization and increased use of agricultural chemicals all lead to increased runoff and pollution that harm downstream water users. In addition, waterborne diseases are prevalent throughout the Basin. Data and understanding related to the transboundary aspects of these issues is lacking. Only limited work has been done to identify environmental hot spots or to carry out systematic water quality monitoring at environmentally sensitive transboundary sites.

Objective and global benefits. This component will augment the collective capacity of the riparian countries to monitor a limited set of agreed key water quality parameters on a basin-wide scale. Teams from the participating countries will work together on developing common analytical methods, identifying parameters to be measured, and preparing and delivering training programs for key national stakeholders through regional workshops. GEF resources will also be used to provide a systematic overview of existing monitoring stations in the Basin, to identify gaps and to strengthen monitoring at transboundary "hot spot" sites. The result of this component will be to substantially upgrade basin-wide capacity to make high quality and consistent water quality information available to inform decision making and thereby target future investments more effectively. Baseline costs of this component are US\$29 million and incremental costs are US\$6 million, of which US\$2.9 million are requested from the GEF for Phase 1 funding.

Domestic benefits

Domestic benefits arising from the project are expected to be largely incidental. The project subcomponents that are expected to generate measurable domestic benefits will be financed from non-GEF sources. These are:

- (a) Information technology equipment provided to NGOs under component 2.
- (b) Approximately 50-80 percent of the micro-grant activities under component 2.
- (c) Water quality monitoring equipment purchased under component 5.

SCOPE OF ANALYSIS

The scope of analysis includes the geographic, institutional, market, policy and legislative issues having a transboundary impact on the Nile Basin's environmental resources. This includes actions at the national and regional levels, as well as actions undertaken on the ground as part of the national development and/or conservation efforts within the parts of the countries that fall within the Nile Basin itself. The defined baseline includes non-GEF projects outside the NBI that were still active in 1999. Reference to the NBI's investment program, the SAP, has been made in the text where figures exist, such as for the NEL-SAP. The size of the investment program is expected to total several billion US dollars over the coming decades, but it is only in the definition stage, and actual figures have therefore not been fully reflected in the incremental cost analysis. Some of the projects in the investment program will form the baseline while others will be part of the alternative.

Relevant actors/elements in the program include (a) national governments; (b) local governments for sub-national jurisdictions within the Basin; (c) local (and community-based), national and international NGOs active in the Basin; (d) the private sector; (e) universities and other research institutions; (f) government policies, laws, regulations and development plans; (g) other donors active in the Basin and (h) relevant international conventions and agreements entered into by the Nile countries related to land and water management.

Costs

The costs of the action are over and above those incurred by the countries to implement their national environmental policies and environmental action plans and to comply with existing environmental laws and egulations. The incremental cost, by which the alternative scenario exceeds the costs of the baseline situation, is estimated at US\$110.6 million. In addition to the US\$350,000 grant from the PDF Block B, already disbursed, GEF is requested to finance US\$26.5 million. Project co-financing is expected to amount to US\$84.1 million (of which US\$71.4 million will support other SVP/NBI projects, while an additional US\$12.7 million has been raised for the project through the ICCON process to complement the GEF increment (Funding by Canada has been confirmed and additional funds from the Netherlands are under discussion). The costs of monitoring and evaluation, supervision and quality control, contingencies and execution are included in these amounts. The project builds on a substantial baseline and is complemented by significant associated financing. The nine participating Nile

Basin country governments are fully committed to the project and to the sustainability of activities undertaken beyond the life of the project.

In line with the above, therefore, the GEF project total for Phase 1, which is requested in the present project proposal, amounts to a total of US\$16.8 million, while the GEF resources which will be requested for Phase 2 amounts to a total of US\$9.7 million.

Incremental Cost Matrix (US\$million)

		mcrem	ental Cost Matrix (US\$m	
Component/	Category	Amount	Domestic Benefits	Global Benefits
Other Costs 1. Institutional Strengthening to Facilitate Regional Cooperation	Baseline	93.0	The institutional framework in most riparian countries includes national legislation, environmental plans and strategies, and projects for natural resource management and environmental conservation. Some gains in institutional and human capacity through training and involvement of National Experts in the project.	Establishment of an environmental framework that will promote: (a) enhanced basin-wide cooperation essential to successful implementation of the Agenda for Environmental Action in the Nile Basin through the SVP, SAPs and other programs, and (2) a basin-wide institution (NBI) with
				substantially enhanced environmental
	Increment	23.4		management capacities.
1a. Decision Support System (DSS)	Baseline Alternative	28.0	Currently insufficient understanding of river basin dynamics to assess the downstream environmental impacts of future river system interventions or changes in watershed management regimes. Existing efforts are fragmented and have not included all riparians. Some incidental domestic benefits.	Improved technical foundation for transboundary water resources planning and
				management, including environmental assessments. Improved access to information within and between the riparian countries, improved knowledge of shared biological resources, enhanced understanding of river basin dynamics, especially transboundary effects. Also regional, integrated planning and management of water resources.
	Increment	28.0		
2. Community- level Land, Forest and Water Conservation	Baseline	205.9	Local-level capacities and access to resources and information throughout the Basin are mostly inadequate.	
	Alternative	222.0	Emphasis will be on transboundary soil erosion hot spot sites and areas with biodiversity of global significance. There will be some incidental domestic benefits. Equipment provided to NGO networks will be funded from non-GEF sources and 50-80% of micro grants will be funded from non-GEF sources.	Improved understanding of transboundary soil erosion processes and land and water conservation. Increased knowledge from exchanges of lessons and experiences among and between national NGO networks. Improved environmental management involving activities designed and implemented by local stakeholders plus enhanced government-NGO collaboration.
	Increment	16.1		

Component/ Other Costs	Category	Amount	Domestic Benefits	Global Benefits
3. Environmental Education and Awareness	Baseline	0.9	Low level of environmental awareness and education on issue of shared water resources among the public, students, officials and professionals.	
	Alternative	31.3	Some incidental domestic benefits.	Deepened public awareness and understanding of riparian countries' codependence on sound environmental management. Strengthened transboundary education and research initiatives.
	Increment	30.4		
4. Wetlands and Biodiversity Conservation	Baseline	74.2	There is generally inadequate information, awareness and management of wetlands and protected areas.	
	Alternative	81.3	There will be some incidental domestic benefits.	Enhanced information and knowledge of economic and ecological contribution of wetlands to conservation and development. Increased basin-wide appreciation of wetland functions. Improved protection of key transboundary conservation areas and key sites for migratory species.
	Increment	7.1		
5. Basin-wide Water Quality Monitoring	Baseline	29.0	Existing water quality monitoring efforts are inconsistent, uncoordinated and mainly do not include the sharing of transboundary information.	
	Alternative	34.5	Monitoring at selected sites will provide some incidental domestic and capacity building benefits, net of domestic contributions. Non-GEF funding will be sought for investments in monitoring equipment that generate domestic benefits.	Improved water quality information for basin-wide natural resource and environmental management, especially at transboundary and globally-significant hot spot sites.
	Increment	5.5		
TOTALS	Baseline	403.0		
-	Alternative	513.6		
	Increment GEF Non-GEF	110.6 26.5 84.1		

Project Baseline Summary

Baseline (\$US millions)

Component	Total Baseline	
Institutional Strengthening to Facilitate Regional Cooperation	1	93.0
Land, Forest, and Water Conservation	2	205.9
Environmental Education & Awareness Wetlands and Biodiversity Conservation	3 4	0.9 74.2
Water Quality Monitoring Basin-wide	5	29.0
TOTAL		403.0

Other Baseline Projects

Country	Project	Year	Budget ¹⁷	Implementing Agency	Donor	Location & Issues	Relevant
	I to a 1 Day 1 and 1 Day (1)	2000 2002	(US\$M)		Agency	Addressed	Proj. Comp.
	Integrated Development - Bututsi (1)	2000-2002	5.6	-	13700	Agriculture, Land mgt	2
	(wetlands component)	Ongoing	3.0	General Directorate for Land and Environment Mgt. (DGATE)	UNDP	Biodiv./Nature Conservation	4
BURUNDI	component)	Ongoing	5.0	Provincial Directorate for Agriculture and Livestock (DPAE)	FIDA- OPP	Wetlands	4
K		2000-2002	0.1	-		Agriculture, Land mgt	2
BI	Soil Erosion Program (2)	2000-2002	0.1	General Directorate for Land and Env. Mgt.		Soil erosion	2
	Forestry - World Bank (2)	2000-2001	0.1	Forestry Department	IDA	Forest mgt	2
	National Biodiversity Strategy & Action Plan	1996-2000	0.22 (GEF)	National Institute for Env. and Nature Conservation	GEF	Biodiv./Nature Conservation	4
Sub-total	of known non-GEF projects		13.9				
09	National Biodiversity Strategy & Action Phn		0.25(GEF)	Ministry of Tourism and Environment	GEF	Biodiv./Nature Conservation	4
CONGO	Range Management and Pasture Improvement	5 years	2.5	Ministry of Agriculture		Land and Water Conservation	2
Sub-total	of known non-GEF projects		2.5				
	Capacity building/Env Sector/Upgrade NEAP	1998-2000		Min. of State for Environmental Affairs, Egyptian Environmental Affairs Agency		Instit. Strengthening	1
	Lake Manzala Engineered Wetland	1997-2002	4.5 (GEF)	Min. of State for Environmental Affairs, Egyptian Environmental Affairs Agency	GEF	Pollution	5
	Developing Renewable Groundwater Resources in Arid Lands: a Pilot Case – the Eastern Desert of Egypt		1.84 (GEF)	Min. of Water Resources and Irrigation	GEF/ UNDP	Water Resources Management, Land and Water Conservation	2
		2000-2002	0.9	Egyptian Environmental Affairs Agency		Disaster mgt	5
	Used Oil & Domestic Waste/Along Nile	1999-2001	0.6	Min. of Water Resources, Egyptian Environmental Affairs Agency		Pollution	5
	National Environmental Disaster Plan	1999-2002	4.4	Egyptian Environmental Affairs Agency		Disaster mgt	5
	Organic Agriculture	Ongoing	0.5	Min. of Agriculture		Land and Water Conservation	2
'PT	National water Quality and Availability Management (NAWQAM) Project	1997-2004	21.3	National Water Resources Centre (NWRC)	Canada/E gypt	WQ Monitoring, Water resources Management	5
EGYPT	National Water Resources Plan for Egypt	1998-2002	3.9	Ministry of Water resources and Irrigation (MWRI)	Netherlan ds/ Egypt	Water Resources Planning	1
	DSS for Water Resources Planning based on Environmental Balance	1998-2001	1.5	National Water Resources Centre (NWRC)	Italy/Egyp	DSS development	1
	Monitoring, Forecasting and Simulation of the	Ongoing	15.0	FAO/ Ministry of Water resources and Irrigation	USAID	Water resources management	1
	Nile River	6. 6		(MWRI)			-
	Updating Meteorological Network	Ongoing	1.4	Government of Egypt	Egypt	Hydrological network	1
	METAPIII	1996-2001	4.2	Egyptian Environmental Affairs Agency		Instit. Strengthening	1
	Wetlands & Coastal/Mediterranean Region	1997-2002	2.8 (GEF)	Egyptian Environmental Affairs Agency	GEF	Instit. Strengthening	4
	National Biodiversity Strategy & Action Plan			Egyptian Environmental Affairs Agency	GEF	Biodiv./Nature Conservation	4
	Local Initiative Facility to Urban Environment	1993-1998	0.9	NGOs	UNDP	Env. Education/Awareness	3
	Italian Cooperation Project	1998-2002	2.0	EEAA, Min. Water Res. & Irrigation, Min. of Culture	Italy		1

¹⁷ Project budgets indicated as GEF funded are **not** added in the baseline.

Country		Year	Budget ¹⁷ (US\$M)	Implementing Agency	Donor Agency	Location & Issues Addressed	Relevant Proj. Comp.
Sub-total	of known non-GEF projects		57.7				
	Conservation Strategy for Ethiopia (CSE) project	1989-to date		IUCN and Environmental Protection Authority (EPA)		Biodiv./Nature Conservation	4
	Regional Conservation Strategy Projects	1994-1999		IUCN and National Regional Governments with the Technical Support from EPA	NORAD	Biodiv./Nature Conservation	4
	National Action Program to Combat Desertification	1997-1999	0.3	EPA	UNDP/ UNSO	Biodiv./Nature Conservation	4
	Environmental Support Project	1999-2003	12.3	, , , , , , , , , , , , , , , , , , ,		Water supply & sanitation master plan; water res. & env. meta database	1
-	Flow Forecasting	2000-2001	0.2	Ministry of Water Resources (MOWR)	UNDP	Flow forecasting	1
ETHIOPIA	Capacity Building of The Hydrology Department	1998-2001	0.7	Ministry of Water Resources (MOWR)	NORAD/ Ethiopia	Data Collection	1
	Soil Conservation for Hydrology	Ongoing		Ministry of Water Resources (MOWR)	ia	Sediment transport in rivers	2
	Ecological Sustainable Industrial Development	2000-2002	1.5	EPA	Netherlan ds/ UNIDO	Instit. Strengthening	1
	National Biodiversity Strategy & Action Plan	2000-2002		Research (IBCR)	GEF	Biodiv./Nature Conservation	4
	Bird Life Project	2000-2002		(EWLNHS)	GEF	Biodiv./Nature Conservation	4
	Conservation of Plant Genetic Resources	1994-1999	2.45 (GEF)	National governmental departments	GEF	Biodiv./Nature Conservation	4
	Conservation of Plant Genetic Resources	1994-1999	3.9	National governmental departments	UNDP/G OV	Biodiv./Nature Conservation	4
Sub-total	of known non-GEF projects		22.3				
	National Biodiversity Strategy & Action Plan	Recently conc		Min. of Env. and Natural Resources (National Environment Secretariat)	GEF	Biodiv./Nature Conservation	4
YA	Integrated Water Resource Management	2000-2003		Ministry of Environment and Natural Resources (MENR)	a		2
	Water Resources Assessment Project (WRAP 5)	1996-2000			Netherlan ds/Kenya	Water Resources database & water res. assessment	1
	National Action Program to Combat Desertification	Five Years	8.3	Min. of Env. And Natural Resources		Land and Water Conservation	2
Sub-total	of known non-GEF projects		9.2				

Country	Project	Year	Budget ¹⁷	Implementing Agency	Donor	Location & Issues	Relevant
			(US\$M)		Agency	Addressed	Proj. Comp.
	National Biodiversity Strategy & Action Plan			Ministry of Lands and Environmental Protection		Biodiv./Nature Conservation	4
	Environmental Law Formulation	2000-2001	0.1	Ministry of Lands and Environmental Protection		Biodiv./Nature Conservation	4
	Implementation of National Environmental	1996-2001	0.8	Ministry of Lands and Environmental Protection	UNDP	Biodiv./Nature Conservation	4
	Action Plan						
	Potable Water Supply (A.E.P.)	1999-2001		Ministry of Water, Energy and Natural Resources	Rwanda	Land and Water Conservation	2
	Capacity Building for the National Meteorological Service	Ongoing		Ministry of Public Works, Transport and Communications (MINITRACO)	UNDP	Capacity building	1
		Ongoing		Ministry of Public Works, Transport and Communications (MINITRACO)	IDA	Information systems	1
RWANDA	Rehab & Reforestation	Ongoing		Ministry of Geology and Mining, Energy, Water and Natural Resources (MINERENA)	EU	Environmental conservation.	2
RWA	A.E.P. Umutara	1999-2001		Ministry of Water, Energy and Natural Resources	Denmark	Land and Water Conservation	2
	A.E.P à partir du lac Mugesera (Karenge- Kigali)	1998-2000		Resources	RFA	Land and Water Conservation	2
	A.E.P. Umutara-Kibungo-Kigali rural	1998-2000		Ministry of Water, Energy and Natural Resources	IDA	Land and Water Conservation	2
	National Program for Soil and Water Conservation	1999-2001	4.3	Ministry of Agriculture	Rwanda	Land and Water Conservation	2
	Management of natural Forests in Nyungwe (cross-border w. natural forest of Kibira in Burundi)	2000-2001	1.2	Ministry of Agriculture	EU	Land and Water Conservation	4
	Agro-forestry in the Oriental High Plateau	1997-2001	1.0	Ministry of Agriculture	EU	Land and Water Conservation	2
Sub-total	of known non-GEF projects		14.7				
	Biodiversity Mgt - Dinder National Park	1999-2002	0.8 (GEF)	Higher Council for Environment & Natural Resources	GEF	Biodiv./Nature Conservation	4
	Biodiversity Mgt - Dinder National Park	1999-2002	0.5	Higher Council for Environment & Natural Resources	UNDP	Biodiv./Nature Conservation	4
Z	Lower Atbara Area Development Scheme	1995-2003		Ministry of International Cooperation and federal states	UNDP	Land and Water Conservation	2
SUDAN	Area Rehabilitation Scheme – Juba	1998-2001		Ministry of International Cooperation and federal states	UNDP	Land and Water Conservation	2
S .	Area Rehabilitation Scheme - Wau	1998-2001		Ministry of International Cooperation and federal states	UNDP	Land and Water Conservation	2
	National Action Plan to Combat Desertification	1997-1999	0.3	National Desertification Unit	UNDP	Land and Water Conservation	2
	National Biodiversity Strategy and Action Plan	1999 - 2000		Higher Council for Environment & Natural Resources	GEF	Biodiv./Nature Conservation	4
Sub-total	of known non-GEF projects		8.3				

Country		Year	Budget ¹⁷ (US\$M)	Implementing Agency	Donor Agency	Location & Issues Addressed	Relevant Proj. Comp.
	Participatory Environmental Resource Management Project	1997-1999	10.0	Min. of Natural Resources & Tourism	USAID	Biodiv./Nature Conservation	4
4	National Action Plan to Combat Desertification	1997-1999	0.4	office	UNDP/U NSO		2
TANZANIA	River Basin Management and smallholder Irrigation Improvement Project.	1997-2003	10.6	Ministry of Water	World Bank	Water resources mgmt. & irrigation	2
TAN	Capacity Building for Environmental Management and Pollution Abatement in Mwanza Region	1998-2003	1.8	Prime Minister's office; Mwanza municipality	DANIDA	Instit. Strengthening, pollution	5
	National Biodiversity Strategy and Action Plan	1995-1996	0.3 (GEF)	Division of Environment under Vice President's office	GEF	Biodiv./Nature Conservation	4
Sub-total	of known non-GEF projects		22.8				
	National Wetlands Conservation and Management Project	July 1996- 2001	2.2	Min. of Water Lands and Environment	Netherlan ds Govt.	Biodiv./Nature Conservation	4
	Tree Seed Project	Oct 1998- 2003	2.1		NORAD/ G of Uganda	Forest mgt	2
	South East and South West Integrated Watershed Management Project.	July 99 - 2004	3.7	Forestry Dept, Ministry of Water, Lands and Environment	ADB	Land mgt.	2
	Environment Management Capacity Building Project	1996-2000	8.4	Nat. Environment Management Authority	World Bank	Instit. Strengthening	1
	Integrated Water Resources Management of Lakes George & Edward Basin	1999-2004	9.4	Ministry of Local Govt.	DFID	Integrated basin management	2
	Strengthening Water Resources Monitoring and Assessment Services (WRAP)	1996-2003	12.0	Directorate of Water Development (DWD)	Danida	Water resources information	1
	National Environment Monitoring Agency	1998-2002	1.5	National Environmental Management Authority (NEMA)	Uganda	Monitoring	1
	National Parks and Wildlife Management.	1995-1999	5.0	Uganda Wildlife Authority	USAID	Instit Strengthening	1
₹	Environment Laws and Institutions Project	1996-1999	0.4	Ministry of Water Lands and Environment	UNEP	Instit. Strengthening	1
UGANDA	Kibali Wild Coffee	1999	0.8	Uganda Coffee Trade Federation	F	Biodiv./Nature Conservation	4
9n	Peri-urban Plantations Project	1996-2000	1.8	Forestry Dept, Ministry of Water Lands and Environment (MWLE).	NORAD/ G of Uganda	Forest mgt	2
	Mt. Elgon Conservation and Development	1996-2000	1.4	Ministry of Water Lands and Environment	IUCN	Biodiv./Nature Conservation	4
	Biomass Study Phase III	1996-2000	0.7	Forestry Dept, Ministry of Water Lands and Environment (MWLE).	EU	Forest mgt/Energy	2
	Development Through Conservation Project	1989-2002	2.8	Ministry of Tourism, Wildlife and Industry		Biodiv./Nature Conservation	4
	Water Resources Assessment Project	1996-2000	7.0	Directorate of Water Development	Danida	Water resources	1
	Environment Management	1996-2001	11.8	Ministry of Natural Resources	IDA	Biodiv./Nature Conservation	4
	Bwindi Forest and Mgahinga Gorilla	1995-1999		Government of Uganda	GEF	Biodiv./Nature Conservation	4
	National Biodiversity Strategy and Action Plan			Ministry of Water Lands and Environment (MWLE).	GEF	Biodiv./Nature Conservation	4
	Cross-border Biodiv. Project (Sango Bay)	1998-2002	1.77 (GEF)	Ministry of Water Lands and Environment	GEF	Biodiv./Nature Conservation	4
	Protected Areas Management & Sustainable Use	1999-2002	12.4	1	IDA	Biodiv./Nature Conservation	4
	Protected Areas Management & Sustainable Use	1999-2002	2.0 (GEF)	Ministry of Tourism, Wildlife and Antiquities	GEF	Biodiv./Nature Conservation	4

Country	, and the second	Year	Budget ¹⁷ (US\$M)	Implementing Agency	Donor Agency	Location & Issues Addressed	Relevant Proj. Comp.
	Small - Towns Water Supply	1995-2001		Ministry of Water Lands and Environment	IDA	Water resources	2
Sub-total	of known non-GEF projects		125.7				
Regional	Basin	2000-2002			FAO	Instit. Strengthening	1
	Operational Water Resources Management and Information Systems in the Nile Basin Countries Project (basin -wide)	1996-1999	3.6		FAO/ Italy	Instit. Strengthening	1
Sub-ba	(Egy, Eth, Sud)	Design phase	tbd	Relevant sector ministries under coordination by Ministers of Water Affairs	tbd	Water Resources; Early warning Systems and Modeling; Agriculture; Land &Water Conservation; Power	
	NBI Equatorial Lakes Subsidiary Action Program (Bur, DRC, Ken, Rwa, Tan, Ug) :			(relevant NEL-SAP projects under design listed below:)			
	Water Use in Agriculture	Design phase		Relevant sector ministries under coordination by Ministers of Water Affairs		Soil & Water Conservation	2
	Sustainable management and Conservation of Lakes and Linked Wetlands	Design phase		Relevant sector ministries under coordination by Ministers of Water Affairs		Wetlands and Biodiversity	4
	Watershed Management (three sub-projects)	Design phase		Relevant sector ministries under coordination by Ministers of Water Affairs		Soil & Water Conservation	2
	Water Hyacinth and Water Weed Control	Design phase		Relevant sector ministries under coordination by Ministers of Water Affairs		Water Resources; Soil & Water Conservation	2
	Lake Victoria Environment Management Project (LVEMP)	1996-2001		Ministries of environment affairs Ken, Tan, Uga + many local partners		Water Res.; Soil & water conservation	2
	Lake Victoria Environment Management Project (LVEMP)	1996-2001		Ministries of environment affairs Ken, Tan, Uga + many local partners		Water Res.; Soil & water conservation	2
	Tan, Uga)	1996-1999	4.9		FAO/ Japan	Instit. Strengthening	1
	Lake Victoria Development Initiative	Planned			Sida	Instit. Strengthening	1
	Reducing Biodiv Loss - Cross Border Sites - East Africa	1998-2002	12.6(GEF)	Gov't Tan, Gov't Ken, Gov't Uga	GEF	Biodiv./Nature Conservation	4
	East African Sub-Regional Project on Environmental Law	1997-1999		Division of Environment under Vice President's office	UNEP/ UNDP		1
	Institutional Support for the Protec. E. Africa Biodiversity			Gov't Tan, Gov't Ken, Gov't Uga	GEF	Biodiv./Nature Conservation	4
	Afr NGO-Govt Partnerships Biodiv.Action/Birdlife (BkF, Cam, Eth, Gha, Ken, Mad, SiL, SA, Uga)	1994 - 1999	4.3 (GEF)	Natl. NGOs, Govt. & intl. NGOs	GEF	Biodiv./Nature Conservation	4
	East African Communities' Organization for Management of Lake Victoria Resources (ECOVIC)	Planned	-	NGOs and CBOs with environment mandate within the Lake Basin		Instit. Strengthening	1
Sub-total	of known non -GEF projects		125.9				
Grand Total			403.0				

ANNEX B LOGICAL FRAMEWORK FOR THE NILE BASIN INITIATIVE TRANSBOUNDARY ENVIRONMENTAL MANAGEMENT PROJECT (SHARED VISION PROGRAM)

Intervention	Indicators of Performance	Means of Verification	Risks and Assumptions
Overall Goal			
The vision of the Nile Basin Initiative (NBI)			
is to achieve sustainable socio-economic			
development through equitable utilization			
of, and benefit from, the common Nile			
Basin water resources.			
The NBI's Strategic Action Program aims to			
support establishment of an enabling			
environment for cooperative development.			
The project aims to develop a framework for			
basin-wide environmental action linked to			
transboundary issues within the context of			
the Nile Basin Initiative's (NBI's) Strategic			
Action Program.			
Project Objective	Examples of effective basin-wide stakeholder	NBI Environment Project	
The project aims to create more effective	cooperation on key environmental issues identified	documents that show that basin-wide	
basin-wide stakeholder cooperation on	by the TEA include:	cooperation on environmental action	
transboundary environmental issues by	 Exchanges of information and knowledge, 	is taking place.	
supporting the implementation of a subset of	including the establishment of networks	Project monitoring and evaluation	
the actions prioritized by the TEA.	Capacity building and training	reports.	
	Improved environmental monitoring and	 Reports of other local, national, 	
	enhanced applied research capabilities	and international investigations	
	Pilot project interventions		
	Environmental issues given greater weight in		
	economic development policies and projects		

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Means of Verification Risks and Assumptions Intervention **Indicators of Performance** Result/ Component 1: DSS river basin planning model developed Project and DSS progress and The non-GEF-funded portion Institutional Strengthening to Facilitate performance reports (incl. needs of the Water Resources Planning DSS Information Management System with Regional Cooperation assessment report, user manuals, QA and Management Project will environmental content developed. 1. Regional Capacity Building for reports, and training program support other DSS components, Participatory development of River Basin Model Transboundary Environmental including developing the assessment) completed. Management Project monitoring and evaluation Information Management System Five training workshops conducted for core staff Decision Support System (DSS) and strengthening the reports to use and maintain River Basin Model. Communications and Knowledge institutional frameworks and Workshop reports (with gender Basin-wide environmental web site and electronic Management human capacity for DSS specific data) communication network functioning. Macro and sectoral policies and the development and application. Project Newsletter Newsletter published regularly (in 3 languages) environment The DSS component of the Evaluation of River Basin Model with best practices, lessons, workshops and Water Resources Planning and additional resource material of interest for all project performance and utility Management Project will Reports of studies on relationships areas. establish the structure and between macro and sector policies Basin-wide Thematic Working Groups technical standards for the and environment, including root established and functioning effectively for each of communications network and project components 2 to 5. causes. Information Management System • Transboundary studies of macro and sector to be used by the project. policies and environment (including root causes) The Newsletter will use completed in 4 countries, including at least one information and publishing southern and one northern Nile country. facilities supported by CIDA (through a parallel Communications Project) in collaboration with the DSS. Stakeholders are willing to share information and will collaborate in the design and maintenance of the DSS. Oualified and motivated staff and other resources available. Additional financial resources can be mobilized to cover the hardware costs associated with the establishment of NGO networks. Key issues and constraints related to the use of new

technology can be overcome.

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Intervention	Indicators of Performance	Means of Verification	Risks and Assumptions
	 Indicators for Phase 1 Completion Basin-wide Thematic Working Groups established and functioning effectively for each of project components 2 to 5 (WGs will continue in phase 2). Newsletter published regularly (in 3 languages) with best practices, lessons, workshops and additional resource material of interest for all project areas. 	Verification of Phase 1 Completion Project and DSS progress and performance reports (incl. needs assessment report, user manuals, QA reports, and training program assessment) Project monitoring and evaluation reports Workshop reports (with gender specific data) Project Newsletter	
Result/ Component 2: Community-level Land, Forest and Water Conservation 1. Enhanced basin-wide capabilities and cooperation 2. Improved understanding of transboundary soil erosion 3. Micro-grant Fund to support local-level land, forest and water conservation initiatives at transboundary sites	 National and international environmental NGO networks established or strengthened in 5 countries Four regional training workshops (with gender balance) conducted on NGO-government collaboration with basin-wide participation Transboundary assessments and studies of soil erosion completed, involving at least 5 countries, including at least one southern and one northern Nile country, and participation of a full range of stakeholders. Priority transboundary sites and areas identified for pilot activities in 5 countries. Micro-grant Fund established and functioning effectively reaching NGOs and grassroots groups across gender lines. Micro-grants made to support local-level pilot initiatives, adoption of best practices and exchanges of lessons learned. Specific verifiable indicators developed for the Micro-grant Fund. Indicators to include gender targets for microgrant beneficiaries. Promising or successful pilots identified for scaling up or replication through the NBI's SAP. 	 Project progress reports. Survey of users of NGO networks. Workshop reports. Reports on assessments and studies of transboundary soil erosion. Micro-grant Fund reports on institutional arrangements, organization and management, grant selection criteria and grant making. Monitoring and evaluation reports for Micro-grant Fund, including monitoring and evaluation for individual grants. Satisfactory gender ratios reached in grant-making. 	 National and international NGOs are willing to share information and collaborate with the project. Studies provide usable insights on transboundary soil erosion to guide grant-making emphasis of Micro-grant Fund. Adequate institutional arrangements can be made in each country to house, manage, safeguard and administer the Micro-grant Fund. Community-level stakeholders are ready to submit proposals to and engage in joint activities with the Micro-grant Fund.

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Intervention	Indicators of Performance	Means of Verification	Risks and Assumptions
	 Indicators for Phase 1 Completion National and international environmental NGO networks established or strengthened in 3 Nile countries. Micro-grant Fund established and functioning effectively. First round of grant making satisfactorily completed. Two regional training workshops conducted on NGO-government collaboration with basin-wide participation. Transboundary assessments and studies of soil erosion completed, involving at least 2 countries, including participation of a full range of stakeholders. 	Verification of Phase 1 Completion Project progress reports. Workshop reports. Reports on assessments and studies of transboundary soil erosion. Micro-grant Fund reports on institutional arrangements, organization and management, grant selection criteria and grant making. Monitoring and evaluation reports for Micro-grant Fund.	
Result/ Component 3: Environmental Education and Awareness 1. Public awareness and understanding of Nile transboundary environmental issues 2. Enhanced networking among universities and other research institutions	 National Working Groups established and functioning effectively. Regional training provided to 50 stakeholders in environmental education and awareness program development. Gender sensitive environmental education and awareness programs for public and schools developed and delivered, using both innovative and traditional media. Specific verifiable indicators will be developed in consultation with national education authorities. University and research institutions brought into a network to coordinate programs in environmental science, engineering and policy studies. One coordinating institution selected per country. Specific verifiable indicators developed in consultation with regional Working Group. 	 Project progress reports. Gender sensitive environmental education and awareness program materials. Survey of environmental education and awareness program users to evaluate impact of activities. Survey of users of university and research institution network to evaluate impact of activities. 	 National Working Groups are willing to participate, work jointly and share information with counterparts from other riparian countries. Adequate institutional arrangements for development and delivery of environmental education programs can be made within each country, e.g., with the Ministries of Education.
	 Indicators for Phase 1 Completion National Working Groups established and functioning effectively. Regional training provided to 20 stakeholders in environmental education and awareness program development. Environmental education and awareness programs for public and schools developed and delivery plan at an advanced or final stage. 	Verification of Phase 1 Completion Project progress reports. Environmental education and awareness program materials.	

Indicators of Performance	Means of Verification	Risks and Assumptions
 Basin-wide wetland management network of stakeholders and experts established and functioning effectively. Wetland education, training and awareness programs developed in 3 languages and delivered in 5 countries. Two ecological and economic studies of the role of wetlands in sustainable development completed in one southern and one northern Nile country. Pilot initiatives completed in support of capacity building and management at 3 key transboundary sites, involving at least one southern and one northern Nile country. Specific verifiable indicators 	 Project progress reports. Survey of users of wetland management network to evaluate impact of activities. Wetland education, training and awareness program materials. Reports on studies on the role of wetlands in sustainable development. Progress reports on pilot initiatives. 	 Wetland management stakeholders and experts are willing to participate in and share information through a network facilitated by the project. Wetlands and other priority transboundary sites selected for studies and for pilot initiatives are accessible.
 Indicators for Phase 1 Completion Component to begin in Phase 2 Phasing indicators as for Component 1. 		
 Existing national capacities assessed, including documentation of sampling points in each country. Common analytical methods selected for basinwide use. Methods pilot tested in one national laboratory in each country then revised based on experience and adopted basin-wide. Four regional training workshops on water quality monitoring conducted in each country National water quality database developed in each country. Water quality monitoring program sampling points established at 3-5 environmental hotspots of transboundary relevance per country. Study tours conducted with basin-wide participation to examine water quality incidents and corrective measures. Best practice materials on pollution prevention and control prepared at a regional level in three languages and disseminated in each country. Four regional training workshops conducted on pollution prevention and monitoring needs, and cost recovery mechanisms for water quality monitoring. 	 Project progress reports and maps. Reports on national water quality monitoring capacities. Manual of common Nile Basin water quality analytical methods. Progress reports on basin-wide water quality monitoring program. Best practice materials and workshop reports. 	 Technical institutions and their staff of sufficient capacity and ready to engage in developing monitoring programs with national and international exchanges of information. Additional financial resources are available for laboratory resources, sampling instruments and other hardware needed for water quality monitoring. Adequate institutional arrangements, including computer systems are made to house and maintain national water quality databases. Adequate financial resources are mobilized to cover the recurring costs of monitoring systems. Political commitment exists to share information and to establish common monitoring approaches.
	 Basin-wide wetland management network of stakeholders and experts established and functioning effectively. Wetland education, training and awareness programs developed in 3 languages and delivered in 5 countries. Two ecological and economic studies of the role of wetlands in sustainable development completed in one southern and one northern Nile country. Pilot initiatives completed in support of capacity building and management at 3 key transboundary sites, involving at least one southern and one northern Nile country. Specific verifiable indicators will be developed for the site interventions. Indicators for Phase 1 Completion Component to begin in Phase 2 Phasing indicators as for Component 1. Existing national capacities assessed, including documentation of sampling points in each country. Common analytical methods selected for basinwide use. Methods pilot tested in one national laboratory in each country then revised based on experience and adopted basin-wide. Four regional training workshops on water quality monitoring conducted in each country National water quality database developed in each country. Water quality monitoring program sampling points established at 3-5 environmental hotspots of transboundary relevance per country. Study tours conducted with basin-wide participation to examine water quality incidents and corrective measures. Best practice materials on pollution prevention and control prepared at a regional level in three languages and disseminated in each country. Four regional training workshops conducted on pollution prevention and monitoring needs, and cost 	 Basin-wide wetland management network of stakeholders and experts established and functioning effectively. Wetland education, training and awareness programs developed in 3 languages and delivered in 5 countries. Two ecological and economic studies of the role of wetlands in sustainable development completed in one southern and one northern Nile country. Pilot initiatives completed in support of capacity building and management at 3 key transboundary sites, involving at least one southern and one northern Nile country. Specific verifiable indicators will be developed for the site interventions. Indicators for Phase 1 Completion Component to begin in Phase 2 Phasing indicators as for Component 1. Existing national capacities assessed, including documentation of sampling points in each country. Common analytical methods selected for basinwide use. Methods pilot tested in one national laboratory in each country then revised based on experience and adopted basin-wide. Four regional training workshops on water quality monitoring conducted in each country. Water quality monitoring program sampling points established at 3-5 environmental hotspots of transboundary relevance per country. Survey of users of wetland management network to evaluate impact of activities. Wetland education, training adawareness program materials. Reports on studies on the role of wetlands in sustainable development. Project progress reports on beneficial awareness program materials. Project progress reports on pilot initiatives.

ANNEX B1 PHASED FUNDING OVERVIEW

COMPONENT	OUTPUT PERFORMANCE INDICATORS FOR SECOND PHASE OF GEF FUNDING	GEF Implementing Agency	GEF Financing Phases Implementing Agency and Funding Distribution Phase 1 Phase 2		GEF Sub-totals and TOTALS	Non-GEF Funding
1. Institutional Strengthening						
1.1 Regional capacity building	Continuing institutional support (Phase 1 and 2)	UNDP	4,616,039	2.320,090		0
1.2 Knowledge management	All GEF funding in Phase 1.	World Bank	994,139	0	994,139	0
1.3 Decision Support System - River Basin Model	All GEF funding in Phase 1.	World Bank	3,646,986	0	3,646,986	0
1.4 Macro/sectoral policies and the environment	All GEF funding in Phase 1.	World Bank	436,686	0	436,686	0
			9,693,869	2.320,090	12,013,959	0
2. Land, Forests and Water Conservation						
2.1 Basin-wide cooperation and NGO networks		UNDP	1,194,997	0	1,194,997	2,461,373
2.2 Transboundary soil erosion	All GEF funding in Phase 1.	UNDP	305,210	0	305,210	0
2.3 Micro-grant fund for local conservation initiatives	Institutional arrangements in place. First round of grant making satisfactorily completed.	UNDP	215,236	2,000,000	215,236	4,922,746
			1,715,442	2,000,000	3,715,422	7,384,119
3. Environmental Education and Awareness						
3.1 Public awareness and understanding	Organizational arrangements, detailed work plans and early pilots completed.	UNDP	2,062,563	1,000,000	3,062,563	0
3.2 Networking universities and other research institutions	All GEF funding in Phase 1.	UNDP	402,742	0	402,742	0
			2,465,305	1,000,000	3,465,305	0
4. Wetlands and Biodiversity Conservation						
4.1 Regional cooperation and capabilities	Institutional framework established (Component 1).	UNDP	0	1,185,766	1,185,766	0
4.2 Wetlands in sustainable development	No GEF funding.	UNDP	0	0	0	2,735,816
4.3 Management of wetlands & cross-border	Institutional framework established (Component 1).	UNDP	0	3,183,786	3,183,786	0
			0	4,369,552	4,369,552	2,735,816
5. Water Quality Monitoring Basin-wide			, and the second	-,000,002	1,000,000	2,,010
5.1 Capacity building for water quality monitoring	All GEF funding in Phase 1.	World Bank	1,506,249	0	1,506,249	0
5.2 Transboundary water quality monitoring initiated	All GEF funding in Phase 1.	World Bank	1,418,221	0	1,418,221	2,589,045
initiated			2,924,470	0	2,924,470	2,589,045
			2,727,470		2,727,470	2,307,043
TOTAL			16,799,086	9,689,642	26,488,729	12,708,979

ANNEX C STAP REVIEW

STAP Reviewer:

Dr. Jan O. Lunqvist Professor, Department of Water and Environmental Studies Linköping University, Sweden

Nile Transboundary Environmental Action. Draft GEF Project Brief (GEF-PB)

1. Overall Impression

I am quite impressed by the level of commitment among the riparians. I am also enthused by the systematic and coordinated approach to tackle significant development and environmental challenges that people in the Nile basin face. Apart from the impressions conveyed by the GEF-PB report and also the Transboundary Environmental Analysis (TEA), I have had the opportunity to meet colleagues who have been involved in the Nile Basin Initiative (NBI). Their description of the NBI concur with the tone in the GEF-PB and TEA. Actually, I have heard no arguments, which contradict this overall impression. Needless to say, it is a huge project and risks have been identified (p. 25-27).

2. Relevance & Priority

This project is a core component of the NBI and the Shared Vision Program. Human livelihoods, mutual trust and the stability in this part of the world hinge on the possibilities to effectively deal with negative environmental trends. If not abated and reversed, these trends represent mounting threats especially to those who live off and on (marginal) lands and whose livelihood is directly linked to environmental goods and services. To abate and reverse the negative trends, the pertinent question is not so much who is affected but: what are the root causes behind the trends and what measures are likely to be effective to foster sustainable development? In TEA, it is argued that poverty tends to be seen as the general cause for environmental degradation while the production and consumption of the non-poor account for most environmental impacts (p. 26 ff.). In Annex 1 (pp 89 – 96 of GEF-PB) various root causes are listed; poverty is mentioned but production and consumption aspects are missing. Irrespective of the relative significance of the root causes, it is essential that both poverty and production and consumption issues are addressed. It seems that performance benchmarks (p. 32-33) could be shaped so that project progress is assessed in this regard. This is also motivated by the repeated argument that poverty alleviation is a major objective of the NBI.

The GEF-PB is one out of seven basin-wide projects. I have not read documents elaborating on the other six projects. Judging from the titles of the other six projects and the overall NBI, it is clear that the Environmental Action Program supplements the other projects and *vice versa*; the success of the GEF-PB depends on how well it is co-ordinated with other projects.

3. Approach

By and large, the approach seems appropriate. It builds on cooperative activities in the region during the last couple of decades. Obviously, considerable effort has been devoted to make it a transparent and participatory process. An active involvement of representatives from political, scientific and other groups in ten riparian countries in the preparation of the GEF-PB, is the best guarantee for promoting confidence and creating a sense of ownership and commitment in the region. It is, however, not clear from the report how far down in the society that ownership extends. Involvement and commitment of civil society is usually tricky but decisive for the outcome. It is reassuring that the entire project has explicitly emphasized an extensive participation by a wide range of stakeholders (p. 28; Annex F). The setting up of a Micro-grant Fund which is supposed to target communities and smaller NGOs is a very relevant component in this connection.

Institutional Strengthening is a key component in the project and it is also the component, which has been allocated the largest share of the budget. The four issues (pp. v and 16-19) which together make up this component are all relevant. But from the text, it is not possible to see if all relevant institutional issues are addressed. One important issue concerns title to land. Similarly, the institutional and legal framework regulating water rights (and responsibilities) are critical in this connection. Both in GEF-PB and TEA, there is a concern about the negative effects of unclear tenure situations and the failure to enforce laws and regulations.

4. Objectives

The objectives are valid and focused. It is satisfactory to see that considerable thought has been given to integrate the various projects so that the NBI can be a coherent undertaking.

5. Background and justification

From what I have read and heard, the project fits with national priorities and commitments. The background information, as presented in the report, is relevant. I would have liked to see more information about land tenure, formal and traditional water rights (and responsibilities) and to what extent existing (national) environmental policies have worked. Similarly, subsidies on agrochemicals, pricing of water and regulation of resource utilisation in general are important for an understanding of the dynamics of resource utilisation and environmental trends. Many of these aspects are of a national concern rather than trans-boundary issues. Maybe that's why they are not elaborated upon in this report.

6. Government Commitment and Sustainability

I see no reason to doubt the commitment of Governments in the basin. Mechanisms have been established in the region, and mandates have been identified, which will make it possible to coordinate national efforts. The GEF-PB gives a clear overview of how regional mechanisms are created. Grassroots actions are described in more general terms, for instance, in terms of demonstration projects, activities at schools, etc. But as mentioned, there is a noticeable commitment in the project to mobilise and support grassroots activities.

7. Activities

Activities are organised to promote more effective basin-wide co-operation in five main areas. During the first phase, two areas are in focus: institutional strengthening (component 1) and water quality monitoring (component 5). It is quite logical to start with these two areas. Once the benchmarks have been achieved, the second phase will be launched, consisting of three areas: Community level land, forest and water conservation, Environmental education and awareness, and Wetlands and biodiversity conservation.

Water quality monitoring should be linked to a project/program, which has the task to identify the sources and the pathways of the polluting substances. To be effective, water quality management must focus on the source of pollution or treatment before environmental damage occurs. As indicated in the GEF-BP and TEA, there are a number of activities and sources behind the pollution and the ensuing water quality degradation. In addition to pollution and sediment load from rural based activities, it is likely that urban and industrial development and also consumption patterns will play an increasing role. On page 25 it is mentioned that: "It is expected that SAPs will design follow-on investment programs addressing specific water quality interventions in the future". This is a kind of activity which is valid in the ambition to deal with root causes.

8. Project funding

I find it difficult to have any clear opinion about this. I note that this project will promote and support the commencement of activities for many years to come and that the total budget for all these activities is expected to several billion US dollars (p. 47). I also note that the indicative cost of GEF PB is US\$ 39 million and that the request to GEF is for US\$ 26.65 million (out of the 39). Some cost estimates are still not available (p. 40).

9. Replicability

There are 261 trans-boundary (international) river systems in the world. For many of these, some kind of agreement for collaboration exists, but in most cases, the institutional set-up is weak and the national political commitment is not as strong as could have been desired. As far as I know, bi-lateral collaboration is rather common but multi-lateral co-operation is less apparent. Experiences from the NBI and especially the explicit concern for the linkages between environmental issues and development aspirations, could be used in other basins. Every basin is unique - in several aspects - but the principles and the approaches to overcome barriers are of universal interest.

10. Time Frame

The first phase runs over three years. It consists of the full implementation of two components (point 7 above). At the end of year 3, an assessment of the achievements will be made against an agreed list of benchmarks. Depending upon the outcome of this evaluation, the intention is to submit a new proposal for project funding. – The time-table and procedure is reasonable.

11. Global Environmental Benefits and Goals of the GEF

Yes, this project does definitely address issues, which qualify for GEF support. I do not foresee any negative environmental effects. The opposite is probable.

12. Rationale for GEF support

With reference to what has been discussed above, the project fits quite well within the overall strategic thrust of the GEF-funded International Waters project activities and the GEF Operational Strategy. The answers to the four bullets raised under this point are affirmative.

13. Secondary Issues to be Addressed

The project has linkages to the biodiversity convention and there are a number of sites in the basin which are declared Ramsar sites. Stakeholder involvement has been discussed above. The innovative character of the project is perhaps primarily related to the fact that the ideas that have been a recurrent feature in discussions about sustainability have been translated into a coherent program, which has been widely accepted. Quite an achievement!

One aspect, which is quite innovative but which unfortunately is not elaborated in the report, concerns the essential idea is: "sharing benefits not sharing water" (p. 34). Translating this idea into policy is probably quite challenging. But for countries where competition for limited and vulnerable water resources is more and more stiff, this idea is quite valid. -- The proposal to establish micro-credits is not new, but it is very promising tool to reach the "grassroots".

14. Additional comments

It is a constructive and systematic project, which I do hope will progress as anticipated.

Linkoping, September 6, 2001

JAN LUNDQVIST

ANNEX C1 RESPONSE TO STAP REVIEW

The project preparation team is pleased with the STAP reviewer's strong endorsement of the project. It is anticipated that the reviewer will remain involved in an advisory capacity during the implementation phase of the project. The observations and comments provided in the review are very of great relevance to the project.

- Addressing production and consumption aspects of environmental degradation.

 Production and consumption aspects are highlighted in the Agenda for Environmental Action identified in the GEF funded Transboundary Environmental Analysis. The present project will address a priority subset of actions of the Agenda. Production/consumption issues are addressed in the context of the 'water quality' component, as well as the 'land and water' and 'wetlands' components.
- <u>Land tenure, effectiveness of national environmental policies and effect of subsidies.</u> This is a key issue and will to a certain extent be addressed through the 'macro/sectoral policies and the environment' (component 1). However, as also noted by the reviewer, aspects on land tenure and related policy matters are best addressed at the national level rather than in a transboundary context

Additional note: Under points 7 and 10 of the STAP review, the reviewer outlines the components included under phase 1 and 2 of the project. This is a slight misunderstanding, since Phase will include components 1, 2, 3, and 5, while Phase 2 will include 1, 2, 3 and 4. This is clarified in the Project Brief under the sub-heading: "A Program Approach".

ANNEX D GOVERNMENT REQUESTS

BURUNDI
D.R. CONGO
EGYPT
Етніоріа
KENYA
RWANDA
SUDAN
TANZANIA
UGANDA

BURUNDI

REPUBLIQUE DU BURUNDI MINISTERE DE L'AMENAGEMENT DU TERRITOIRE ET DE L'ENVIRONNEMENT



INSTITUT NATIONAL POUR L'ENVIRONNEMENT ET LA CONSERVATION DE LA NATURE

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Gitega, le .261.07...1200 7

N. Ref.: 153/DG. 8/INECN/2001

V. Réf. : Objet :

Endossement du "Projet d'Action environnementale transfrontalière du Bassin du Nil A Monsieur le Représentant Résident du PNUD,

à BUJUMBURA .-

Monsieur le Représentant Résident,

Par la présente, j'ai l'honneur de vous annoncer que faisant suite à la demande du Point Focal de l'Initiative du Bassin du Nil, j'endosse au non du Gouvernement du Burundi la proposition de "Projet d'Action Environnementale Transfrontalière du Bassin du Nil" qui est un des 7 projets préparés par le Programme de vision commune au sein de l'INITIATIVE DU BASSIN DU NIL (IBN).

Le Gouvernement du Burundi attache une très grande importance à ce projet dans lequel il s'est investi en participant activement à sa formulation. Il a été préparé dans le cadre de l'Initiative du Bassin du Nil en partenariat avec le PNUD et la Banque Mondiale.

Ce projet s'intègre parfaitement dans les priorités du pays en matière de développement et d'environnement et le Gouvernement du Burundi l'endosse entièrement.

Comme il était demandé au Gouvernement du Burundi d'endosser le Projet avant la Réunion d'Entebbe sur l'Initiative du Bassin du Nil qui aura lieu du 30 au 31 Juillet 2001, je vous prie de bien vouloir en aviser le FEM qui financera le projet ainsi que les autres parties prenantes au Projet.

Veuillez agréer, Monsieur le Représentant Résident, l'expression de ma haute considération.

JETÔME KARIMUMURYANGO

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Bureau de liaison: B.P. 2757 Bujumbura • Tel. (257) 234304 • Fax: (257) 234426 • Email: bozone@echint.com

DEMOCRATIC REPUBLIC OF CONGO

REPUBLIQUE DEMOCRATIQUE DU CONGO
MINISTERE DES AFPAIRES FONCIERES,
ENVIRONNEMENT ET DEVELOPPEMENT TOURISTIQUE

Kinshasa, le 12 mil 2007

La Ministra

N°CAB/AFF, ENV. DT QUAL/SS/2001

Transmis copie pour information à :

- Monsieur le Représentant Résident du Programme des Nations Unies pour le Développement en République Démocratique du Congo
- Monsieur le Secrétaire Général à l'Environnement et Conservation de la Nature
- Monsieur le Directeur-Chef de Service des Ressources en Eau et Membre du Comité Technique Consultatif de l'Initiative du Bassin du Nil (TAC-NIL)
- Monsieur le Point Focal GEF/RDC en République Démocratique du Congo (RDC) (Tous) à <u>Kinshasa/Gombe</u>

A Madame Inger Andersen
Coordonnateur du Partenariat
Partnership Coordinator
VNDP-World Bank International
Waters Partnership
Washington D.C. USA
Tel: 202 458 7405
Fax: 202 522 0367

Concerne : Approbation du Projet d'action environnementale Transfrontalière du bassin du Nil

Madame le Coordonnateur,

Le Gouvernement de la République Démocratique du Congo a le plaisir de vous annoncer que le projet d'action environnementale transfrontalière du bassin du Nil est considéré comme un projet prioritaire et qu'il a participé activement à toutes les étapes de sa formulation.

Adresse : Avenue Papa ILEO (Ex - des cliniques) nº 15 Kinshasa / Gombe - 8.P. 12 348 Kinshasa I Tic : 880 2093 - 880 2394 - Tél. ; 34 390 E-mail ; ICCN@ic.cd En effet, le projet sus-mentionné qui est l'un des 7 projets préparés dans le cadre du Programme de l'Initiative du Bassin du Nil a été élaboré avec la collaboration du Programme des Nations-Unies pour le Développement (PNUD) et de la Banque Mondiale partenaires de l'Initiative du Bassin du Nil (IBN).

Etant donné que ce projet est en accord avec les priorités nationales dans les secteurs de l'environnement et du développement, le Gouvernement de la République Démocratique du Congo donne son approbation pour la mise en œuvre dudit projet.

C'est pourquoi, cette lettre consiste en une demande de soutien adressée au PNUD et à la Banque Mondiale en vue de faciliter la libération du financement du Fonds pour l'Environnement Mondial (FEM) destiné à la mise en œuvre de cette importante initiative.

Veuillez agréer, Madame le Coordonnateur, l'assurance de ma parfaite considération.

Henri MOVA Sakanvi.

EGYPT

Arab Republic of Egypt

Cabinet of Ministers

Egyptian Environmental Affairs Agency

جمهورية مصر الغربية رئاسة مجلس الوزراء جهاز شئون البيئة

Ms. Inger Andersen
Partnership Coordinator
UNDP – World Bank International Waters Partnership
Washington DC

Cairo,12 July 2001

Re: Nile Transboundary Environmental Action Project

Dear Ms. Andersen,

In reference to the Nile Basin Initiative, I am pleased to inform you that the Government of Egypt has completed the review of the aforementioned proposal, which is one of 7 projects that are included within the scope of the NBI's Shared Programme.

Given the high priority that is assigned by the Government of Egypt to this project on its development and environmental agendas, I am pleased to endorse the attached proposal and look forward to our continued collaboration toward its subsequent implementation.

I take this opportunity to acknowledge the effectively coordinated efforts of the World Bank and the UNDP, as partners in the project formulation phase; and on behalf of the participating Egyptian organizations—extend our appreciation to the GEF for supporting this important initiative.

Or. Ibrahan Abd El Geill Chief Executive Officer; and, GEF National Focal Point

c.c. Dr. Mohamed El Ashry, CEO and Chairman GEF Secretariat, Washington DC

> Eng. Ahmed Fahmy, Chairman, Nile Water Sector Ministry of Water Resources and Irrigation

ETHIOPIA



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The Federal Democratic Republic of Ethiopia
ENVIRONMENTAL PROTECTION AUTHORITY

Dr. Mohammed T.El-Ashry Chief Executive Officer & Chairman Global Environment Facility 18181-1 Street, NW Washington, DC 20433 USA Fax: (202) 522 3240/522 3245 27 JUL 2601
Date
TC [H] MWI 2001
Ref. No

This is in reference to the letter of 26 July 2001, written to us by the Ministry of Water Resources. In this letter, the Ministry has requested us to write an endorsement letter for the Project Entitled "Nile Transboundary Environmental Action Project," which is one of the seven projects prepared within the Nile Basin Initiative's Shared Vision Program.

The proposal was formulated in cooperation with UNDP and the World Bank as partners in the Nile Basin Initiative. The Ethiopian Government places high priority on this project and the Environmental Protection Authority has also participated actively in its formulation.

I am writing this letter in my capacity as the General Manager of the Environmental Protection Authority, which is a focal point for the GEF.

The Environmental Protection Authority, therefore, endorses this project proposal.

CC.

Ms. Inger Andreas
Partnership Cocdin
UNDP-World Same International
Waters Partnerships
Washington DC.
Fax 202 522 0367

 Mr. Samuel Nyambi Resident Representative UNDP

Ministry of Water Resources Development

 Ministry of Economic Development & Cooperation Addis Ababa

hAh: 62 55 58-62 hAh 18 61 97 TEL 18 62 02

F. W. P. 12760

10. 450 TELE FAX 251-1-616077

Gebre Egziabber (Dr.)

Singerely Your

KENYA

MINISTRY OF ENVIRONMENT AND NATURAL RESOURCES NATIONAL ENVIRONMENT SECRETARIAT

BRUCE HOUSE STANDARD STREET

P.O. BOX 67839

NAIROBI, KENYA

Felephone: Nairobi 243088, 243839, 247795 Fax: 248851 Email: mec@mbnet.co.ke

When replying please quote

Ref. No. REF: NES/CONF/01/10/Vol.VII

Date 17th January, 2001

Ms. Inger Anderson
Partnership Co-ordinator
UNDP World Bank
International Waters Partnership
Washington DC
Fax 020 522 0367
E-Mail inger.andersen@undp.org or iandersonl@worldbank.org

ENVIRONMENTAL ACTION PROJECT"

RE: ENDORESMENT LETTER FOR THE "NILE TRANSBOUNDARY

The National GEF Operational Focal Point (Kenya) has reviewed the attached proposal entitled "Nile Transboundary Environmental Action Project", which is one of the 7 projects prepared within the Nile Basin Initiative's shared vision program. The government places high priority on this project. This proposal was formulated in co-operation with UNDP and World Bank as partners in the Nile Basin Initiative. The proposal falls within the national development and environment priorities and the National GEF Operational Focal Point (Kenya) therefore fully endorses it.

The purpose of this letter therefore, is to request the support of UNDP and World to facilitate the release of GEF funding for this important initiative.

D. N. Kinyanjul Acting Director NES

FOR: PERMANENT SECRETARY

C.C. The Resident Representative

UNDP

P O Box 30552

NAIROBI (ATTN: MR. C. G. GAKAHU)

Country Representative World Bank (Kenya) Hill Park Building Upper Hill P O Box 30577

NAIROBI (ATTN: DR. R. KAGUAMBA)

RWANDA

REPUBLIC OF RWANDA



Kigali . 29 JUIN 2001 N° 9 4 5 /13/02/2001

MINISTRY OF ENERGY, WATER AND NATURAL RESOURCES

To: Ms Inger Andersen Partnership Coordinator UNDP-World Bank International Waters Partnership Washington DC Fax :202 522 0367

With reference to our letter n° 868/13/02/2001 of Jun 22 and 2001 proposing the project "Applied training for financing", I would like to inform you that it was a mistake.

In this place we send to you the correct project as it was agreed recently.

The Government of Rwanda has reviewed the attached proposal entitled " Nile Transboundary Environmental Action Project", which is one of 7 projects prepared within the Nile Basin Initiative's Shared Vision Program.

The Government places high priority on this project and has participated actively in its formulation.

This proposal was formulated in cooperation with UNDP and the World Bank as partners in the Nile Basin Initiative.

The proposal falls within the national development and environment priorities and the Government of Rwanda is therefore pleased to endorse the proposal.

The purpose of this letter, therefore, is to request the support of UNDP and the World Bank to facilitate the release of GEF funding for this important initiative.

MINISTER OF ENERGY, WATER AND NATURAL RESOURCES

NSANZUMUGANWA Emmanuel Secrétaire Général

B.P. 447 KIGALI

Tél.: (250) 511610 (250) 87333 Fax:(250) 83706 (250) 87333

SUDAN

ہے اقدار حن ارحے جھوریۃ السودان The Republic of Sudan

MINISTRY OF INTERNATIONAL CO.OPERATION

MINISTRY OF INTERNATIONAL CO-OPERATION

Tet:772169 -Fax:780115 - Telex:324-224 (Ermar) RO.Box: 2092(thortour)



وزارة التعاون الحولي

ت: ۷۷۲۱۱۹ - فاکن:۷۸۰۱۱۵ - نلکن:۳۲۶-۳۲۶ (آصار) صعب:۲۰۹۲ ففرطوم

Ref: MIC/

Date: 2 July, 2001

The Chief Executive Officer
The Global Environmental Faculty
1818 H Street NW
Washington D.C
U.S.A.

Attention: Mr. Mohamed El-Asgary

Dear sir,

Dero: 1-6-441 2001

File: Mile Blood Book A

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SORR (O)

Action Unit: Chevarante Sha

PIS.

SPK

COLV.

Subject: Nile River Basin-Transboundar

Reference is made to the above mentioned subject.

As you know, the Nile River is one of the world's greatest riches and is of inestimable value for its peoples-a resource which needs to be held in trust for future generations. Sustainable development and management of the Nile Basin presents a great challenge and there remain many opportunities for growth and development for the future, bringing the promise of regional harmony and economic development.

1 wish to endorse the Government of Sudan's support to the above mentioned subject for GEF Fund, I therefore support the implementation of this programme in Sudan.

Thank you for your usual cooperation.

Sineerely yours,

Yassin Eisa Mohamed

GEF Focal Point For/ Undersecretary,

Ministry of International Cooperation

C.C. Resident Representative, UNDP Office, Khartoum.

TANZANIA

THE UNITED REPUBLIC OF TANZANIA

Telegrams: "Makamu", Telephone: 113857. Fax: 113856, In reply please quote:

Vice-President's Office, P.O. Box 5380, Dar es Salaam, 'Tanzania.

20 June, 2001

Our Ref. No. CAB 78/200/01...

To: Ms. Inger Andersen Partnership Coordinator

UNDP-World Bank International

Waters Partnership Washington DC Fax: 202 522 0367

The Government of Tanzania has reviewed the attached proposal entitled "Nile Transboundary Environmental Action Project", which is one of 7 projects prepared within the Nile Basin Initiative's shared Vision Program. The Government places high priority on this project and has participated actively in its formulation.

This proposal was formulated in cooperation with UNDP and the World Bank as partners in the Nile Basin Initiative. The proposal falls within the national development and environment priorities and the Government of Tanzania is therefore pleased to endorse the proposal.

The purpose of this letter, therefore, is to request the support of UNDP and the World Bank to facilitate the release of GEF funding for this important initiative.

Yours sincerely,

Abubakar R.M.S. Rajabu PERMANENT SECRETARY

cc: Mr. Peter Ngumbullu Permanent Secretary Ministry of Finance DAR ES SALAAM

" Mr. James W. Adams Country Director World Bank DAR ES SALAAM

" Ms. Sally-Fegan-Wayles Resident Representative UNDP DAR ES SALAAM

UGANDA

Telephones: Kampala 234700/5 (6 lines)

235051/4(4 lines) Kampala 230163 61170

Telex: 61170 Telegrams: "FINSEC" In any correspondence on

this subject please quote No ISS/56/255/112



THE REPUBLIC OF UGANDA

Ministry of Finance, Planning and Economic Development, P.O. Box 8147, Kampala. Uganda.

26th July 2001.

Fax: 202 522 0367

Ms. Inger Anderson,
Partnership Coordinator,
UNDP – World Bank International Waters Partnership
Washington DC.

Dear Madam,

RE: REQUEST FOR GEF FUNDING FOR THE NILE TRANSBOUNDARY ENVIRONMENT ACTION UNDER THE NILE BASIN INITIATIVE.

The Government of Uganda has reviewed the attached proposal "Nile Transboundary Environment Action Project", which is one of the seven projects prepared within the Nile Basin Initiative's Shared Vision Program. The proposal has been developed with the active participation of the Government, and formulated in cooperation with UNDP and the World Bank as partners in the Nile Basin Initiative. The Government places high priority on this project, which will address some of the key Ugandan concerns: draining of wetlands, deforestation, soil erosion, pollution of water bodies. The project, therefore falls within the national development strategy, and the country's environmental priorities. The Government of Uganda is pleased to endorse the proposal.

The purpose of this letter is to request the support to UNDP and the World Bank to facilitate the release of GEF funds for this important initiative.

Yours sincerely,

For: PERMANENT SECRETARY/SECRETARY TO THE TREASURY

c.c. The Permanent Secretary, Ministry of Water, Lands and Environment, KAMPALA.

c.c. The Representative, UNDP, KAMPALA.

ANNEX E

COUNCIL OF MINISTERS OF WATER AFFAIRS OF THE NILE BASIN STATES POLICY GUIDELINES FOR THE NILE RIVER BASIN STRATEGIC ACTION PROGRAM¹

1. Introduction

The Nile is one of the world's greatest riches and is of inestimable value for its peoples—a resource which needs to be held in trust for future generations. Sustainable development and management of the Nile Basin presents a great challenge and there remain many opportunities for growth and development for the future, bringing the promise of regional harmony and economic development. At the heart of this challenge is the imperative to eradicate poverty. Without action today, the riparian countries will face many problems including famine, extreme poverty, environmental degradation and rapid population growth. This is a clear challenge for the peoples of the Basin and calls for vision and leadership.

The purpose of this brief document is to set out policy guidelines for taking the strategic action which is necessary to realize the potential of the Nile for the good of all. The time has come to move from planning to action.

2. OBJECTIVES

The objectives are:

- To develop the water resources of the Nile Basin in a sustainable and equitable way to ensure prosperity, security and peace for all its peoples.
- To ensure efficient water management and the optimal use of the resources.
- To ensure cooperation and joint action between the riparian countries, seeking win-win gains.
- To target poverty eradication and promote economic integration.

• To ensure that the program results in a move from planning to action.

3. THE SHARED VISION

To achieve sustainable socio-economic development through the equitable utilization of, and benefit from, the common Nile Basin water resources.

Cooperative action:

An important approach to cooperative action within a basin-wide framework is the principle of subsidiarity: to take decisions at the lowest appropriate level, to facilitate the development of real action on the ground.

4. THE STRATEGIC ACTION PROGRAM

The strategic action program comprises two complementary sub-programs. These promote the Shared Vision and realize the vision through action on the ground – see Figure 1.

While the Shared Vision is being developed and promoted at the basin-wide level, building commitment and clear goals, it needs to filter down to the country and local level. However, the Shared Vision cannot stand alone; it has to be nourished and fed by actions on the ground—actions which meet the needs of the people and build trust and confidence amongst the riparian countries. Action on the ground will take place at local, national and sub-basin levels, and will integrate upwards within a basin-wide framework.

5. SHARED VISION PROGRAM

The main task of the Shared Vision Program will be the creation of an enabling environment for investments and action on the ground, within a basin-wide framework. This Program will promote the Shared Vision through a limited, but effective, set of basin-wide activities and projects.

¹ Policy Guidelines for the Nile River Basin Strategic Action Program, Council of Ministers of Water Affairs of the Nile Basin states, February 1999

The Shared Vision Program illustrated in Figure 2 (and further explained in Annex 1), comprises 5 broad themes, as follows:

- Cooperative Framework (Project D3, ongoing) [B].
- Confidence building and stakeholder involvement [C].
- Socio-economic, environmental and sectoral analyses [D].
- Development and investment planning [E].
- Applied training [F].

The Shared Vision (A) will be underpinned by a cooperative framework (B). The Cooperative ongoing Framework Project D3, supported by UNDP, is building such a regional framework. **Supporting** this "roof," are four major basin-wide tasks (C-F) which are the "pillars" of a basin-wide Shared Vision Program. Other activities will be added as they are needed and agreed upon. All activities within these tasks have a major capacity building component and contribute to human resources development within the Basin—this provides the "foundation" of the proposed program (G).

Figure 1:Strategic Action Program for the Nile

- 1. The "Shared Vision Program" comprises a limited range of essential but effective activities to create a coordination mechanism and an "enabling environment" for the implementation of the Shared Vision through action on the ground.
- 2. "Subsidiary Action Programs" plan and implement action on the ground at the lowest appropriate level, taking into account benefits and effects of planned activities on other countries.

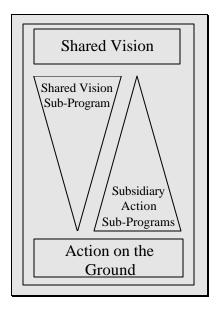


Figure 2: A Basin-wide Shared Vision Program

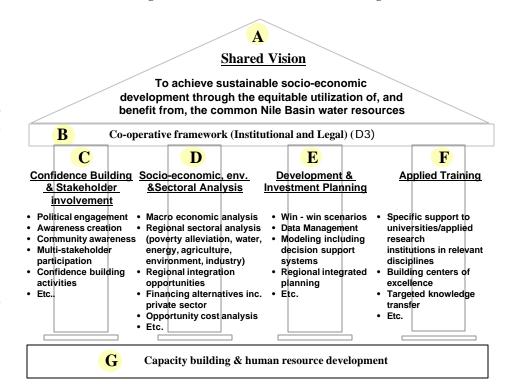


Figure 3 outlines the project cycle for the Shared Vision Program.

Figure 3: Shared Vision Program Project Cycle

B
Preparation of consultant TORs

B
Detailed project preparation

B
Preparation of CG documentation

B
CG process: information to NILE-COM & mobilization of funding

B
Implementation

6. SUBSIDIARY ACTION PROGRAMS

Within the basin-wide framework, Subsidiary Action Programs will comprise actual development projects at sub-basin level, involving two or more countries. This will allow the move from planning to action. While local and national governments will address what needs to be done at the local and national levels, the challenge of regional cooperation is to address development opportunities with transboundary implications.

Guidelines for subsidiary action programs

Common understanding has been reached on the following guidelines for the implementation of Subsidiary Action Programs, pending the establishment of the Cooperative Framework.

1. Action on the ground needs to be planned at the lowest appropriate level (the principle of

- subsidiarity). Given the hydrological conditions of the Nile Basin, action on the ground will mainly be planned and implemented at a sub-basin level.
- 2. The appropriate planning level needs to involve all those who will be affected. Countries involved will be a function of the location, type, and scale of activity, as well as potential upstream and downstream impacts.
- 3. The role of the overall (basin-wide) framework is to ensure appropriate consultation and involvement of those affected on the one hand, and subsidiarity on the other.
- 4. Subsidiary Action Programs will build on principles of equitable utilization, no significant harm and cooperation.
- 5. The range of development project options (see below) will vary depending on the nature of the needs and opportunities in the different geographical areas.
- Investigations will seek solutions both that have benefits for all involved and distribute benefits, costs, and risks equitably as well as use resources efficiently and protect the environment.
- 7. Bundling several projects into a program provides the opportunity to counterbalance the positive and negative impacts of different projects, such that the cumulative sum of impacts within the program optimizes benefits for all parties involved.

Some of the types of projects which could be bundled into Subsidiary Action Programs are as follows:

I. Generic Water Resources Management Project Possibilities

- Water Supply & Sanitation
- Irrigation & Drainage Development
- Fisheries Development
- Hydropower Development & Pooling
- Watershed Management
- Sustainable Management of Wetlands & Biodiversity Conservation
- Sustainable Management of Lakes & linked Wetland Systems
- River Regulation
- Flood Management
- Desertification Control
- Water Hyacinth & Weeds Control
- Pollution Control & Water Quality Management
- Water Use Efficiency Improvements

II. Other Related Joint Development Project Possibilities

Infrastructure:

- Regional energy networks, including power interconnection and gas pipelines
- Telecommunication development
- Regional transport, including: railway and road networks; river and marine navigation; aviation

Trade and Industry:

- Promotion of trade (including border trade)
- Industrial development
- Regional tourism development
- Promotion of private investment and joint ventures
- Marketing and storage of agricultural products
- Forest crop harvesting

Health, environment, other:

- Malaria and other endemic diseases control
- Protection of wildlife
- Environmental management
- Disaster forecasting and management

The program cycle for Subsidiary Action Program development is outlined in Figure 4.

Figure 4: Subsidiary Action Program Cycle

Establishment of working groups

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Facilitated prioritization process & formulation of priority Subsidiary Action Programs (TOR)

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Preliminary analysis (project fiches)

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CG process, information to NILE-COM through Nile-TAC & mobilization of funding

ß

Pre-feasibility

ß

Feasibility/final design

ß

Funding & implementation

7. RIPARIAN CONSULTATION PROCESS

Maintaining riparian dialogue

The Council of Ministers of Water Affairs of the Nile Basin (NILE-COM) is the main policy and guidance forum for Nile Basin cooperation. The NILE-COM has established a Technical Advisory Committee (Nile-TAC) as an inclusive, transitional institutional mechanism to coordinate joint activities, pending the successful completion of the Cooperative Framework Project D3. The Nile-TAC will establish working groups to undertake specific tasks (see below). High priority will continue to be placed on strengthening the process of consultation in order to build trust and confidence. Other fora, such as the Nile 2002 series of conferences (supported by CIDA) will continue to be valuable mechanisms for the exchange of views.

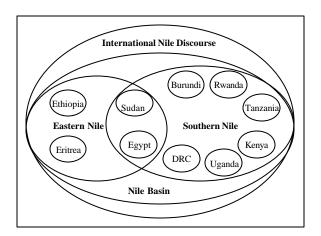
Shared Vision Program preparation

The Nile-TAC will be responsible to the NILE-COM for the preparation of the Shared Vision Program, which will be coordinated and implemented at the basin-wide level.

Subsidiary Action Program identification

To help with identifying subsidiary action programs, Nile-TAC will promote the establishment of working groups of concerned countries. The Subsidiary Action Programs that will evolve will be within the Shared Vision and its framework developed at the basin-wide level. The sole responsibility for these programs will then rest with the involved riparians—with all affected countries being able to participate. Figure 5 illustrates how country activities will take place within possible sub-basin frameworks (with many smaller sub-basins within the two larger sub-basins illustrated), which themselves will be within a basin-wide framework. This basin-wide framework will itself be within an "international discourse" to promote international support for sustainable Nile water development and management.

Figure 5: An Illustration of Possible Levels of Nile Cooperation



8. CONSULTATIVE GROUP (CG)

The NILE-COM has requested the World Bank and its partners to organize and host a consultative group - the International Consortium for Cooperation on the Nile (ICCON). The objective of the ICCON is to seek coordinated and transparent

support for cooperative water resources development and management and other related projects in the Nile Basin. Within this forum, Nile riparian countries will seek funding pledges for projects from bilateral, multilateral and possibly private funding agencies.

9. CONCLUSIONS

On the basis of the Shared Vision for the Nile Basin and the arrangements outlined in this document, the Council of Ministers is committed to foster cooperation and *sustainable development of the River Nile for the benefit of all*.

ANNEX F STAKEHOLDER INVOLVEMENT IN PROJECT FORMULATION

The preparation of this project, as well as the other projects within the Shared Vision Program project portfolio, was directed by the institutions of the NBI and involved the active participation of technical experts from across the Basin. This complex, multi-country, multi-sectoral process, which is described below, demonstrates riparian ownership and commitment to successful project implementation.

Evolution of the Shared Vision Program: A coordinated basin-wide program

The Shared Vision Program evolved from four thematic areas, or pillars, as described in the NBI policy guidelines for a coordinated program of seven basin-wide projects, between February 1999 and December 2000. The process, as summarized in Table 2, was executed and coordinated by the Nile-Sec, involved active participation of and guidance from the Nile-TAC, and received formal endorsement by the Nile-COM at critical milestones.

The final portfolio of Shared Vision Program projects includes:

- (a) Environmental analysis and management (this proposal).
- (b) Promoting power trade in the Nile Basin.
- (c) Efficient use of water for agriculture.
- (d) Water resources planning and management.
- (e) Confidence building and stakeholder involvement.
- (f) Applied training.
- (g) Socio-economic development and benefit-sharing.

Four of these are sectoral projects—focusing on environment, power, agriculture, and water resources management—and three are cross-cutting projects related to confidence building and stakeholder involvement, training, and macro-economics. The projects build on each other, and together will serve to provide an enabling environment for cooperative development.

Table 1. Preparation of the Shared Vision Program

Date	Meeting		Key Outcomes
	Type	Location	
July 1998	Nile-TAC	Dar es Salaam, Tanzania	Drafting of Policy Guide lines that define the SVP and 4 major thematic areas of the program.
Feb 1999	Nile-COM and Nile-TAC	Dar es Salaam, Tanzania	Adoption of the NBI Policy Guidelines, and instruction by Nile-COM to prepare a portfolio of priority SVP projects for ICCON.
May 1999	SVP Planning Meeting	Sodere, Ethiopia	Preliminary list of priority projects, including project goals & objectives, based on consultation and brainstorming by Nile-TAC members and 2 additional sectoral experts from each country.
May 1999	Nile-COM and Nile-TAC	Addis Ababa, Ethiopia	Approval of list of priority projects and project preparation process. Nile-COM endorses GEF PDF-B project for submission to GEF Secretariat.
Sept 1999	Nile-TAC	Entebbe, Uganda	Based on output from Sodere Planning Meeting, development of Project Concept Notes for 7 priority projects and approval of a detailed project preparation process and schedule for each project.
Nov, 1999	PDF B Review meeting	Washington DC	GEF SEC approved PDF B funding.
Dec 1999	Project Prepara- tion 1	Entebbe, Uganda	Review and further development of Draft Project Concept Notes/Documents by Working Groups (WG). For each project, the WGs included a Nile-TAC member and National Expert(s) from each country. A total of 8 National Experts were involved from each country. Each project was assisted by a Lead Consultant.
Dec 1999 - Nov 2000	National Analysis & Consult ations	(basin-wide) Nile Basin countries	Lead Consultants together with National Experts prepare Draft Project Documents. Depending on the project and country, National Experts provided inputs through preparation of National Reports, country consultations and/or country visits by Lead Consultants.
Jan 2000	Nile-TAC	Entebbe, Uganda	Review of progress in project preparation and further refinement of Project Concepts, as warranted.
Jan – Apr 2000	National consultations	In all Basin countries	GEF PDF-B funds facilitated the holding of national consultation work- shops in each of the Nile riparian countries. This allowed for further stake- holder involvement and consultation.
Mar 2000	Environment Experts	Entebbe, Uganda	Review of draft National Reports. Agreements of common transboundary priorities.
Mar 2000	Nile-TAC	Delft, the Netherlands	Review of progress in project preparation and further refinement of project concepts/design, as warranted.
July 2000	Project Preparation 2	Addis Ababa, Ethiopia	Review and further development of detailed Draft Project Documents by WGs.
Aug 2000	Nile-COM and Nile-TAC	Khartoum, Sudan	Approval of SVP Project Portfolio and updated Project Summaries.
Oct 2000	Nile-TAC	Via electronic mail	Review of Final Project Documents.
Feb 2001	Nile-COM and Nile-TAC	Khartoum, Sudan	Final approval of SVP Project Portfolio and Project Documents.

The Transboundary Environmental Analysis

Highly participatory. The Transboundary Environmental Analysis (TEA) was prepared through a highly participatory and transparent process to ensure maximum consultation and involvement, which in turn can translate into maximum relevance, ownership and commitment.

Political commitment. The decision to carry out a process of environmental analysis was taken by the Nile Basin Initiative's Council of Ministers for Water Affairs, based on the recommendations by the Nile-TAC at meetings held in Addis Ababa in May 1999, which prepared the strategic guidance for the overall Shared Vision Program.

National Experts. During October – November 1999, the national Ministries of Water Affairs consulted with their national environment authorities for the nomination of a National Environment Expert from each of the nine countries who would serve as National Expert and Drafting Group member.

Initiation of Transboundary Analysis. The Transboundary Environmental Analysis process was formally launched with a one-week workshop in December 1999 at the Nile Basin Secretariat in Entebbe, Uganda. During this workshop, partic ipants from each of the Nile countries studied GEF guidelines and operations, and started initial identification of common Nile-related transboundary environmental priorities. The National Experts participated in this workshop, together with UNDP and World Bank staff. Members of the TAC participated in several of the workshop sessions. One of the key workshop outputs was a preliminary characterization of the major basin-wide environmental threats by the National Experts. The workshop participants also agreed on a basic approach and methodology for the process ahead; decided to hold broad national consultations in each of the nine countries to ensure that the report would emerge reflecting national concerns and priorities, and agreed on the format for the National Report which each National Expert would produce; and, finally, committed to a challenging work plan for the following six months. For the riparian countries, this workshop began the critical process of working together on shared environmental concerns at an operational level, complementing the commitment to political cooperation that had already been established through the Nile Basin Initiative.

National consultations. The national consultation process varied between countries, reflecting national traditions and preferences as well as the nature of individual Nile Basin issues within each country. In each case the National Experts started by identifying the major stakeholder groups. The national ministries or departments responsible for water resources and for environment were usually facilitators of the consultation as well as being important stakeholders themselves. Other key stakeholders included national government agencies responsible for natural resources and for planning, local government agencies, mational and local NGOs, universities and other research institutions, participants in related projects and programs, and selected individual experts (see table below for a list of stakeholders involved in the mational consultations).

Broad participation. At least one stakeholder workshop was held in each riparian country. All of the workshops were led by the national Nile-TAC representative and many had ministerial-level participation. The workshops served the dual purpose of explaining the relatively complex context for and background to the consultations, including making sure that the Nile Basin Initiative itself was well understood, as well as soliciting inputs and suggestions on environmental priorities. In some cases workshop participants were able to respond to early drafts of the National Reports. In all cases the workshop participants were encouraged to contact the National Experts directly to request information about progress or to provide further inputs. In countries where the national capital is outside the Nile Basin, the National Experts traveled to the Nile Basin region of their countries for consultations. In some cases additional workshops or briefings were conducted for NGO groups.

Coordination with environmental planning initiatives. All of the riparian countries had previously undertaken comparable national environmental planning processes aimed at diagnosing and prioritizing environmental problems. These include national environmental action plans, national conservation strategies, national desertification action plans, national biodiversity strategies and action plans, tropical forestry action plans, etc. Many of these processes had themselves been based on broad consultations. The findings from these planning frameworks were reflected in the National Reports.

National Reports. The National Experts prepared their National Reports to reflect the results of the consultations as well as prior analytical work done in their respective countries. These reports in draft form were made available to and reviewed by the stakeholders who had participated in the consultations. By March 2000, the National Reports were received from each of the nine countries and a second workshop for the National Experts was therefore held in Entebbe. The purpose of this workshop was to review the environmental analysis in each of the reports and begin to identify common themes and priorities, around which joint and common environmental management action could be taken.

Consolidation of findings. Following the March 2000 workshop, a draft Consolidated Report was produced and shared with the Nile-TAC members and the National Experts. This was followed by a final workshop held in Addis Ababa in July 2000 during which the Consolidated Report and the project action components were carefully reviewed and revised to fully reflect the national and basin-wide prior ities.

Throughout the process, policy guidance was provided by the National Nile-TAC members and close interaction took place between the Nile-TAC members and the National Experts. Moreover, the Nile-Sec provided administrative and logistical support and facilitated links to related NBI activities while UNDP and World Bank staff provided technical guidance. Coordination between the countries was provided by an international Lead Consultant who also prepared the Consolidated Report based on the national findings and recommendations. The core funding for these activities was provided by the Global Environment Facility. Additional funding was provided by UNDP and the World Bank.

A parallel set of activities supported by USAID involved a scoping study preparing a multi-country technical background paper based on readily accessible and public domain information. This activity was carried out by a US-based consulting team that consulted with stakeholders in Burundi, D.R. Congo, Egypt, Ethiopia, Kenya, Rwanda, Tanzania and Uganda. The National Experts worked closely with the consulting teams during their country visits. The National Experts reflected some of the results of this scoping study in the consolidated Transboundary Environmental Analysis report.

The impressive collaboration between the riparian countries' Experts laid a promising foundation for the detailed design and implementation of the transboundary project activities proposed as a result of the Transboundary Environmental Analysis.

Table 2. Stakeholders consulted during Transboundary Analysis and Project Formulation Process

COUNTRY STAKEHOLDER

BURUNDI Agri-Consult

Département de l'Environnement

Deuxième Vice-Présidence de la République Food & Agriculture Organisation (FAO)

Générale de l'Aménagement du Territoire et de l'Aménagement - Génie Rural (Gestion des Marais)

Institut Géographique du Burundi (IGEBU) – Cartographie Institut Géographique du Burundi (IGEBU) – Climatologie

Institut Géographique du Burundi (IGEBU)

Institut National Pour l'Environnement et la Conservation de la Nature (INECN) - Département Technique

Institut National Pour l'Environnement et la Conservation de la Nature (INECN)

Ministère de Développement Rural et de l'Artisanat

Ministère de l'Agriculture et de l'Elevage

Ministère de l'Agriculture et de l'Elevage - Département des Pêches et Pisciculture

Ministère de l'Aménagement du Territoire et de l'Environnement

Ministère de l'Energie et des Mines - Géologie et Mines

Ministère de la Santé Publique - Propreté Environnement Santé (PES)

Programme des Nations unies pour le Développement (PNUD)

Universitè du Burundi

D.R. CONGO Agence Nationale de Metéorologie et de Telédétection par Satellite (METTELSAT)

Bureau d'Etudes de l'Association pour le Développement de Beni et Lubero (ADEBEL)

Bureau Dendrologi e

Cellule Juridique au Secrétariat Général de l'Environnement – Conservation de la Nature, Pêche et Forêts (SG – ECNPF)

Centre National d'Information Environnementale (CNIE)

Comité Interministériel de Coordination en matière d'environnement

Comité National d'Action de l"Eau et de l'Assainissement (CNAEA)

Comité National MAB (Man and Biosphere)

Direction d'Etudes et Planification

Direction de Pêche et Ressources en Eau (DPRE)

Direction des Etablissements Humains et Protection Environnementale

Institut Géographique de Congo

Institut Supérieur des Techniques Appliqués (ISTA)

Ministère de l'Agricultre, Elevage et Développement Rural

Ministère de l'Intérieur et des Affairs Coutumières

Ministère du Plan et Consultant national chargé du volet utilisation efficace de l'eau pour l'agriculture

National du Projet - FAO

Notabilité de la Province du Nord - Kivu

Organisations autogérées et Organisations non-gouvernementales (ONGS)

Point Focal – Lutte contre la Désertification

Programme Hydrologique International (PHI)

Régie de Distribution d'eau (REGIDESO)

Régie des Voies Fluviales (RVF)

Services Généraux

Service National pour la Promotion et le Développement de la Pêche (SENADEP)

Société Nationale d'Electricité (SNEL)

Système d'information Géographique (SIG)

EGYPT

Ain Shams University - Engineering Department

Ain Shams University – Environmental Institute

Arabian Youth and Environment Office

Cairo University – Engineering Department

Climate Change and Environmental Research Institute

Drainage Research Institute

Egypt Youth for Development and Environment

Egyptian Environment Federation

Egyptian Environmental Affairs Agency - Central Department for Information and Environmental Awareness

Egyptian Environmental Affairs Agency - Environment Quality Department

Egyptian Environmental Affairs Agency - Natural Protectorate Department

Groundwater Research Institute

Ministry of Agriculture

Ministry of State for Environmental Affairs

Ministry of Water Resources and Irrigation

Ministry of Water Resources and Irrigation - National Water Quality and Availability Project

National Water Research Center

Water Resources Master Plan Project

ETHIOPIA

Agri-Service Ethiopia (ASE)

Bureau of Agriculture

Bureau of Economic Development and Planning

Bureau of Water Resources and Energy

CARE – Ethiopia

Christian Relief and Development Agency (CRDA)

CISP

Conservation Strategy for Ethiopia

Ethiopia Environmental NGO (EENGO)

Environmental Protection Authority

Ethiopian Aid

Ethiopian Aid

Ethiopian Wildlife and Natural History Society (EWNHS)

Ethiopian Wildlife Conservation Organization

HNDEE (Oromo Grass-roots Development Initiative)

Institute for Biodiversity Conservation and Research (IBCR)

Japan International Volunteer Center (JIVC)

Ministry of Agriculture

Ministry of Mines and Energy

Ministry of Planning and Economic Development

Ministry of Transportation and Communication

Ministry of Water Resources

Natural Resources Management in Amhara National Regional Government

OXFAM-Great Britain

Regional Conservation Coordinating Committee

Soil Conservation Program-Sweden

United Nations Industrial Development Organization (UNIDO)

KENYA Africa Water Network

Care Kenya

Department of Civil Engineering - University of Nairobi

East African Cross-Border Biodiversity Project

Forest Department

International Centre for Insect Physiology and Ecology (ICIPE) - Mbita Point Station

International Network for Water and Sanitation (NETWAS)

Irrigation and Drainage Branch - Ministry of Agriculture and Rural Development

IUCN – East African Regional Office

Kenya Association of Manufacturers

Kenya Marine Fisheries Research Institute (KMFRI) – Kisumu

Kenya Water Institute

Kenya Wildlife Society (KWS)

Kipsaina Youth Conservation Group

Kisumu Municipal Council

Lake Basin Development Authority

Lake Victoria Environment Management Project

Maseno University College

MENR - Uasin Gishu District

Ministry of Environment and Natural Resources

Ministry of Environment and Natural Resources (MENR) - Suba District

Ministry of Finance and Planning

Ministry of Local Authorities

Moi University

National Environment Secretariat

National Irrigation Board

National Museums of Kenya

Osienala Kisumu

Pan-African Paper Mills

Water and Sanitation Department (WSD) - Kisumu Municipal Council

Water Development Department

Wetlands Program

World Wild Fund for Nature (WWF)

RWANDA Association pour la Recherche en Aménagement du Territoire (ARAMET)

CESTRAR

Division Aéronautique au Ministère des Travaux Publics, du Transport et des Communications (MINITRACO)

ELECTROGAZ

Institut de Recherche Scientifique (l'IRST)

Institut des Science Agronomiques de Rwanda (l'ISAR)

Ministère de l'Agriculture, de l'Elevage et des Forêts (MINAGRI)

Ministère de l'Eau et des Ressources Naturelles (MINERENA)

Ministère de l'Energie

Ministère de la Justice (MINIJUST)

Ministère des Terres, de la Réinstallation et de la Protection de l'Environnement (MINITERE)

Ministère du Commerce, de l'Industrie et du Tourisme (MINICOM)

National Office for Population (ONAPO)

Office Rwandais du Tourisme et des Parcs Nationaux (ORTPN)

United Nations Development Programme (UNDP)

United Nations Children's Fund (UNICEF)

SUDAN Animal Resources Research Corporation

Arab Organization for Agricultural Development

Environmentalist Society

Farmers Union

Fisheries Research Center

Food & Agriculture Organization (FAO)

Geologist Trade Union

Higher Council of Civil Defense

Higher Council of Environment and Natural Resources

Hydraulic Research Station Institute of Disaster Management

Institute of Environment and Natural Resource Research

Institute of Environmental Studies

Juba University - College of Environment and Natural Resource Studies

Ministry of Agriculture and Forestry Ministry of Animal Resources Ministry of Economic Planning

Ministry of International Cooperation and Investment

Ministry of Irrigation and Water Resources

Ministry of Justice

National Forest Corporation Save the Children – Great Britain

Sudanese Environmental Conservation Society

Union of Engineers

UNESCO National Committee

University of Khartoum - College of Agriculture

Wildlife Department Wildlife Research Center

World Health Organization (WHO)

TANZANIA Environment Division of the Vice President's Office

Green Shinyanga Group

Health through Sanitation and Water Project - Mwanza

Journalist Environmental Association (JET) Lake Victoria Environment Management Project

Mwanza Town Council Directors Office

Ministry of Agriculture and Co-operatives - Crop and Irrigation Division

Ministry of Communication and Transport

Ministry of Energy and Minerals

Ministry of Health

Ministry of Lands - Fisheries Division

Ministry of Local Government

Ministry of Natural Resources and Tourism

Ministry of Water

National Environment Management Council National Land Use and Planning Commission

Tanzania Association of Non-Governmental Organizations (TANGO) Tanzania Traditional Energy and Environment Organization (TATEDO)

United Nations Development Programme

University of Dar es Salaam

Urban Water Supply and Sewerage Authority – Mwanza

Wildlife Conservation Society (WCS)

World Wildlife Fund (WWF)

UGANDA Action for Rural Development

Auxfound Environmental Awareness District Environment Office of Jinja District Environment Office of Mukono

Environment Protection and Economic Development Project (EPED)

Friends of Wetlands

Greenwatch

IUCN – Kampala

Jinja District

Jinja Municipal Council

Jinja Urban Wetlands

Kakuto Fish Farming

Kampala City Council

Lugazi Peoples Enterprise Development

Makerere University Institute of Environment and Natural Resources

Ministry of Agriculture, Animal Industry and Fisheries

Ministry of Agriculture, Animal Industry, and Fisheries - Agriculture Department

Ministry of Energy and Mineral Development

Ministry of Energy and Mineral Development - Directorate of Energy

Ministry of Health

Ministry of Tourism Trade and Industry

Ministry of Water, Land and Environment

Ministry of Water, Land, and Environment - Directorate of Water Development

Ministry of Water, Land, and Environment - Forestry Department

Ministry of Works, Transport and Communications

Mukono District

National Association of Professional Environmentalists

National Environment Management Authority (NEMA)

National Strategy for the Advancement of Rural Women in Uganda

National Wetlands Program

NEMA - GEF Biodiversity Conservation Project

Uganda Electricity Board

Uganda Environmental Protection Forum

Uganda Investment Authority

Uganda National NGO Forum

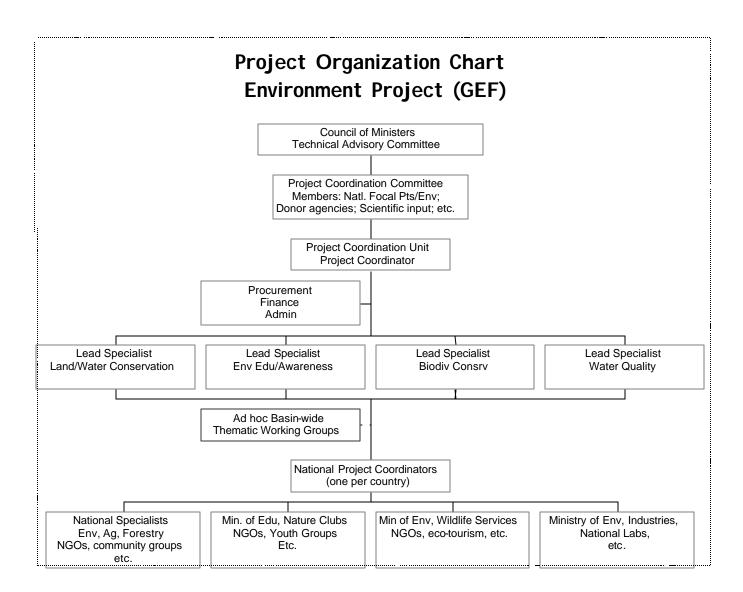
Uganda Neem Movement

Uganda Wetlands and Resource Conservation Association

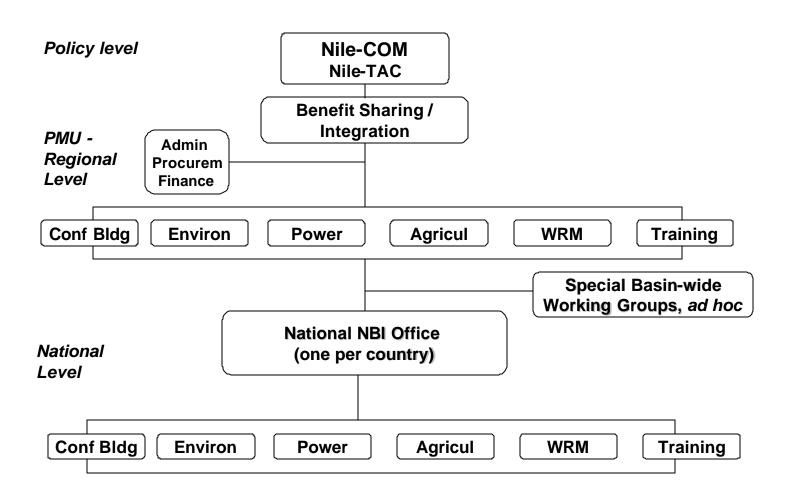
Uganda Wildlife Authority

Uganda Women Tree Planting Movement

ANNEX G ORGANIZATIONAL CHART TRANSBOUNDARY ENVIRONMENT PROJECT



ANNEX H ORGANIZATIONAL CHART - SHARED VISION PROGRAM



ANNEX I NILE BASIN-WIDE ENVIRONMENTAL THREATS

ISSUE	SYMPTOMS/ IMPACTS	IMMEDIATE CAUSES	ROOT CAUSES	EXTENT ¹	SEVERITY		
1. Land	1. Land Degradation						
A.Deforestation	Decreasing veget ation/forest cover; loss of density and diversity Deterioration of watershed: high run-off associated with increased erosion leading to loss of fertile soils and sedimentation and siltation downstream Energy crisis associated with price increased availability of fuelwood and charcoal Large scale habitat destruction and loss of wildlife in terms of numbers and biodiversity; progressive disappearance of National Parks Variability in local climate and rainfall patterns	Land use conversion due to increasing need for arable land and grazing areas; slash and burn practices for land clearing and shifting cultivation Uncontrolled logging for fuelwood and charcoal production (especially with increased fuelwood prices), construction material and local industry fuel needs Unsustainable and inefficient resource use (e.g. overgrazing, extensive cultivation on steep hillslopes and uncontrolled logging) Lack of local planting/replanting Human migration and resettlement; encroachment into forested areas	Poverty and population pressure leading to pressure on resources; absence of alternative livelihoods and weak capacity to increase unit agricultural production Insufficient energy alternatives to fuelwood Unsustainable land use practices perpetuated through weak policies and laws and failure to enforce laws and regulations; lack of forest protection Insufficient awareness and knowledge of sustainable land use practices and effects of deforestation Land tenure system leading to allocation and use of marginal lands and lack of incentives for sustainable land use practices Large number of refugees and resettlements without basic support Drought and overall arid climate and topo graphy	Basin-wide Critical areas: Burundi: along Ruvubu River and other river basins, along steep slopes of high mountains D.R. Congo: Territories of Beni, Lubero, Rutshuru and Irumu; Virunga National Park Border area between D.R. Congo, Rwanda, Uganda Ethiopian highlands Rwanda: Nyungwe National Forest Sudan: Nile Basin south of Khartoum, Atbara River, Blue Nile Tanzania: Several divisions in Mwanza region; some districts in Kagera region Uganda: Mt. Elgon and Rwenzori areas; SW highlands	Severe		

¹ Specific locations are indicated on the country maps attached to this report

ISSUE	SYMPTOMS/ IMPACTS	IMMEDIATE CAUSES	ROOT CAUSES	EXTENT ¹	SEVERITY
B. Soil Erosion	Loss of top soil and reduction of soil fertility leading to decrease in agricultural production and food security Reduction of veget ative cover and loss of habitats and biodiversity Water quality degradation from high sediment loads, silt ation of shallow lakes, wetlands, reservoirs, and low lying lands downstream Degradation of river beds and river bank erosion; desertification and wind erosion (northern arid regions); sheet and rill erosion and gully formation (after heavy rainfall) in highlands Landslides and flooding leading to destruction of infrastructure (houses, means of communication, communal facilities)	Massive continued loss of vegetative cover due to deforestation and loss of other land cover, deterioration of catchment buffer zones Inappropriate agricultural practices leading to decreased soil quality and erosion, such as use of marginal lands, overgrazing and free grazing Lack of soil and water conservation measures and/or abandonment and poor maintenance of anti-erosion works Bush fires and slash and burn practices	Population pressure and poverty leading to unsustainable land use practices Topography (uneven relief, high stream flow velocities) and rainfall patterns (floods, droughts, climate variability) Lack of land use policies and improper land use management; weak extension service on soil conservation and lack of incentives for conservation often connected with prevalent land tenure system High livestock density Lack of awareness of landwater interaction Lack of EIAs or systematic implementation of EIA for infrastructure projects due to lack of financial and human resources	Regional Critical areas: Burundi: Ruvubu River region, steep slopes/ hillsides D.R. Congo: Lubero; ne ar Kasenyi (south shore of Lake Albert) Egypt: River bank/river bed erosion north of Aswan	Severe
C.River Bank and Lakeshore Degradation	Destruction of veget ative cover especially in riparian and lakeshore buffer zones Erosion, landslides, and downstream sedimentation leading to change in river course Adverse effects on riverine aquatic life and lake ecosy stems	Poor land use and agricultural practices such as dry season cultivation near banks and destruction of vegetative cover to increase arable land area; high animal density Drop in water levels and drying up of waterways Increased urban development and construction and industrial activities near river banks; poorly planned tourism centers	 Lack of or insufficient national land use plans, laws and regulations, and/or enforcement of existing laws Population pressure and rapid growth of urban centers Expansion of farm lands and inadequate agricultural practices near river banks and shores, including overgrazing Land subsistence; relief and morphological structure of soil Climatic variability and conditions; seasonal floods and intermittent increase of lake levels 	Mostly sub-regional Critical areas: Burundi: Lake Cohoha Ethiopia and Sudan: Atbara and Sobat, Blue Nile and tributaries; main Nile (Sudan) Egypt: Nile below Lake Nasser Rwanda: Nyabarongo River Tanzania: estuaries of rivers into Lake Uganda: Severe in seasonal wetlands near shore of Lake Kyoga	Moderate to severe

ISSUE	SYMPTOMS/ IMPACTS	IMMEDIATE CAUSES	ROOT CAUSES	EXTENT ¹	SEVERITY
D.Mining Impacts	Water and air pollution Soil degradation and erosion of sites and adjacent river banks; deforestation and landslides leading to river silt ation Adverse impact on flora and fauna	Use of toxic chemicals and lack of containment and treatment facilities (esp. mercury use in gold mining) Lack of or inadequate site rehabilit ation Inadequate mining practices High demand for construction materials and indiscriminate clearing veget ation	Inadequate policy guidance, lack of or insufficient safe-guards (EIA, anti-pollution/environmental legislation) and enforcement No regulation/enforcement of private mining entrepreneurs Lack of (government) planning and oversight	Localized- Mining operations in the Basin include gold, coal, copper, diamond, iron ore, phosphate, manganese, tin, wolfram and zinc mines	Overall low Severe in certain locations
A. Pollution (point and non-point source)	Degradation Degradation Degradation of water quality, rendering water unsuitable for domestic, agricultural, industrial and other uses Adverse impacts on water-dependent flora and fauna; loss of habitats and biodiversity; nutrient discharges leading to increased eutrophication Pollution of lakes and tributaries, resulting in contamination of drinking water Lack of adequate liquid and solid waste disposal systems and accumulation of refuse Decrease in environmental quality, disappearance of natural habitats and proliferation of water hy acinth	Discharge and run-off of untreated water from urban and industrial sources containing dissolved nutrients, industrial pollutants, agricultural chemicals/fertilizers; lack of recycling of waste matter; uncontrolled dumping of waste Non-point source pollution from agriculture due to improper and high application rates of agro-chemicals Degradation of veget ative cover especially riparian buffer zones and wetlands in Basin which could act as filters	Weak policies, laws and regulations for environmental protection (e.g. EIA); insufficient enforcement and monitoring especially in respect to industrial facilities; low budgetary provision for enforcement of existing regulations; lack of sufficient human resources Point Sources: Inadequate funding of investments; high capital costs; high operation and maintenance costs; inadequate containment and treatment of wastes and lack of sanitary facilities Non-point sources: Unsustainable land use practices in combination with lack of security of land tenure Inadequate zoning regulations and/or enforcement; inadequate environmental and land use planning Low environmental awareness and sense of value of environmental protection	Basin-wide – Critical areas: • Point source pollution: localized around urban centers, such as Kampala, Khartoum, Cairo and other urban centers in Egypt • Non-point sources: regional problem mostly from agricultural sources. Hotspots include large irrigation schemes in Sudan and Egypt, and nutrient pollution from agricultural areas around Lake Victoria and its tributaries	Moderate

ISSUE	SYMPTOMS/ IMPACTS	IMMEDIATE CAUSES	ROOT CAUSES	EXTENT ¹	SEVERITY
B. Sanitation Concerns – Water borne Diseases and Environmental Health	Pollution of drinking water sources (ground and surface water) and high dissolved nutrient loads resulting in increasing eutrophication and spread of infectious diseases (diarrhea, malaria, bilharzia, dysentery, intestinal worms) Risks to public health due to poor sanitation conditions, especially during rainy season and floods Increased absence from work due to sickness; increase in malnutrition and death rates especially among vulnerable groups such as small children, the displaced and the elderly	Lack of water supply systems and/or other reliable drinking water source; drinking water contamination with fecal matter leading to spread of pathogens Lack of or insufficient sewerage or alternative sanitation systems; leaks and insufficient maintenance of existing facilities; lack of urban stormwater sewers and solid waste disposal facilities Insufficient sanitation and hygiene training in conjunction with widespread poor sanitary conditions Increased breeding ground for mosquitoes in water weed infested areas and irrigation canals	 Lack of environmental regulations and laws, monitoring and enforcement and general waste management strategies Rapid growth of urban centers and lack of financial resource base to build needed water supply and sanitation infrastructure, combined with lack of planning for urban expansion and required infrastructure High capital costs for investments; high operation and maint enance costs Previous low priority given to sanitation by government and agencies; lack of awareness of connection between sanitation and safe drinking water; need for better hygiene educ ation Poverty and poor health condition of large parts of the population 	Basin-wide – localized Critical areas: • All large urban centers, such as Kampala, Khartoum, Cairo and urban centers in Nile delta • Rural villages (local threats)	Severe
C.Eutrophication	Algal blooms and increasing invasion by water weeds Decreased water quality Change/reduction in fish stock	Discharge of nutrients from domestic and industrial waste watersources and agricultural run-off Degradation of catchment area especially wetlands	 Inadequate environmental provisions in planning of industrial and urban centers Land degradation Over-use of agro-chemicals Poor land use and farming practices 	Regional, sub-basin Critical areas: • Lake Victoria region, including Kagera basin (lakes and river), • Urban areas in delta area in Egypt	Moderate
D.Water Weed Infestation	Continuing spread of weeds and infestation of lakes and rivers, eutrophication Interference with ecology and economy, e.g. mats on water surface impair navigation and fishing activities and lead to decrease in fish yields as well as to eutrophic ation Decrease in diversity of certain fish species Increase in occurrence of water borne diseases; increased water evaporation	High dissolved nutrient levels from pollutant discharge from industrial and domestic sources and agricultural run-off due to poor land use practices and lack of water treatment Inadequate response mechanisms	Introduction of hyacinth; insufficient preventive measures against introduction of foreign species in general Lack of capacity in water resources and environment departments in some countries resulting in insufficient enforcement of environmental regulations Delay in mobilizing funds and creating national/regional programs to combat infe station	Regional Critical areas: Burundi: Ruvubu River, Lake Cyohoha and Rwihinda D.R. Congo: Lake Albert (severe), Lake Edward (moderate) Kenya: Winam Gulf (Lake Victoria) Rwanda/Tanzania/ Burundi: Kagera river Rwanda: Lake Cyohoha, Lake Rwero, Nyabarongo River, entire stretch of Kagera Sudan: White Nile south of Jebel Aulia dam Tanzania: Southern shore of Lake Victoria, especially in bays of Mara and Mwanza regions Uganda: Lake Victoria, Lake Kyoga and Victoria Nile	Severe in certain areas

ISSUE	SYMPTOMS/ IMPACTS	IMMEDIATE CAUSES	ROOT CAUSES	FXTENT ¹	SEVERITY
E.Siltation	Decreased life span of dams and reservoirs as well as siltation of flooded fields, plains and irrigation canals; additional threat often associated with toxic pollutants adsorbed in silt part icles Siltation leading to decrease of wetlands and reduction of beneficial functions and uses Heavy silt loads in water bodies; sedimentation leading to formation of sand bars, changes in river course and river bank erosion ter Preparedness and Rem	• Climatic conditions and topographic features upstream (heavy rains and steep slopes) as well as land practices resulting in catchment degradation and soil erosion (such as encroachment for agricultural purposes)	Root Causes Inappropriate land management practices and lack if soil conservation practices often perpetuated by specific land tenure systems; deterioration in catchment through deforestation (see above) Lack of stringent enforcement of environmental regulations and policies Lack of awareness of link between land based activities and water pollution	EXTENT¹ Basin-wide – localized Critical areas: Burundi: Shallow lakes in the NE Egypt: Aswan Dam reservoir Ethiopia: Finchaa, Tekeze Kenya: Lower reaches of Yara, Nzoia, Kuja, Sondu-Miriu, Nyando Sudan: Roseires, Sennar, Khasm el Girba reservoirs; Gezira, Rahad and new Halfa irrigation schemes; main Nile Tanzania: Mara River, Simiyu River, Shinyanga and Mwanza regions Uganda: Nile River system especially Kioga	Moderate to severe (depend- ing on location)
A.Floods and Droughts	Floods - • Direct impacts include loss of life and property (crops/ livestock and arable land, housing, infrastructure); other results are food insecurity (availability and increased prices), loss to economy and environmental impacts Droughts - • Direct impacts are food insecurity, famine and human migration; long-term impacts include change in water availability (e.g. permanently dried springs, perennial rivers becoming seasonal) Floods/droughts - • Dislocation of people and problems associated with high number of disaster victims such as food insecurity and high incidence of waterborne diseases	Floods - Heavy rainfalls in conjunction with specific natural terrain features, increased by certain land use practices; lack of planning of urban settlements to prevent settlement in flood prone areas, aggravated by by population pressure and lack of land ownership Droughts - Long/prolonged dry season resulting in water shortage, aggravated by improper management of land and water resources (e.g. deforestation, overgrazing) leading to decrease in vegetative cover, water retention capacity, and groundwater recharge; and increased desertification Floods/droughts - Poorly equipped met eorological services and lack of efficient and reliable early warning sys-	Floods - • Irregular and large seasonal and year to year variability in rainfall patterns increased by climatic changes; mismanagement of land and water resources leading to soil erosion and increased run-off Droughts - • Climatic zone/ geography; effects from El Niño	Regional Most critical areas: Floods - Blue Nile and Atbara from Ethiopian highlands to Lake Nasser Flash floods in wadis in dry areas (e.g. between Aswan and Cairo) Floods from recent rise in Lake Vict oria lake levels Gambella plain in Ethiopia, lower river reaches in Kenya (Nzoia and Nyando River) Droughts — Severe drought prone areas north of 8 th parallel - Localized droughts in all Nile countries	Severe

ISSUE	SYMPTOMS/ IMPACTS	IMMEDIATE CAUSES	ROOT CAUSES	EXTENT ¹	SEVERITY
	Pressure on and de- struction of surroun d- ing ecosystems, for fuel or agriculture; threat to wildlife habi-	Sudden, large-scale refugee influxes over- whelming local capacity to provide protect, shel- ter and food	Political instability, armed conflicts, governance problems and social unrest Natural catastrophes such as famine	Localized Main areas of current settlements of refugees and displaced people:	Moderate overall
B. Refugees and Displaced People	tats and pressure on drinking water resources • Spread of disease in camps, especially waterborne, contributing to poor health, maln utrition and death • Migration of large numbers of people to refugee camps and establishment of new, unplanned settlements leading to conflict with existing population	Inadequate basic subsistence resources such as fuelwood and water; inadequate waste containment and treatment facilities		 Burundi: Rivubu River region Ethiopia: Sudan /Ethiopia cross-border area near Dinder (=Alatish valley), Gambella region, Ben-Shangul-Gumuz region, Baro/Akobo area, Dobus swamp area, SW part of country Rwanda: south of country near Burundi border Sudan/Uganda border area and Sudan/ Uganda/D.R. Congo area Sudan: Refugees in eastern Sudan, Kassala and Gedarif States; displaced people along selected areas of Nile Tanzania: SW lakeshores, Muleba Ngara and Karagwe districts of Kagera region 	
C.Uncertain Impacts of Climate Change	Increase in severe floods and droughts Potential negative impacts may include: Ecosystems: Changes in species distribution and composition; changes in migration patterns; wildlife habitat deterioration Food securiy, agriculture and land-use: Decreasing food security; land degradation e.g. through landslides and change in forest and rangeland cover; desertification Water resources: Change in local water availability; deteriorating water quality Health and settlements: Increase in waterborne diseases; possible increase in urbanization Economy: Vulnerability of mostly agrarian based economies in SSA to climate change related impacts	Climatic changes temperation, precipitation and wet and dry cycles Changes in weather and rainfall patterns Impacts and vulnerability due to floods and droughts Population pressure on limited resources	Global phenomenon related to anthropogenic activities lead- ing to increased emission of green house gases	Basin-wide	Low to moderate

ISSUE	SYMPTOMS/ IMPACTS	IMMEDIATE CAUSES	ROOT CAUSES	EXTENT ¹	SEVERITY
D.Navigation Risks, Aids, and Mapping (oil spills, boat discharges)	Routine accidents (collisions, groundings, wreckage) and associated pollution risks/pollution Navigation risks Oil discharge: Contamination of surface and groundwater, river banks and lakeshores Adverse impact on natural habitats and biodiversity and species loss of Biodiversity, Habitat and	Poorly separated traffic and inaccurate navigation charts Limited navigational devices and aids and lack of technology Old and poorly constructed ships and additional overloading as well as non-qualified boat owners Oil discharge: Discharge from tankers (cleaning of tanks) and bilge and ballast water as well as increasing incidences of oil spills through accidents of tankers (ships) Discharge of petroleum products from industrial sectors and leaking storage tanks d Wetlands	Complex navigational hazards (e.g. hidden channels) combined with lack of mapping and insufficient maintenance of waterways (e.g. no regular dredging) No emergency response system; lack of government control Oil discharge: Lack of technology for preventive and remediation measures; high cost of water treatment; lack of reception and treatment facilities at ports Industrialization of coasts and river banks combined with lack of EIA and inadequate control and enforcement of environmental regulations Lack of oil spill emergency plans and measures	Subregional Critical incidents reported from Lake Victoria and Egyptian river traffic; generally relevant in large lakes, rivers and their ports	Low over- all
A. Loss and Destruction of Valuable Species, Special Ecosystem, and Habitats	Species loss and decline of ecosystems and unique habitats - • Disappearance of unique animal and plant species, especially endemic ones; decline of species diversity • Decrease in numbers of large mammals with negative impact on tourism and associated decrease in revenue • Decrease in forest cover constituting decrease in food, fuel, timber and shelter Loss of agrodiversity • Loss of genetic base (cattle breeds, crops, vegetables/ fruits); loss of benefits from local variety qualities (tolerance, productivity, resilience); dependency on exotic seeds and breeds/ imported varieties	Species loss and decline of ecosystems and unique habitats - Poaching and illegal trade in valuable species as well as intensive and unsustainable resource use and land management, such as deforest ation, wetlands conversion, expansion of agriculture (crops and livestock farming, overfishing, uncontrolled burning and forest fires) Lack of alternative income sources especially in areas of resettlement Loss of agrodiversity - Expansion of hybrid/high yielding crop and livestock varieties leading to decrease of genetic diversity of domestic species Introduction of exotic species (not only restricted to agricultural species)	Population pressure and poverty combined with high reliance on primary natural resources and income from agriculture Low financial and staff capacity in management of protected areas and associated lack of control and monitoring; poor enforcement of laws protecting gazetted forests and game sanctuaries; lack of financial resources for development and implementation of effective and relevant programs Weak agricultural extension services Lack of awareness of biodiversity concerns and benefits from conservation Lack of regulations to prevent introduction of exotic species Inadequate and unregulated land use practices; insufficient integrated programs for people living in protected areas	Basin-wide Areas are related to specific issues of species loss*: • Species and ecosystems/unique habitat loss - Wetlands - Forest areas - Specific protected Areas • Agrodiversity - Intense primary agricultural areas * For specific locations please refer to maps attached to this report	Severe

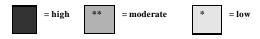
ISSUE	SYMPTOMS/ IMPACTS	IMMEDIATE CAUSES	ROOT CAUSES	EXTENT ¹	SEVERITY
B. Wetland Degradation	Decrease and degradation of wetland areas (reclamation, siltation, flood damage; water weed infest ation) Decreased benefits from functioning wetlands, e.g. less groundwater recharge, decreased buffering of floods, loss of filter function to absorb and degrade pollutants and associated decrease in water quality; decreasing ability to act as sediment trap; destruction of habitats and loss of biodiversity	Reclamation of wetlands to expand agricultural production Deforestation, erosion and sedimentation Overuse of natural resources (overfishing/ hunting/ overgrazing, farming practices) Pollution from industrial, agricultural and domestic sources	Lack of wetland protection and management regulations and measures and/or lack of implementation Poverty and population pressure; shortage of land; inadequate land use policies Lack of awareness of wetlands function and value; cultural habits	Basin-wide – Important and/or degraded wet lands: Burundi: Ruvubu, Kanyaru valley and around Lake Rwihinda, Nyamuswaga wetland D.R. Congo: SW lakeshore of Lake Edward Egypt: Lake Nasser area, Nile delta (shores of Lake Mariut, Burullus and Manzala); Qarun and Rayan Ethiopia: Gambella flood plain (Baro and Akobo River), Lake Tana, Finchaa area, Dobus Swamp/Alatish River Kenya: Winam Gulf/ Kisumu, estuary of Nzoia River, Yara swamp Rwanda: Upstream of Risumu Falls, lakes south of Kagera National Park (Lakes Rwehikama, Ihema, Hago, and Rwanyakizinga), Lake Cyohoha and entire Lake Bugesera area, Lake Rweru, Lake Mugesera Sudan: Sudd, Machar Marshes, Dinder wet lands Tanzania: Simiyu river, Lake Victoria shores, banks of Kagera River/swamps Uganda: shores of Lake Victoria, Kyoga, Lakes Edward, George and Albert	Severe in most countries

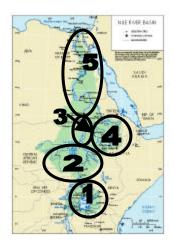
ANNEX J COMMON CONCERNS BY SUB-REGION

Co	MMON CONCERNS	EQUATORIAL LAKES	Lower Altitude Watershed	WHITE NILE (MALAKAL TO KHARTOUM)	EASTERN HIGHLAND	LOWER NILE (KHARTOUM TO MED.)	BASIN-WIDE
1.	Land Degradation						
A.	Deforestation	***	***	***	***		***
B.	Soil erosion	***	***	***	***	**	***
C.	River bank and lakeshore degradation	**	**	***	***	***	**
D.	Mining impacts	**		*			*
2.	Water Quality Degradation					l	
A.	Pollution (point and non-point source)	**	*	**	*	***	**
B.	Sanitation concerns (rural and urban sanitation)	**	**	***	***	***	***
C.	Eutrophication	**	**	*	*	**	**
D.	Water weed infestation	**	**	**		*	**
E.	Siltation	**	**	***	**		**
3.	Disaster Preparedness and Remedia	tion					
A.	Floods and droughts	**	**	**	***	***	***
B.	Refugee problems	**	***	**	***		**
C.	Uncertain impacts of climate change	**	*	*	***	***	**
D.	Navigation risks, aids, and mapping	**	*	**		**	*
4.	Loss of Biodiversity, Habitat and We	tlands					
A.	Biodiversity – loss and destruction of valuable species and habitats	***	***	**	***	**	***
B.	Wetland degradation	**	***	**	***	***	***

NOTE: Key for table:

 ${\bf Sub\text{-}regional\ severity\ of\ threats\ identified\ in\ basin-wide\ Transboundary\ Analysis\ is}$





- 1 Equatorial Lakes
- 2 Lower Altitude Watershed
- 3 White Nile (Malakal to Khartoum)
- 4 Eastern Highlands
- 5 Lower Nile (Khartoum to Mediterranean)

ANNEX K

NILE BASIN INITIATIVE

DESCRIPTION OF SHARED VISION PROGRAM AND SUBSIDIARY ACTION PROGRAM PROJECT PROFILES

A summary of the seven basin wide projects under the Shared Vision Program (SVP) and the Subsidiary Action Program (SAP) is provided in this Annex. This includes the following project profiles and SAP summaries:

- 1. Nile Transboundary Environmental Action
- 2. Nile Basin Regional Power Trade
- 3. Efficient Water Use for Agricultural Production
- 4. Water Resources Planning and Management
- 5. Confidence-Building and Stakeholder Involvement (Communications)
- 6. Applied Training
- 7. Socio-Economic Development and Benefit-Sharing.

Additionally summary tables of the first project within the Eastern Nile Subsidiary Action Program, the Integrated Development for the Eastern Nile Project (IDEN), as well as the Nile Equatorial Lakes Project (NELSAP) are provided.

1. SVP Project Title: Nile Transboundary Environmental Action

Objective

- Provide a strategic framework for environmentally sustainable development of the Nile River Basin.
- Support basin-wide environmental action linked to transboundary issues in the context of the NBI strategic action program.

Context

Within the NBI is clear recognition that the development in the Nile Basin must be environmentally sustainable in the long-term. This is reinforced by the fact that the Nile is widely perceived as an environmental issue of global concern. Identifying the environmental and development synergies and thus the sustainable development opportunities will be a major task for the Initiative. This project will therefore contribute towards a strategic framework for environmentally sustainable development of the Nile Basin, improve the understanding of the relationship of water resources development and the environment in the Basin, and provide a forum to discuss development paths for the Nile with a wide range of stakeholders.

A transboundary analysis has been carried out by the Nile riparians, which constitutes a collective synthesis of basin-wide environmental trends, threats, and priorities, and outlines the elements for a long-term agenda for environmental action for the Nile Basin.¹

Expected Outputs

- 1. Enhanced regional cooperation on transboundary environmental and natural resource management issues. Elements include the development and application of a river basin model as part of a decision support system, knowledge management, and linkage of macro and sectoral policies and the environment.
- 2. Capacity and support for local-level action on land, forest, and water conservation enhanced and micro-grant fund to support community level initiatives at pilot sites established.
- 3. Increased environmental awareness of civil society through environmental education programs and networking of universities and research institutions.
- 4. Enhanced regional capacity for sustainable management of wetlands and establishment of wetlands management program at pilot sites.
- 5. Standard basin-wide analytical methods for water quality measurements established and monitoring of transboundary relevant hotspots initiated. Enhanced capacity for monitoring efforts and pollution prevention.

Major Components

1. Institutional Strengthening To Facilitate Regional Cooperation

- Regional capacity building for transboundary environmental management
- Knowledge management & basin-wide environmental communication

The Transboundary Environmental Analysis (TEA) report as well as a detailed draft project brief is available upon request. The TEA has been carried out by the Nile riparians under the SVP, with support from GEF, UNDP and the World Bank.

- Decision Support System and River Basin Modeling
- Macro and sectoral policies and the environment

2. Community-Level Land And Water Conservation

- Enhancing basin-wide cooperation and NGO networks
- Priority actions for addressing transboundary soil erosion
- Micro-grant fund to support local-level land and water conservation

3. Environmental Education & Awareness

- Deepen public awareness-and understanding of transboundary environmental issues
- Enhanced networking among educational & research institution

4. Wetlands And Biodiversity Conservation

- Enhanced regional cooperation and capabilities
- Better understanding & broader awareness of the role of wetlands in supporting sustainable development
- More effective management of wetlands and transboundary protected areas

5. Basin-Wide Water Quality Monitoring

- Enhanced national capacities for water quality monitoring
- Water quality monitoring at environmental hotspots of transboundary significance initiated

Indicative Cost and Duration

\$26.77 million (Phase 1, over 3 years) \$12.43 million (Phase 2) \$39.36 million (GEF and non-GEF funding)

2. SVP PROJECT TITLE: NILE BASIN REGIONAL POWER TRADE

Objective

• Establish the institutional means to coordinate the development of regional power markets among the Nile Basin countries.

Context

Adequate and reliable power supply is critical to meeting the social and economic development objectives of the Nile Basin countries. Yet, in a large majority of the Nile Basin countries, only around 10 percent of the population has access to electricity. This situation exists despite the presence of vast and as yet untapped hydroelectric and other energy resources in the Nile Basin. The present limited development of national power systems in the Basin imposes a constraint on the exploitation of these resources at affordable costs at the national level. The cost of hydropower in the Nile Basin is also increased by the large seasonal variations in hydropower output, whilst the costs of meeting peak loads on national power systems can be high in countries where these loads are supplied from expensive thermal plants. These constraints on supplying affordable power could be overcome by expanding the market for these resources by developing power trade among Nile Basin countries.

Countries in the Nile Basin are aware of the potential benefits from trading power. Therefore, while the current level of power trade among Basin countries is low, many of them are considering ways to increase the levels of this trade and are looking for suitable investments to realize this objective. A recently drafted scoping study of the "Opportunities for Power Trade in the Nile Basin," which was reviewed and revised by the Power Trade Working Group of the Shared Vision Program, identifies several options for increasing power trade in the region. In the short-term, many of these opportunities exist at the sub-regional level. It also appears that it is important to evaluate power trade opportunities in the context of a broader multi-purpose approach to Nile Basin water resources development and management.

The scoping study further found that a more focused and coordinated process for discussing ways to expand power trade in the Nile Basin would advance the development of power supply facilities. The Study recommended that this objective be realized through the creation of a basin-wide 'forum' of national power experts to facilitate continued dialogue in the region. Power forums are proving effective in developing power trade among other regional groups of countries, notably in the Southern African Power Pool, the Mekong Regional Power Market, the Central American Regional Electricity Market and in the Mercosur region. The establishment of regional power markets has generally improved systems reliability and economies of scale in planning, construction, and operation of the generation and transmission facilities, thereby contributing to the development and integration of regional economies.

Expected Outputs

- 1. Power Forum to support continued discourse and promote power trade amongst Nile Basin countries established and operating.
- 2. Basin-wide analysis of long-term power supply, demand, and trade opportunities in order to inform the planning of multi-purpose river basin management in the SAPs of the NBI completed.

Major Components

- 1. **Power Forum:** Establish a power forum to support continued discourse and promote power trade among Nile Basin countries. Important functions, particularly during the formative period, include, but are not limited to:
 - Facilitate dialogue and cooperation amongst power utilities in the region
 - Commission special studies
 - Coordinate analytical activities with relevant SVP projects
 - Assist in developing the strategic framework and agreements for advancing power trade
 - Prepare a consistent framework for power demand forecasting
 - Facilitate training programs.
- 2. **Comprehensive Analysis:** Comprehensive basin-wide analysis of long-term power supply, demand, and trade opportunities in order to inform the planning of multi-purpose river basin management in the SAPs² of the NBI.

Indicative Cost and Duration

\$12 million (over 3 years)

-

Within the overall framework of the NBI, the SAP will comprise investment projects, which provide mutual benefits to two or more countries. The Nile riparians have formed two major sub-regional groupings: The Eastern Nile (ENSAP) including Egypt, Ethiopia and Sudan; and the Nile Equatorial Lakes Region (NELSAP), including Burundi, DR Congo, Kenya, Rwanda, Tanzania, and Uganda within the equatorial lakes region, as well as Egypt and Sudan as downstream riparians.

3. SVP Project Title: Efficient Water Use for Agricultural Production

Objective

• Provide a sound conceptual and practical basis to increase the availability and efficient use of water for agricultural production.

Context

The Nile Basin riparian countries have identified improving the efficiency of water use for agricultural production as one of the highest priority issues for the Shared Vision Program. This reflects the fact that irrigation is the dominant human use of water in the Basin and that agriculture is an important element of the economies of all riparian countries in terms of employment, export and contribution to GDP. This component will therefore contribute to creating an improved enabling environment for increased regional collaboration and coordination towards increasing the availability and efficient use of water for agricultural production.

Expected Outputs

- 1. Improved enabling environment for sustainable watershed management and increased productivity by improved watershed management demonstrated.
- 2. Improved enabling environment for community managed irrigation development and increased agricultural production demonstrated.
- 3. Options for reforms in public managed irrigation reviewed and appropriate pilot projects that demonstrate improved system performance implemented. Options for irrigation development are to be explored.

Major Components

1. Regional Consultations and Training

- Basin-wide consultations/seminars/training in topics related to watershed management, community-managed irrigation development, and irrigation management
- National-level consultations on agricultural/irrigation policy at country request.

2. Demonstrations/Pilots And Basin-Wide Exchange Of Experience

- Exchange of good practice and experience and identification of project opportunities
- Basin-wide twinning of institutions and exchange visits among water users, research institutions, and irrigation organizations.

Indicative Cost and Duration

\$5 million (over 3 years)

4. SVP PROJECT TITLE: WATER RESOURCES PLANNING AND MANAGEMENT

Objective

• Enhance analytical capacity for basin-wide perspective to support development, management and protection of Nile Basin water resources in an equitable, optimal, integrated and sustainable manner.

Context

An important element in to furthering cooperation among the Nile Basin states is the building of a technical foundation to facilitate water resources planning and management from a basin-wide perspective. Components of such a foundation include effective policies and implementation strategies, project planning and management skills, and communication and decision making tools. While water policy development is clearly a national responsibility, creating a common understanding of good practices and the process of policy development, coupled with enhanced skills and practical tools in project planning and management, creates an enabling environment for cooperative development and joint investment planning. Tools, such as a Decision Support System (DSS), can support informed decision making from a regional perspective by providing a common platform for communication, the exchange of information, and water resources analysis. Together, the components of this project provide the technical infrastructure and basis needed to support the sustainable development, management, and protection of the Nile Basin water resources.

Expected Outputs

- 1. Support for water policy development and implementation provided and national capacities strengthened.
- 2. Capacity for successful preparation and management for joint projects enhanced.
- 3. A Nile Basin DSS, coupled with human capacity and institutional support, developed and facilitates water resources planning and management on regional, sub-regional, and national levels.
- 4. Nile Basin DSS provides a tool that could be used to operationalize the project goal.

Major Components

- 1. **Water Policy Development & Implementation Processes:** To enable all basin countries to cooperate on an equal footing, based on sound national IWRM policies.
 - Guidelines and compendia of good practice in integrated water resource management policy (a) formulation and (b) implementation prepared and disseminated
 - 'Drawdown' facility for water policy development and implementation support established
- 2. **Project Planning & Management:** To strengthen national capacities for multi-country project planning and management.
 - Practical guidelines and knowledge base for project preparation & design developed and skills enhanced
 - Practical guidelines for project management & administration developed and skills enhanced

- Technical guidelines for joint projects developed, reviewed, and disseminated, upon country request
- Drawdown support facility established and operating.
- 3. **Decision Support System for the Nile Basin:** To support informed decision making from a regional perspective by providing a common platform for communication, the exchange of information, and water resources analysis.
 - Institutions and human capacity strengthened in DSS development & application
 - Technical DSS developed and applied
 - Fast-track IMS to support SVP & SAP
 - River basin modeling system
 - Core national capabilities
 - Guidelines for the collection, processing, analysis and exchange of information established and cooperation enhanced
 - Consolidation of DSS use and training.

Indicative Cost and Duration

\$ 2.8 million Policy development & implementation processes (over 3 years)

\$ 4.4 million Project planning & management (over 3 years)

\$21.0 million DSS (over 6 years)

\$28.2 million Total

5. SVP PROJECT TITLE: CONFIDENCE BUILDING AND STAKEHOLDER INVOLVEMENT (COMMUNICATION)

Objective

• To develop confidence in regional cooperation under the NBI, both at the basin-wide and local levels, and to ensure full stakeholder involvement.

Context

Communication cuts across all aspects of the NBI's Shared Vision and is the primary means for building public confidence and ensuring stakeholder involvement. A sustained, multi-dimensional program of communication is required over the long-term to raise awareness, increase understanding and bolster confidence among the peoples of the Nile basin. This project – conceived as Pillar C in the Shared Vision Program – can help to create the enabling environment for all objectives of the Shared Vision. It is a crucial facilitator of the projects and of the NBI itself.

Expected Outputs

- 1. Improved public information about the NBI within participating countries, throughout the region and around the world.
- 2. Increased capacity for public information about the NBI throughout the region.
- 3. A communication unit within Nile-SEC that facilitates policy dialogue and provides advice on communication for stakeholder involvement.

Major Components

1. **Public Information**

- Development and implementation of a public information campaign
- Public information and media relations capacity development (Nile-SEC)
- Public information support to SVP and SAP projects.

2. Development Communications

- Assessment of development communication requirements for SVP and SAP projects
- Assessment of regional development communication capacity
- Preparation of capacity development plan
- Policy dialogue on stakeholder involvement
- Orientation of Nile-SEC and government staff in development communication
- Testing regional and national modalities to monitor stakeholder involvement
- Sharing best practices.

Indicative Cost and Duration

\$7 million (over 4 years)

6. SVP PROJECT TITLE: APPLIED TRAINING

Objective

- Strengthen institutional capacity in selected subject areas of water resources management in the public and private sectors and community groups.
- Create or strengthen centers with the capacity to develop and deliver programs on a continuing basis.

Context

Lack of capacity to manage water in an integrated manner. Most of the Basin countries are burdened by weak human and institutional capacity to manage water resources in an integrated manner. This situation applies not only to the management of international waters but also to the management of national waters.

Uneven distribution of capacity within the basin. A central issue is that the water sector in the Basin is characterized by widely diverse institutional capacities in the countries. The availability of water professionals, for instance, varies from 100 in one country to over 3,000 in another. Senior managers, trainers, and researchers are even fewer.

Little interaction among water professionals in the Nile Basin. By its very nature, management of transboundary waters is a complex matter. In the case of the Nile, collective or joint development of the Nile waters is made even more difficult by the fact that there is limited trade and exchange among the riparian countries. The country assessments carried out for the Applied Training Project suggest that, at best, there are only a couple of distinct professional regional relationships between Nile Basin institutions.

Expected Outputs

- 1. Nile network of training Institutions established and functional.
- 2. Awareness of decision makers enhanced and support for human resources in IWRM obtained.
- 3. Professional/technical expertise upgraded.
- 4. Institutional capacity to design and deliver WRM modules in specialized centers strengthened.
- 5. Exchange of basin experience strengthened.

Major Components

1. Establishing Nile Net

• Set up, operate, and consolidate the Nile network of training institutions.

2. Developing Human Resources

- Appreciation courses for decision makers
- Short courses for trainers and key technical experts
- Master's for trainers and technical experts
- Ph.D. for trainers.

3. Strengthening Institutional Capacity

- WRM Module (Curriculum) development
- Use of new learning methods
- Applied research linked to training
- Hardware support.

4. **Promoting Basin Interchange**

- Information/knowledge exchange
- Staff/student exchange.

Indicative Cost and Duration

\$20 million (over 5 years)

7. SVP Project Title: Socio-Economic Development and Benefit-Sharing

Objective

Strengthen Nile River basin-wide socio-economic cooperation and integration.

Context

The water resources of the Nile are increasingly scarce due to growing populations and demand per capita. This resource constraint, and the tensions it evokes, are obstacles to growth in the region. Cooperative management of the resource presents an opportunity to actually increase the total flow of Nile waters, providing potential gains to all riparians. Gains to cooperation go beyond the additional water resources that would be made available as a consequence of coordinated basin-wide management by easing historical tensions over Nile waters, releasing the resources diverted by those tensions, and enabling broader cooperation among riparian countries. Broader cooperation could enable enhanced intra-regional trade and promote investment in regional infrastructure, such as road, rail, and telecom links, that could increase the productivity of all countries within the region and allow them to develop more rapidly and trade more effectively both within and beyond the region. This broad cooperation will require strong vision, initiative, and capacity, all of which this project is envisaged to promote.

Expected Outputs

- 1. Specialist and multi-disciplinary for established to generate alternative development scenarios for the Basin Country-level information compiled and consolidated.
- 2. 3-5 regional forums to foster public-private partnerships to maximize investments and to identify and remove specific barriers to regional cooperation.
- 3. Assessment of capacity in macro-economic, policy analysis and planning. Professionals from Nile basin trained in regional setting in fields of economics, policy analysis and planning.
- 4. Matrix of activities under the SVP established to monitor the overall process.

Major Components

1. Scenario-Building And Establishment of Socio-Economic Information Bases

- Scenario-building for cooperative Nile Basin development
- Socio-economic information bases.

2. Riparian Dialogue For Private Sector Cooperation And Investment

3. Capacity Strengthening

- Assessment and analysis of regional capacity in macroeconomics, policy analysis, and economic planning skills
- Capacity strengthening in macroeconomics, policy analysis, and planning,

4. Shared Vision Program Monitoring

• Support for monitoring and development of SVP project monitoring matrix.

Indicative Cost and Duration

\$11 million (over 6 years)

270

EASTERN NILE SUBSIDIARY ACTION PROGRAM (ENSAP): INTEGRATED DEVELOPMENT OF THE EASTERN NILE (IDEN) – PROJECT

Area of Coopera- tion	Sub-Projects	Objectives	Sub-Project Major Components	Estimated Preparation Costs (Mill US\$)	Indicative Project Costs (Mill US\$)
s Planning	Eastern Nile Planning Model*	Development Objective Strengthen the capacity of Egypt, Ethiopia, and Sudan to identify, prepare, and implement cooperative development projects that provide mutual benefits in the Eastern Nile. Immediate Objective Develop an Eastern Nile Planning model to assist in identifying, evaluating, and prioritizing projects as part of the investment planning process for the sustainable development and management of Eastern Nile waters.	 Institutional and human capacity strengthening Development of modeling system Information management Model application and consolidation 	0.4	5– 6
Integrated Water Resources and Management	Baro-Akobo Multi- Purpose Water Re- source Project	Development Objective Promote social and economic development in the region in an environmentally sustainable manner. Immediate Objective Multi-purpose development of the Baro-Akobo Basin, bringing regional beneftis to all EN countries.	 Multi-purpose water resources infrastructure Integrated water resources management Environmental management and protection Socio-economic development Navigation Regional cooperation 	3.0	> 400

Area of Coopera- tion	Sub-Projects	Objectives	Sub-Project Major Components	Estimated Preparation Costs (Mill US\$)	Indicative Project Costs (Mill US\$)
	Flood Preparedness	Development Objective	Participation, education, and training	0.4	7 - 14
ight	and Early Warning*	Reduce damages and loss of life from major floods, and to increase benefits from excess	Flood risk assessment and mapping		
Drou nt		flood waters, in the Eastern Nile countries.	Mitigation planning		
nd [Immediate Objective	Flood forecasting		
Flood and Drought Management		Improve regional coordination and national capacity in preparedness for and early warn-	Flood warning and communication		
FIG		ing of major floods in the Eastern Nile.	Emergency preparedness and response		
	Ethiopia-Sudan Trans- mission Interconnection*	Development Objective Promote regional power trade through coordinated planning and development of power projects and transmission interconnection in the context of multi-purpose water resources development. Immediate Objective		10	150
t and		Interconnect Ethiopia and Sudan to facilitate cross border energy trade between the two countries.			
pmen	Eastern Nile Power Trade Investment Pro-	Development Objective Promote regional power trade through coor-	Standardization of input data for EN Planning Model	2.6	TBD
evelo er Tra	gram	dinated planning and development of power projects and transmission interconnection in			
ower D		the context of multi-purpose water resources development.	Initiation of Eastern Nile regional power trade investment program		
Hydropower Development and Regional Power Trade		Immediate Objective Initiate the development of a regional power trade investment program.	Advancing the preparation of site specific projects	10.0 ¹	

Area of Coopera- tion	Sub-Projects	Objectives	Sub-Project Major Components	Estimated Preparation Costs (Mill US\$)	Indicative Project Costs (Mill US\$)
ŧ	Irrigation and Drainage	Development Objective	Irrigation and drainage infrastructure	2.0	TBD
velopment		Increase agricultural productivity through irrigation development, create rural employment opportunities, and improve rural liveli-	tions		
Dev			Agricultural development and rural infrastruc-		
g		Immediate Objective	ture	40.01	
Drainage		irrigated agriculture as well as to improve	Irrigation related environmental and social measures	10.0 ¹	
and		the productivity of small- and large-scale agriculture through improved agricultural water	Institutional and legislative reform		
		use.	Inter-regional cooperation		
Irrigation			Advancing the preparation of site specific projects		

Area of Coopera- tion	Sub-Projects	Objectives	Sub-Project Major Components	Estimated Preparation Costs (Mill US\$)	Indicative Project Costs (Mill US\$)
Watershed Management	Watershed Manage- ment*	Improve standards of living of the population living within selected watersheds in the Eastern Nile region, decrease population pressures and increase land productivity so that sustainable livelihoods and land use practices can be secured for the target populations. Immediate Objective Establish a sustainable framework for the management of selected watersheds in order to improve the living conditions of the people, enhance agricultural productivity, protect the environment, reduce sediment transport and siltation of infrastructure, and prepare for sustainable development oriented investments.	 Agricultural sector capacity strengthening Watershed management investment program Erosion and sedimentation study Population and carrying capacity program Community based energy alternatives Assessment of morphological changes in the Nile 	2.1	400
			Sub-Total	\$ 40.5	

^{*} Indicates fast-track sub-project

1 First tranche, additional funds to be sought as project preparation progresses

ENTRO		
Core activities (First three year period)		0.5
IDEN Project Preparation		
Management & coordination		2.0
 Integration, options assessment & prioritization 		6.0
	Sub-Total	\$ 8.5
Total IDEN Preparation		\$ 49.0
Total Implementation of Fast-Track Sub-Projects		

NILE EQUATORIAL LAKES – SUBSIDIARY ACTION PROGRAM (NELSAP)

Program Areas and List of Identified Projects Under Preparation

NEL-COM Priority Area	Project	Countries	Description	Prep. Costs (M. US\$)	Impl. Costs (M. US\$)
1. Water Use in Agriculture	1.1 Enhanced Agricultural Productivity through Rainwater Harvesting, Small Scale Irrigation and Livestock Management	BUR, DRC, KEN, RWA, TAN, UGA	The objective of the project is to improve the productivity of small-scale agriculture and animal industry through a program coordinated across the participating NEL countries to improve and develop water use. The project will on a regional level seek to create a favorable environment for private sector involvement in small-scale irrigation development. It will invest in participatory development of water harvesting/water conservation techniques, small-scale irrigation and livestock management in combination with agricultural extension for subsistence low-output farming in each country. The project period is planned to be five years. The preparation phase include a feasibility study that includes a baseline survey for each country and the drafting of detailed project documents.	1.2	45
2. Sustainable Management and Conservation of Lakes and Linked Wetlands	2.1 Fisheries Project for Lake Albert and Lake Edward	DRC, UGA EGY, SUD	The objective of the project is to establish a sustainable framework for the joint management of the fisheries in Lake Albert and Lake Edward to improve the living condition of the people and to protect the environment. The project has three components: (1) a research component focusing on inventory of fish biodiversity and identification of issues affecting continued viability of fish biodiversity; (2) a fishery management component that addresses environmentally and socially sustainable management of fish species forming the basis of the subsistence and commercial fishery in the Lake; and (3) a micro-projects component for small scale investments on a community level addressing e.g. catchment management, water hyacinth control, access roads, water supply and sanitation. The project would be implemented in two phases. A first pilot phase in Lake Albert which would be expanded to Lake Edward. The project period is planned to be 5 years. The preparation phase will include the establishment of a joint project steering mechanism, a regional situation analysis addressing key issues affecting management of the two lakes, and the development of a comprehensive project document.	1.0	15

NEL-COM Priority Area	Project	Countries	Description	Prep. Costs (M. US\$)	Impl. Costs (M. US\$)
3. Watershed Management	3.1 Development of a Framework for Cooperative Management of the Water Resources of the Mara River Basin	KEN, TAN	The objective of the project is to establish a sustainable framework for the joint management of the water resources of the Mara River Basin, in order to prepare for sustainable development oriented investments to improve the living condition of the people and to protect the environment. The project includes a comprehensive study of integrated water resources management options for the Mara River Basin and capacity building in transboundary water resources management. The first phase of the project will create the enabling environment for the project for actions on the ground, and will include the establishment of a joint steering committee and drafting of a business plan for the project. Preparation activities are minimized.	(3) Full Project Cost Sought	3
	3.2 Kagera River Basin Integrated Water Resources Management	BUR,RWA, TAN, UGA, KEN, EGY, SUD	The objective of the project is to develop tools and a permanent institution for the joint, sustainable management of the water resources in the Kagera River Basin in order to prepare for sustainable development oriented investments through improvements of the living conditions of the people and to protect the environment. The project includes the development of a joint strategy, water allocation scenarios and capacity for the optimal use of scarce water resources. The first phase of the project will create the enabling environment for the project for actions on the ground, and will include the establishment of a joint steering committee and drafting of a business plan for the project. Preparation activities are minimized.	(4) Full Project Cost Sought	4
	3.3 Development of a Framework for Cooperative Management of the Malakisi-Malaba-Sio River Basins	KEN, UGA	The objective of the project is to reverse the environmental degradation trends in the catchments by supporting the rural communities in adopting appropriate technologies in catchment management. This will include the development of a joint integrated management strategy for the three watersheds identifying investments that lead to economic benefit for the rural communities reduce environmental degradation as well as build capacity at the responsible national and joint institutions. Micro-project activities would include domestic and livestock water supply. The first phase of the project will create the enabling environment for the project for actions on the ground, and will include the establishment of a joint steering committee and drafting of a business plan for project. Preparation activities are minimized.	(3) Full Project Cost Sought	3
4. Water Hyacinth and Water Weed Control	4.1 Water Hyacinth Abatement in the Kagera River Basin	BUR, RWA, TAN, UGA, EGY, SUD	The objective of the project is to eliminate adverse effects on environment, health and socio- economic activities, caused by water hyacinth infestation, by reducing to manageable levels the infestation of water hyacinth in the Kagera River basin. The project will implement biological and physical Water Hyacinth control activities in the Kagera River basin; establish capacities at national and community levels, manage weed infestations and facilitate exchange of information and experience with control measures. Preparation activities include the identification of relevant institutions, formation of a regional steering committee, a survey of the Water Hyacinth distribution and the drafting of detailed project documents.	0.7	4

NEL-COM	Project	Countries	Description	Prep.	Impl.
Priority Area				Costs	Costs
				(M. US\$)	(M. US\$) /
5. Hydropower	5. Hydropower Development and Power Trade	BUR, DRC, KEN, RWA, TAN, UGA EGY, SUD	 The program is made up of two sup-programs divided into six separate projects. The Long-term objectives of the program are: Regional economic development and improved quality of life through provision of ample power supply at reasonable prices. Increased regional power supply in the NEL Region by improving export/import capabilities between NEL member countries. Improved reliability of power supplies and the quality of power delivered through interconnecting the currently isolated networks in each country. 		
Sub-program 1 Hydropower Development	5.1.A Rusumo Falls Hydro- Electric Power Development, HEP	BUR, RWA, TAN,	The objective of the project is to supply new energy and capacity to the existing power grid based on renewable hydropower energy, to foster international cooperation in hydropower project development, and to electrify new areas and improve regional power supply reliability by interconnecting the power networks of DRC-East/ Burundi/ Rwanda and the national network of Tanzania. The project consists of construction of a small dam, a reservoir, a 40-60 MW hydropower station at the Rusumo Falls on the Kagera river, and the building of transmission lines to the riparian countries. Preparation activities include in the first phase an updated design of the existing documentation, a design review of alternative options including a run-of the river scheme, a Preliminary EIA, a cost/benefit assessment of different options and a design review of regional transmission interconnections. In the second phase detailed design will be undertaken and a full EIA and a Resettlement Action Plan conducted.	6 (1.0 first phase, 5 second phase)	Tbd during prep. Phase
	5.1.B Ranking and Feasibility Study of HEPs in the NEL Region	BUR, DRC, KEN, RWA, TAN, UGA, EGY, SUD	The objective of the project is to rank proposed hydropower development options larger than 50 MW with a view to supplying the future interconnected transmission system of the NEL region , to update the costs of past studies and project proposals, and determine a common ground for comparing projects and to provide sufficient documentation enabling financing, licensing, procurement and construction of one or more hydropower projects having benefit to more than one NEL country. In a second phase feasibility studies will be undertaken of one or two promising hydropower development and transmission options, including documentation of economic justification and environmental and social impacts. Preparation activities are minimized.	5 (0.76 first phase, and 2 projects @ 2 per study in second phase)	Tbd during the prep. Phase

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		5.2 B Interconnection s between Burundi, DRC and Rwanda	BUR DRC RWA	The objective of the project is to interconnect Mugomba in DRC with Giseni in Rwanda and Ruzizi II with Bubanza in Burundi to permit power exports from Mugomba and the Ruzizi schemes. Preparation activities include a Feasibility study, EIA and Design Specification Report confirming voltage levels, transfer capacity, conductor size, earthing protection etc. for both transmission interconnections.
עכו		5.2.C Interconnection between, Burundi and Rwanda	BUR, RWA	The objective of the project is to strengthen the interconnection between Kigoma in Rwanda and Rwegura in Burundi to supply both extremities of the existing lines, as well as to provide grid power to Butari in Rwanda and possibly other small district centers along the route. This will create a transmission ring and strengthening the grid in both countries. Preparation activities include a Feasibility study, EIA and Design Specification Report confirming voltage levels, transfer capacity, conductor size, earthing protection etc.
		5.2.D Interconnection between Rwanda and Uganda	RWA, UGA	The objective of the project is to establish an interconnection between Mbarara in Uganda and Gikonda in Rwanda, to expand and strengthen the grids in northern Rwanda and southwestern Uganda, and enable exchange of power. Preparation activities include a review of the previous Feasibility Study including evaluation of technical feasibility, an EIA, and detailed design.
	Coordination	6. NEL- Coordination Unit (NEL-CU)	BUR, DRC, KEN, RWA, TAN, UGA, EGY, SUD	The objective of the NEL-CU is to facilitate and coordinate the preparation and implementation activities of NELSAP on behalf of the Ministries of the NEL-countries and other national agencies and institutions. The NEL-CU is proposed to consist of one professional expert with some administrative back up to be based at the Nile-SEC. The NEL-CU is a temporary mechanism that would be in place during three years.

Description

The objective of the project is to strengthen the existing interconnection between Kenya and

Uganda to permit the export of more power from Uganda to Kenya after the Bujagali HEP

Specification Report confirming voltage levels, transfer capacity, conductor size, earthing

come into operation. Preparation activities include a Feasibility study, EIA and Design

Continued capacity building at the national institutions for regional cooperation is a key component of the activities of the NEL-CU. Capacity building would partly occur through the joint preparation exercise, and partly through a strategic vision exercise that will analyze opportunities in cooperative Nile development and management in partnership with other

Total indicative preparation and implementation costs sought

Total indicative implementation cost

regional initiatives in the Nile Equatorial Lakes Region.

Prep.

Costs

(M. US\$)

8.0

1

0.7

0.7

0.7

Full Project Cost

Sought

30

Impl.

Costs

(M. US\$)

Tbd

during

Phase

Tbd during the prep. Phase

Tbd during the prep. Phase

Tbd during the prep. Phase

0.7

1000

the prep.

NEL-COM

Priority Area

Sub-program 2

Transmission

Interconnection

Project

Interconnection

between Kenya

and Uganda

5.2.A

Countries

KEN. UGA