

# INFORMATION PRODUCTS FOR NILE BASIN WATER RESOURCES MANAGEMENT (PROJECT GCP/INT/945/ITA)



## TERMINAL EVALUATION REPORT

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## EXECUTIVE SUMMARY

### 1. Introduction

This project “*Information Products for Nile Basin Water Resources Management*” (hereafter, “FAO Nile”) which started in December 2004 is scheduled to end on 31st December 2008. The **purpose of the evaluation** is to provide **recommendations** to the Government, FAO and the donor on the **further steps necessary** to consolidate progress and ensure achievement of the project’s objectives. The Terms of Reference (ToR) for the mission is attached as “Annexure A” to the Report. The mission comprised of 2 consultants: a specialist in international water resources management and information products and a specialist in natural resources negotiation processes. The schedule of activities of the mission and documents/literature consulted are attached as Annexure B and C respectively.

### 2. Background and Context

FAO Nile is being implemented in all the ten riparian countries<sup>1</sup> with US \$ 5.170 million Italian Government funding and technical and operational assistance from FAO under the overall control and direction of the Project Steering Committee (PSC); and under the umbrella of the Nile Basin Initiative (NBI). Its overall **objective** is to strengthen the ability of the governments of the riparian states to take informed decisions with regard to water resources policy and management in the Nile basin. The Project builds upon two of prior Nile basin projects supported by Italian Cooperation. It is designed to deliver policy neutral information products at the request of the riparian countries and with their active cooperation; and then inform basin policy decision making. It has thus been designed to create and promote synergies with the other activities under the NBI.

The project’s outputs include: capacity building; consolidated hydro- metrological monitoring networks; databases; the Nile Decision Support Tool (DST) and related geo-referenced information systems; baseline survey of agricultural water use and productivity; compilation of an agricultural production database; and “Food for Thought” (F4T) scenario exercise to determine a plausible range of demand for agricultural produce by the year 2030.

### 3. Main Findings

#### a. Assessment of Project Objectives and Design

**i. Justification:** FAO- Nile was premised on the need to: provide policy neutral products that would inform decision making in the Nile basin; develop human and institutional capacity building at national and basin levels; enhance cooperation among the riparian countries and build confidence in the public. These premises are unassailable having regard to the circumstances of most of the riparian countries: with rising water scarcity within the Nile basin, it is important to ensure that water resources were used in such a manner as “to achieve sustainable socio-economic development through equitable utilization of, and benefits from, the common Nile basin water resources” (the shared vision). The project’s

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1. Burundi, Democratic Republic of Congo, Egypt, Eritrea, Ethiopia, Kenya, Rwanda, Sudan, Tanzania and Uganda<sup>1</sup>

products are designed to provide tools that would inform policy decision making towards the achievement of this objective.

## **ii. Objectives and relevance**

The long-term development objectives of the project are to empower the riparian countries to develop water resources of the Nile in a sustainable and equitable way, to ensure efficient water management, cooperation and joint action between the riparian countries. To this end, the project document identifies three immediate objectives:

- 1) Integrated data products used for making informed water resources management decisions**
- 2) Strengthen the ability to carry out surveys, case studies and benefit-sharing scenarios**
- 3) Dissemination of information and knowledge**

These development objectives are at the core of the strategic action programme of the NBI; and thus of relevance to the realization of the shared vision. The justification for the project, its objectives and relevance as set out in the project document are sound, clear and well articulated. Most countries rate the project objectives and relevance as good.

## **iii. Project Design**

FAO Nile identifies both direct and indirect project beneficiaries. Direct project beneficiaries were identified as human resources in the government sector responsible for water development and management. The indirect and ultimate beneficiaries are the as yet unidentified rural populations in areas to be impacted by water development projects in the Nile Basin. The project design identifies strategies and mechanisms, including: institutional strengthening; training and capacity building to address the needs/ shortcomings of direct beneficiaries. To date, however, only a small group of direct beneficiaries has been involved in project activities. This is not adequate to sustain the project outputs at basin and national levels. Owing to non realization of output 3, the project has had no impact on the indirect beneficiaries.

The project design was ambitious. Indeed some of the project's components such as F4T could be individual projects in their own rights. The agriculture and F4T related activities were mainly driven by the project headquarters with inadequate internalization and participation at national level, or with adequate involvement of the FPI and NPC. Not much use was made of E-Mail contacts and visits by project management to monitor the projects. Moreover, the level of financial and human resources available to the project was inadequate for the required monitoring, mentoring and participatory processes at national and basin levels.

## **b. Assessment of Project Implementation Efficiency and Management**

### **i. Project Budget and Expenditure**

The main donor is the Italian Government which funded the project to the tune of US\$ 5.170 million, bringing the total contribution of the Government of Italy to the Nile process to over US\$ 16 million over a 12-year period. On the whole, the actual budgetary expenditures were in consonance with the planned expenditures. Donor inputs were timely provided.

## **ii. Activities and Outputs**

The project's planned activities are well articulated in the project document. In addition, the project design was flexible to allow for further alignments and adjustments by the PSC, as the need arose. However, the prescribed project outputs and activities were rather ambitious with attendant challenges as noted above. In the circumstances, project objective 1 stopped at producing the products, consolidating the DST and training technical officials before transferring it to the NBI. No further initiatives/activities were taken to enable decision makers to review and make input into further development of the information products. The application of the DST was not supported either at country-level or by academic institutions. Activities under objective 2 have also not been fully implemented and objective 3 was virtually not addressed (see recommendations below).

The inability to fully accomplish the project's objectives and/or activities prescribed in the project document and the AWP were because these were rather ambitious in scope considering the limited capacity in most of the riparian countries and the time frame for project implementation. The ambitious nature of the project entailed much time and expense in their realization, leaving little or no time for the dissemination of the outputs. Also the needed cooperation from some of the FPIs in the project implementation was not achieved as originally envisaged. The project management team could, also, have been more active in its oversight role, for example through periodic visits to FPIs. However, this also would have entailed a lot of time and expense in view of the geographical spread of the project and the number of participating countries involved in the project.

## **iii. Government Support**

The PSC which includes the recipient governments, the donor and FAO, has been effective in providing basin level guidance and made changes in project activities to respond to emerging needs. However, with one meeting a year, the PSC could not have been effective, in the light of the numerous project activities. The project steering and management are therefore, to a large extent, the responsibility of the project management team and FAO. A 6<sup>th</sup> monthly meeting (i.e. 2 meetings a year) of the PSC with a participant from each country (instead of 2 to reduce cost) could improve upon the effectiveness of the PSC.

## **iv. Project Management**

Project implementation was led by the CTA under the operational and technical supervision of the Chief, NRLW at FAO headquarters, and in close cooperation with the project's designated NPCs and other project staff. Mainstreaming project implementation in government institutions and use of predominantly experts from the basin in consonance with NBI operational guidelines contributed to cost-effective and efficient use of the limited project resources. However, there were no formal committees at national level to ensure national level coordination and multi-disciplinary collaboration (see recommendations below). Thus right from the onset, national level coordination and participation was weak. Provision of national oversight committees could have enhanced project management.

The main project activities, especially, database updates, the agricultural systems surveys and report synthesis were fully managed by the project headquarters with limited involvement of NPCs. This created a gap in information flow and project follow-up at national level.

Moreover, these activities involved very few people creating difficulty in sustaining project outputs without further support.

The project has been fairly well managed given the geographical spread of project area, diversity of interests and capacity among participating countries, limited budget and the nature of project activities. The tasks assigned the CTA are challenging, especially in view of the extent of the area covered by the project and its attendant communication challenges; and requires dedication as demonstrated on the part of the incumbent and the project staff for their execution.

#### **v. Technical and Operational Backstopping**

FAO provided the support needs of the project management and enabled the project access its technical capacity and information data base. Moreover, the project was able to bring on board high level and well qualified competent consultants to carry out training and provide specialized knowledge and expertise. In addition, there were specific and concise backstopping reports to guide project implementation. However, project implementation as set out in the AWP was behind schedule as noted above, owing to the ambitious nature of the project design and the limited time available for implementation.

#### **c. Assessment of Results and Effectiveness**

##### **i. Effects, Impact and Sustainability**

The high staff turnover from national governmental institutions to the NBI and elsewhere will negatively impact on the effective utilization of project outputs at the national level. There are not enough trained manpower exposed to propel the activities and ideas for further analysis and use. Furthermore, as noted, there are important project activities that have not been finalized synthesized and disseminated. These may not be sustained beyond the project (see recommendations below).

##### **ii Gender Equity in Project Implementation and Results**

There was no direct attention or activity on gender issues. However, water use in agriculture is of interest to women; indeed most women in the rural communities are engaged in agriculture. The training involved both men and women. This was an equal opportunity project.

### **4. Conclusions, Recommendations and Lessons Learned**

#### **a. Conclusions**

The project is considered relevant by all participating countries and is in consonance with the shared vision of the riparian states. The attainment of the project objectives is thus critical to the attainment of the NBI vision. To date, however, only immediate objective 1 has been realized. Activities under objective 2 are yet to be completed and those under objective 3 have barely began. The anticipated close linkage with NBI projects especially those under the SVP portfolio did not materialize as expected. Presently, there is no project under NBI that can take over and complete what the project has initiated and not concluded.

## **b. Recommendations**

The projects outputs and products are of little value unless disseminated, internalized and used for decision making in the Nile Basin. The mission thus recommends an extension of the project up to 18 months to enable the parties consolidate, disseminate, internalize and use project outputs and products; for the transfer of project outputs into the domain of the NBI; and for the parties to decide on their future cooperation program. The following specific actions are recommended:

### **i. The Donor:**

Additional funding would be required for the consolidation phase/follow-up. As indicated, the Italian Government has so far injected over US\$ 16 million over a 12-year period into the Nile basin process. This investment would not have achieved much dividend if the project were to end at this stage when the products have not been disseminated. Provision of additional funding by the Donor could enable the project realize all its objectives and contribute to the sustainability of the project's outputs. In this regard, the minimum requirement would be provision of adequate level of funding to meet the finalization and dissemination of the products at basin, sub- basin and national levels; including project office and staff requirements.

### **ii. Participating Countries:**

- Identify/confirm FPI and assign staff with clear responsibility as NPC.
- Strengthen implementation oversight through committees for country-level implementation and internalization of project activities.
- As far as applicable and appropriate, integrate project activities into relevant national programs and plans.
- Ensure integration of project and its outputs into basin-wide, NBI activities.

### **iii. NBI:**

- Prepare and create capacity to assume control and ownership of FAO Nile's outputs and products upon expiration of project extension. In that regard, Nile-TAC and Nile-Sec should collaborate with the FAO Nile PSC and project management to achieve the above objective.
- Ensure project reports are internalized and disseminated widely to NBI governance, NBI partners and member states as appropriate.

### **iv. FAO/ Project execution /management:**

- Prepare and disseminate project completion report.
- Prepare detailed project write up and or/ work plan for the extension.
- Provide competent project team and backstopping for project exception.
- Ensure active support and follow-up by FAO Country offices in the basin of project activities.
- Vet, present and/or package project outputs in a manner or form that could be presented to the NBI to assume ownership.
- Produce a booklet summarizing project outputs and products with country details, what the product consists of , how derived and what aspects are for public dissemination and what is restricted information as well as how to access the information and products

### **c. Lessons Learned**

As noted, not all the project objectives could be accomplished: the 1st objective is substantially complete. In objective 2, various products have been prepared or are in the process of being finalized. In the baseline survey of agricultural water use and productivity and agricultural production database components, for example, important data set has been collected, organized, and analyzed; but same has not been disseminated to counterparts or stakeholders. With regard to objective 3, not much has been achieved except in the area of posters and web-based information. Essentially, the project is at the information acquisition stage.

Several weaknesses and/or shortcomings in the project's objectives, design and implementation account for these; and provide lessons and/or could constitute the “**dos and don'ts**” in the design and implementation of another or similar large-scale basin wide project involving several countries with varying political and socio-economic circumstances as obtains in the Nile basin.

#### **i. Project Objectives and Design**

The project's objectives and design were ambitious with inadequate technical and financial resources; some of the project's components such as F4T, and Farming System Analysis could be individual projects in their own rights. Furthermore, the complex challenge of implementing activities that did not squarely rely on the FPI's staff expertise and required skills and knowledge from multi-institutional and multi-disciplinary collaboration was underestimated for the agriculture and F4T related activities. As a result, they were mainly driven by the project headquarters with inadequate internalization and participation at national level, or with adequate involvement of the FPI and NPC

No timelines were provided for in the project document for the realization of the various outputs to guide cost effective implementation. Even though this was rectified by the project staff in the AWP, the project outputs and activities prescribed in the project document and the AWP were rather ambitious in scope considering the limited capacity in most of the riparian countries and the time frame for project implementation.

Moreover, the project policy was to treat all riparian countries equally, irrespective of their size, GDP, contribution to the Nile flows, perceived development challenges, or capacity of the national water agencies. It was recognized that this setup did not reflect the varying capacities and needs at national level, but was considered a practical formula for transparency for distributing project funds and support.

A way out of addressing the foregoing challenges in the future would be to proceed cautiously; for example, by beginning the project on a pilot basis involving 2 of the countries with contrasting circumstances to guide implementation. That way, problems and/or obstacles revealed in the pilot study could be identified and/or addressed prior to the implementation of the main project.

#### **ii. Project Management and Implementation**

Project implementation is directed and supervised by the PSC. The PSC reports to the Nile-TAC and the Nile-COM. The PSC meets once a year. This was not enough in view of its



functions, and in the light of the numerous project activities. The PSC accordingly was not effective. The project steering and management therefore, to a large extent, devolved on the project management team and FAO. A 6<sup>th</sup> monthly meeting (i.e. 2 meetings a year) of the PSC with a participant from each country (instead of 2 to reduce cost) could improve upon the effectiveness of the PSC. The PSC also had to be proactive in its functions. For instance active follow up of the need for the extension of the project as captured in its minutes of December 2007 could have positively impacted on the fortunes of the project.

At the country level, the institutional setting and linkages, within country focal point institutions (FPI) internalization was inadequate. Project coordinators were part-time, and did not create enough integration of project activities within the national programs. Indeed, the project's activities did not form part of a coherent national program. No requirement for national level project management was put in place, and the respective FAO country offices were not effectively linked with the project activities at national level. They did not monitor progress on the project and were only given copies of periodic reports submitted to the project headquarters.

Inadequate national level steering and follow-ups impacted negatively on the project implementation, progress and the sustainability of project outputs. The establishment of oversight committees for country-level implementation and internalization of project activities, backed by budgetary support could have enhanced project implementation at the national level and also provided a means or mechanism for quality assurance or the vetting of outputs of the project's national consultants. The various FAO country offices should also take interest in future project activities and monitor performance of project consultants endpoints.

At the project headquarters level the AWP's were rather ambitious in scope, the activities to be implemented were rather many; hence targets could not be achieved in some instances whilst in others such as the F4T scenarios, the activities went far beyond the planned scope. Monitoring of project activities by project headquarters was not adequate; it was limited to monthly Reports by the NPC's and periodic reports by the various project consultants. The quality of the reports varied from country to country. Egypt, Sudan, DRC Congo, Ethiopia, Kenya and Uganda for instance provided comprehensive reports, whilst Burundi and Tanzania did not submit any reports. Similarly FAO backstopping could have been more frequent in view of the complex nature of the project.

Regular visits/inspections of project activities in the riparian countries by the CTA supported by telephone and electronic communication with Emails, could have helped enhance project implementation.

## **ACRONYMS AND ABBREVIATIONS**

ADCP	Acoustic Doppler Current Profiler
NRLW	FAO Water Resources, Development and Management Service
CTA	Chief Technical Advisor
DSS	Decision Support System
DST	Decision support Tool
ENTRO	Eastern Nile Technical Regional Office
FAO	Food and Agriculture Organization of the United Nations
FPI	Focal Point Institution
GIS	Geographic Information System
GWP	Global Water Partnership
IT	Information Technology
LNCV	Landau Network Centro Volta
NBI	Nile Basin Initiative
NPC	National Project Coordinator
NELSAP	Nile Equatorial Lake Subsidiary Action Program
Nile- COM	Nile Council of Ministers for Water Affairs
Nile –DST	Nile Decision Support Tool
Nile- TAC	Nile Technical Advisory Committee
Nile-COM	Nile Basin Council of Ministers for Water
PSC	Project Steering Committee
SVP	Shared Vision Program
WRPMP	Water Resources Planning and Management Project
AWP	Annual Work Plan

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## 1.0 INTRODUCTION

This project “*Information Products for Nile Basin Water Resources Management*” (hereafter, “FAO Nile”) started in December 2004. The Government of Italy is funding FAO Nile to the tune of US\$ 5.170 million, bringing the total contribution of the Government of Italy to the Nile process since 1996 to over US\$ 16 million. FAO Nile is being executed under the umbrella of the Nile Basin Initiative (NBI).

The project is being implemented by 10 states: Burundi, Democratic Republic of Congo, Egypt, Eritrea, Ethiopia, Kenya, Rwanda, Sudan, Tanzania and Uganda (hereafter referred to as “riparian countries”) with technical and operational assistance from FAO under the overall control and direction of the Project Steering Committee (PSC).

FAO Nile is scheduled to end on 31st December 2008. This evaluation mission is one of the prescribed terminal activities under the project agreement to be carried out by representatives of the participating countries, the donor and FAO.

The **purpose** is to provide **recommendations** to the Government, FAO and the donor on the **further steps necessary** to consolidate progress and ensure achievement of the project’s objectives. The Terms of Reference (ToR) for the evaluation mission is attached as “Annexure A” to the Report.

## 2.0 BACKGROUND AND CONTEXT

### 2.1 Context

With an approximate area of 3.1 million km<sup>2</sup>, the Nile basin covers about 10% of the land mass of the African continent. It is home to approximately 200 million people. The Nile basin is characterized by high population growth and significant development challenges: environmental degradation, armed strife, drought and famine, weak institutions, low financial capacity and inadequate infrastructure. Poverty is thus rife in the region; indeed 5 out of the 10 riparian countries are among the poorest in the world. The Nile waters are seen as veritable

sources for socio-economic advancement of the region. Agriculture is a dominant economic sector, and reliable access to water remains key to increasing agricultural productivity, providing employment, and to raising the standards of living of the riparian countries. The Nile also represents a vast resource for hydropower generation.

With rising water scarcity within the Nile basin, it became increasingly important to ensure that water resources were used effectively to meet diverse socio-economic goals. In the light of the foregoing, the Nile Council of Ministers launched the NBI in 1999. Through a participatory process of dialogue, they agreed on a shared vision “to achieve sustainable socio-economic development through equitable utilization of, and benefits from, the common Nile basin water resources”.



The NBI comprises the Nile Council of Ministers for Water Affairs (Nile-COM), the Nile Technical Advisory Committee (Nile-TAC), and the Secretariat (Nile SEC), which is based in Entebbe, Uganda. To support its vision, the NBI developed the Shared Vision Program (SVP) of basin wide projects, and the Subsidiary Action Program (SAP), consisting of investment programs at a sub-basin level. The main objective of these programs is to build capacity, trust and confidence among the riparian states, to develop the river in a cooperative manner, share socio-economic benefits, and promote regional peace and security.

The FAO Nile's overall **objective** is to strengthen the ability of the governments of the riparian states to take informed decisions with regard to water resources policy and management in the Nile basin. Its activities are thus wide-ranging; from hydro-meteorological monitoring, GIS database development, preparation of poster series, the Nile Decision Support Tool (Nile DST), to negotiation skills training.

To date, the capacity building component has implemented 60 training events with a total of 562 trainees (see Annexure D). Furthermore, in the last two years the project has made a significant attempt to provide Nile Basin decision makers with a better understanding of the relationship between water and agriculture at the Nile basin level. The agricultural sector consumes between 70% and 90% of the entire water in the Nile basin, making it the most important area for effecting the necessary change to lives and livelihoods

The specific **purpose** of FAO Nile is to provide a set of capacity building and information products. These outputs have been designed to enhance the work of the riparian countries and within the umbrella of the NBI. The Project builds upon two of prior Nile Basin projects supported by Italian Cooperation:

- Operational Water Resources Management and Information System in the Nile Basin Countries (March 1996-November 1999); and
- Capacity Building for Nile Basin Water Resources Management (December 1999-November 2004).

The project is designed to deliver policy-neutral information products at the request of the riparian countries and with their active cooperation; and then inform basin policy decision making. It has thus been designed to create and promote synergies with the other activities under the NBI. The project's outputs include:

- Capacity building.
- Consolidated hydro- metrological monitoring networks, databases, internalized Nile Decision Support Tool (DST) and related geo-referenced information systems.
- Baseline survey of agricultural water use and productivity at Nile-basin scale.
- Compilation of an agricultural production database for the riparian states, including statistics on yield, acreage, and production for the major crops at district level.
- A survey on agricultural productivity in the Nile basin following a farming system approach.

- “Food for Thought” (F4T) scenario exercise to determine a plausible range of demand for agricultural produce by the year 2030.

## 2.2 Evaluation Mission- Purpose and Scope

As noted, the **purpose** of the evaluation is to provide **recommendations** to the Government, FAO and the donor on **further steps necessary** to consolidate progress and ensure achievement of the project’s objectives.<sup>2</sup> With regard to the **scope of the evaluation**, the ToR provides in detail a minimum coverage of matters to be addressed. These must be adapted to specific concerns and issues that the mission is expected to address. The mission was thus tasked to assess the:

- Relevance of the project in terms of current development priorities and needs in the context of basin wide collaboration.
- Clarity and realism of the project's development and immediate objectives.
- Quality, clarity and adequacy of project design.
- Efficiency and adequacy of project implementation.
- Project results, including a full and systematic assessment of outputs produced to date and progress towards achieving the immediate objectives.
- The cost-effectiveness of the project.

In the light of the foregoing, the mission was to draw specific conclusions and make proposals for any necessary further action by Government and/or FAO/donor to ensure sustainable development, including any need for additional assistance and activities of the project prior to its completion. The mission was also to draw attention to any lessons of general interest, and make specific proposals for further assistance, if any, including precise specification of objectives and suggested outputs and inputs.

## 2.3 Methodology

The mission comprised 2 consultants: a specialist in international water resources management and information products and a specialist in natural resources negotiation processes. The Report is the outcome of a 4-week schedule of activities throughout November, 2008. This entailed the following:

- The team assembled at the project headquarters, Entebbe on Monday 3<sup>rd</sup> November, 2008 where it was introduced to project staff and briefed by the project’s Chief Technical Adviser (CTA). The briefing was followed by a telephone conference with project’s backstopping officers at FAO headquarters, Rome. The briefing and conference provided further clarification of the scope of the ToR.

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<sup>2</sup> The mission could identify further need for external assistance but without placing any obligation on the donor, FAO or governments.



- The team examined the FAO guidelines for project evaluation and agreed on a framework for executing the mission.
- The team examined relevant project documents and literature on the NBI and FAO Nile
- The team received briefing from some members of the project staff.
- Meetings were held with senior Ugandan officials connected with the project and a representative of GWP Eastern Africa office who has collaborated with FAO Nile and participated in the F4T scenario exercise.
- Responses from riparian countries to a questionnaire circulated by the project were examined.
- The team travelled to Egypt and Ethiopia (3 days each) for meetings/consultations on the basis of the project questionnaire.
- Back to Uganda, the team held further consultations with officials of the NBI, Ugandan government officials and project staff.
- The team had discussions with the Director and Technical Consultant, Office of the Italian Development Cooperation.
- Discussions were held by the team with the FAO Representative in Uganda.
- The team prepared its preliminary findings/Report.
- The team briefed the PSC meeting on its preliminary Report /findings and received comments from the PSC.
- The team produced its draft report.
- The team was debriefed by the FAO/Italy technical officers and project staff prior to departure for their respective home bases.

On the basis of various literature on the project; including, the project documents and ToR for the various components; interviews with project staff, the NBI and national government officials connected with the project; the team assessed the project in the light of its objectives, outputs and analysis of the questionnaires; made findings and recommendations and draws lessons for the future. A detailed list of activities including persons met and/or consulted and the relevant documents/literature are attached as Annexure B and C to the Report. The team's final Report is to be submitted to the FAO by December 15, 2008.

Parts 1 and 2 of the Report have addressed preliminary matters: introduction, background and context including, purpose and scope of the evaluation and methodology. The subsequent chapters of the Report deal with the following substantive matters

- Project Objectives and Relevance
- Project Design

- Project Management and Implementation
- Project Activities and Outputs
- Progress towards Achievement of Project Objectives and Sustainability
- Cost Effectiveness of the Project
- Findings and Conclusions
- Recommendations
- Lessons Learned.

### **3.0 ASSESSMENT OF PROJECT OBJECTIVES AND RELEVANCE**

#### **3.1 Justification**

Justification for FAO- Nile was premised on the fact that integrated water resources management principles and techniques are new and not applied in the basin so as to offer the full picture of water development to stakeholders and decision-makers. There is no elaborate information to support basin-wide studies or examine policy alternatives and trade-offs at national and trans-boundary level and the ability to elaborate and assemble data in a meaningful way into useful information is generally unavailable.

These have necessitated human and institutional capacity building at national and basin levels on the subject, including quality control procedures and the internalization of the use of the DST. The project was also designed to enhance cooperation among the riparian countries by addressing the issue of weak dissemination of public information as well as providing knowledge, and building confidence in the public. These premises are unassailable having regard to the circumstances of most of the riparian countries.

#### **3.2 Objectives**

As spelt out in the project document, the long-term development objectives of the project are to empower Nile Basin countries to develop water resources of the Nile in a sustainable and equitable way, to ensure efficient water management, cooperation and joint action between the riparian countries; and to address poverty eradication and economic integration seeking win-win situations for the prosperity, security and peace of all its people.

Such development objectives are at the core of the strategic action programme of the NBI. It is thus of great relevance to the realization of the shared vision of the riparian countries, namely, “to achieve sustainable socio-economic development through equitable utilization of, and benefits from, the common Nile basin water resources”.

It was envisaged that the project which builds upon the two previous FAO/Italy supported projects by utilizing equipment provided, skills and institutional capacity developed as well as the utilization of data and tools developed, would, specifically, contribute to the development of capacity and ability to take informed decisions for cooperative action concerning planning, development and use of the waters of the Nile by the riparian countries. To achieve these developmental goals, the project document identifies three immediate objectives:

- a) **Integrated data products used for making informed water resources management decisions**
- b) **Strengthen the ability to carry out surveys, case studies and benefit-sharing scenarios**
- c) **Dissemination of information and knowledge**

The project document further identifies the means for the attainment of these immediate objectives, the expected outputs, and supporting activities to be carried out during the implementation period.

Of the planned activities, PSC3 decided to cancel the Integrated Water Resources Management (IWRM) component since the subject was adequately covered by the Global Water Partnership (GWP) programme. Instead, project resources were concentrated on assessing the agricultural water variable in the Nile Basin.

From the assessment and responses to the questionnaire, the project objectives as set out in the project document are sound, clear and relevant to the Nile Basin development initiative under the umbrella of the NBI. Most countries rate the project objectives and relevance as good. However, there are shortcomings: no timelines were provided for the realization of the various outputs to guide cost effective implementation. However, this was rectified by the project staff in the first Annual Work-Plan (AWP) and approved by the PSC. There was no mid-term review. The project did not serve as coherent parts of national programs in most riparian countries. This has contributed to the different levels of implementation among the participating countries.

The project outputs and activities prescribed in the project document and the AWP were rather ambitious considering the limited capacity in most of the riparian countries and the time frame for project implementation. Moreover, the project policy was to treat all riparian countries equally, irrespective of their size, GDP, contribution to the Nile flows, perceived development challenges, or capacity of the national water agencies. It was recognized that this setup did not reflect the varying capacities and needs at national level, but was considered a practical formula for transparency for distributing project funds and support. Finding an alternative formula that would take into account specific national needs was practically impossible.

There was also the assumption of a strong linkage between the project activities and outputs with those of the NBI, especially, the SVP portfolio. This has not been fully realized as each NBI project was implemented according to its plans and budget. For instance, in late 2006, the project's Decision Support Tool (DST) was transferred to the Water Resources Management Project (WRMP) of the NBI, at a time when the WRMP was being established and the Decision Support system (DSS) development was at an initial stage.

The transfer of the Nile DST was accompanied by a 2-week regional workshop organized jointly with the SVP of the WRPM project, at their premises, to beef up the existing DST technology and know-how acquired by many national experts in previous Nile DST training activities.

Regrettably, since its transfer to the WRMP, the DST has not been much used to-date and the capacity earlier built by the project in member states has consequently been unutilized, with the risk of same being lost. Owing to the limited time prescribed for implementation, most of the key project outputs, especially, those related to agriculture and F4T components are yet to be synthesized, disseminated and/or internalized both at basin and national levels (see further projects activities and outputs below).

## 4.0 ASSESSMENT OF PROJECT DESIGN

FAO Nile identifies both direct and indirect project beneficiaries. Direct project beneficiaries were identified as human resources in the government sector responsible for water development and management. The indirect and ultimate beneficiaries are the as yet unidentified rural populations in areas prone to be impacted, in one way or another, by water development projects in the Nile Basin, either because the benefits of investment are geared to improve their situation, or because negative externalities of such investments are averted.

With regard to the immediate beneficiaries, the project design identifies strategies and mechanisms, including: institutional strengthening; training and capacity building for officials in the relevant government institutions; workshops for target groups such as research and academic institutions, and project monitoring through representation at PSC meetings to promote ownership by the beneficiaries. To date, however, only a small group of immediate beneficiaries has been involved in project activities. This is not adequate to sustain the project outputs at basin and national levels.

In the case of the indirect beneficiaries, these are yet to benefit from the project on account of the fact that project outputs and activities such as farming systems and the F4T scenario which could inure to their benefit are yet to be completed.

The project design was ambitious. Indeed some of the project's components such as F4T, Farming System Analysis, Water Use Survey, and Identifying Basin Wide Agricultural Development Options could be individual projects in their own right in a 10-country environment.

Though there was the mainstreaming of the project and other measures adopted by the project to ensure cost-effectiveness (see project budget and expenditure, Part5 below), some of the major project outputs were not fully completed leaving out major activities such as dissemination of the studies in case of the agriculture study component and the F4T. In the case of the Nile DST case studies at national universities, the matter was brought to the attention of national coordinators (NCs) on a number of occasions but the project received no research proposals.

The project's planned activities are well articulated in the project document. In addition, the project design was flexible to allow for further alignments and adjustments by the PSC, as the need arose. The PSC 3, for example, decided to refocus the project and changed activities and outputs related to undertaking IWRM to training in negotiation skills and international law for senior managers in the NBI countries, in order to support the on-going negotiations on the Nile cooperative framework.

However, there are a few shortcomings: the project duration is not fully realistic. Project duration, especially the agricultural studies have been underestimated. Project Objective 1, **integrated data products used for making informed water resources management decisions**, stopped at producing the products, consolidating the DST and training technical officials. No further initiatives/activities were taken to enable decision makers to review and make input into further development of the information products. The application of the DST was not supported either at country-level or by academic institutions.

Project Objective 2- **Strengthen the ability to carry out surveys, case studies and benefit-sharing scenarios** are rather ambitious, and required much time, effort as well as financial and technical resources. Objectives 1 and 2 have thus not been fully implemented and objective 3- **Dissemination of information and knowledge** was not addressed.

Furthermore, the complex challenge of implementing activities that did not squarely rely on the FPI's staff expertise and required skills and knowledge from multi-institutional and multi-disciplinary collaboration was underestimated for the agriculture and F4T related activities. As a result, they were mainly driven by the project headquarters with inadequate internalization and participation at national level, or with adequate involvement of the FPI and NPC.

## **5.0 ASSESSMENT OF PROJECT IMPLEMENTATION, EFFICIENCY AND MANAGEMENT**

### **5.1 Project Management**

The project headquarters is located at Entebbe within premises provided by the government of Uganda at the Directorate of Water Resources Management. It is headed by the Chief Technical Advisor (CTA). Under the operational and technical supervision of the Chief of the FAO Water Resources, Development and Management Service (AGLW), and in close cooperation with the project's designated national coordinators and other project staff, the CTA is tasked to:

- Attend to responsibilities and functions as resident international water resources specialist, and in particular, manage the project, its international, regional and national experts and supporting staff; attend to project management matters, including financial and administrative management, procurement and reporting, as required.
- Facilitate co-operative working and communications among the participating countries, and assist in identification and evaluation of consultants and sub-contractors.
- Ensure close cooperation, coordination, and exchange of project results with the Nile SEC and other related activities of the NBI program, and vice versa.
- Facilitate and support the work of the Project Steering Committee, provide relevant information to this project body, and secure all required clearance for recruitment, agreements and subcontracts.
- Contribute to the technical work under the project both as a manager and a technical expert within his/her particular field of experience.
- Carry out other work as required under the project, as may be requested by FAO and the Project Steering Committee.

The CTA is assisted by a number of specialist consultants and a secretariat support team. In line with the NBI operational policies, project staff is mostly recruited from the riparian countries. Only the CTA and some of the specialist consultants are from outside the Nile basin.

The NBI provides the overall institutional framework for the project. The governing body is Nile-COM which is advised by the Nile-TAC and supported by the Secretariat, the Nile-SEC.

FAO- Nile reported to the annual Nile TAC and Nile COM meetings, and participated in the periodic SVP coordination meetings. A representative from the Nile-SEC participated in the annual PSC meetings as observer. Frequent informal coordination took place with individual SVP projects, and there were regular consultations and exchanges of information with Nile-Sec.

Project implementation was directed and supervised by the PSC. It comprised 2 members nominated by each participating country, 2 representatives from the Donor, and 2 representatives from FAO. The PSC reports to the Nile-TAC and the Nile-COM. Its mandate is to:

- Direct project implementation, review and endorse project work plans, and monitor project progress. The PSC further provided regular advice and recommendation to FAO, as executing agency, on project implementation and all project related matters.
- ensure that appropriate mechanisms are in place for close cooperation, coordination, and exchange of project results with other related activities of the NBI program.
- Report regularly to Nile COM through the Nile TAC on all project matters, including progress, outputs, and coordination issues.
- Liaise, through national PSC members, with line ministries and relevant national programs to ensure that potential synergies are captured.

The set up for the project implementation at the secretariat is good. The project is managed by a small team of staff based at the headquarters at Entebbe, with back-up support of FAO headquarters, Rome. Only the CTA, as noted, is international staff with the rest hired from the basin (technical specialist from Ethiopia, Eritrea, Kenya and Uganda), and support staff from Uganda. This reduces project management costs, promotes efficient use of resources and enhances capacity building.

The project uses web-based communication with the countries and limited travels. However, the CTA and headquarter -based staff should have had regular monitoring to the support project implementation in the riparian countries; their regular presence could have kept implementing agencies alert and active. The monitoring could also have verified the PSC's monthly reports, the utilization of equipment provided by the project, etc.

While the project is by design implemented by the countries through the FPI and coordinated by the NPC and second steering committee member, the main project activities under this phase, especially, database updates, the agricultural systems surveys and report synthesis were fully managed by the project headquarters with limited involvement of NPCs. This created a gap in information flow and project follow-up at national level. Moreover, these activities, including the F4T involved very few people; a core group of 25 persons, and 50 others who were exposed to the scenario, but were not active participants.

Assessment of the mission is that the project has been fairly well managed given the geographical spread of project area, diversity of interests and capacity among participating countries, limited budget and the nature of project activities. The tasks assigned the CTA are challenging, especially in view of the extent of the area covered by the project and its attendant communication challenges; and requires dedication as demonstrated on the part of the CTA and project headquarters staff for their execution. However, there was too much

demand on the CTA for technical work and less time available for regular communication and monitoring visits to the participating countries.

Lastly there was provision for tripartite meetings between the Countries, donor and FAO, usually at the end of each PSC, to review and endorse PSC decisions, especially those with financial implications.

## **5.2 Government and NBI Support**

These are considered satisfactory. The project is guided by the PSC composed of senior Government officials from the FPI within the participating states. These are to ensure internalization of project implementation and create synergies between the project and other national programs. The PSC reports to the Nile-COM through the Nile-TAC for political and policy level guidance. Since the project is under the umbrella of NBI, the TAC and NBI Secretariat are to ensure its synergy with the other NBI projects and overall cooperative planning and management of the Nile basin resources.

The required reporting by the PSC to Nile-TAC and coordination between the FAO Nile project management and NBI's SVP projects were regular and considered adequate. The effectiveness of this arrangement, however, could not be established.

The project implementation strategy was to mainstream the project at national level within the FPI, utilizing national coordinators who are public servants working within the FPI, thus creating a national level supervisory and support avenue for the project. However, for most of the countries, the project is not integrated in the sector work plans and budgets, partly because it has a basin wide focus and resources accruing to individual countries are not identifiable.

The mission was, however, informed by Uganda that the FAO Nile project is actually reflected in the sector annual work plans and budget and provided with limited national budget resources. This may be a special case for Uganda as the host country to ensure effective support to the project and its offices in Entebbe.

The mission is of the opinion that due to the limited budget and inability to articulate the project's contribution in each riparian country, the project is not adequately supported and consistently followed in all the countries. There have been rapid changes in NPCs affecting continuity. There is no national coordination/steering mechanism in place and each country manages the national level activities as it sees fit.

Moreover, the many personnel trained by the project may not be monitored to ensure their continuous support to the project. Many of the staff trained by the project, especially the GIS experts and Modelers have been taken out of government and hired by the NBI's WRMP, creating sustainability problems as they are independent of national control. Moreover, with the level of remuneration provided by NBI, it is doubtful whether they would return to government service.

The PSC which includes the recipient governments, the donor Italy and executing Agency, FAO, has been effective in providing basin level guidance and made changes in project activities to respond to emerging needs. However, with one meeting a year, the PSC could not have been effective, in the light of the numerous project activities. The project steering and management are therefore, to a large extent, the responsibility of the project management team and FAO. A six-monthly meeting (i.e. 2 meetings a year) of the PSC with a participant

from each country (instead of 2 to reduce cost) could improve upon the effectiveness of the PSC. The use of facilities and or devices such as teleconferences and e-mails as well as more regular inspection/visits of project activities in the riparian Countries by the CTA could have, also, helped to enhance project execution.

Inadequate national level steering and follow-up is a concern to the CTA and the mission, and may have impacted on project implementation, progress and the sustainability of project outputs and products for future use.

At the country level, the institutional setting and linkages, within country focal point institutions (FPI) internalization appears to have been inadequate: part-time coordinators did not create enough integration of project activities within the national programs.

The responses to the questionnaire indicate that the project activities did not form part of a coherent national program. No requirement for national level project management was put in place, and the respective FAO country offices were not effectively linked with the project activities at national level. They did not monitor progress on the project and were only given copies of periodic reports submitted to the project headquarters.

The project design considered the risks but the mitigation measures were not adequate to cope with the rate of institutional changes in governments with respect to staff turn-over and the widespread loss of the GIS/Database experts to the NBI's Water Resources Planning and Management project (WRMP).

Moreover, the agriculture and F4T activities required involvement of expertise and personnel that had to be oriented and initiated into project activities with a strong reliance on consultants within the countries. The consultants were external to the FPI and, in most cases, government agencies. Their skills brought to bear on the project would not be available to the water sector beyond their contracted time input.

### **5.3 Technical and operational backstopping**

FAO responded to the support needs of the project management and enabled the project access FAO technical capacity and information data base. The project was, also, able to bring on board high level and well qualified competent consultants to carryout training and provide specialized knowledge and expertise. Although project implementation as set out in the AWP's was behind schedule and there was no Mid-Term evaluation, backstopping mission reports by headquarter staff identified areas where project execution needed to focus thus contributing to enhanced project implementation.

### **5.4 Project Budget and Expenditure**

#### **5.4.1 Donor Inputs**

As indicated, the Italian Government is funding FAO Nile to the tune of US\$ 5.170 million, bringing the total contribution of the Government of Italy to the Nile process to over US\$ 16 million over a 12-year period. **Table 1** below presents a summary of the planned and actual expenditures for the implementation of the project.



The initial US\$5,000,000 provided for under the funding agreement was increased by an additional US\$ 170,000 by the Donor to support the conference of the Landau Network Centro Volta on “*the Agricultural Water Variable in the Nile Basin: Mapping the Issues and Examining Prospects to 2030*”.

Planned expenditures were exceeded in some instances whilst savings were made in others: the unanticipated increases in certain activities led to increases in planned expenditure. For instance, the budgets for the water use survey and farming system analysis were increased to reflect the expanded input from national consultants; and funds for the F4T Scenario Exercise were similarly increased to respond to the widening of the scope of this component of the project. 5 meetings of the PSC were organized; one more than planned, hence the PSC budget line was increased by an additional US\$ 75,000.

**Table 1- Project Expenditure [in 1000 US\$]**

<b>CATEGORY</b>	<b>Planned Sub Total</b>	<b>Effectuated Sub Total</b>
Salaries General & Professional	718	907
FPI coordination & operation	350	381
Operating expenses (incl. miscellaneous travel)	225	396
PSC Meetings	200	275
Miscellaneous Training	250	240
Equipment	715	638
<b>OUTPUTS</b>		
1.1: Hydro-meteorological Monitoring	75	115
1.2: Database Development	45	26
1.3: Nile DST	200	208
1.4: GIS Info products	300	285
1.5: Improved Internet Access	72	18
2.1: Water Use Survey	150	225
2.2: Farming System Analysis	150	194
2.3: IWRM	150	0
2.4: Negotiation Skills Training	40	135
2.5: Exploring Basin Wide Development Options	200	10
2.6: "Food for Thought" Scenarios	150	235
3.1: Information Dissemination	55	50
<b>SUPPORT</b>		
Technical Support (FAO HQ)	380	239
FAO Support Costs (13%)	575	593
<b>TOTAL</b>	<b>5,000</b>	<b>5,170</b>

Source: Project Headquarters

Funds for improving internet access at the FPI were reduced as internet became a standard provision at most government departments. The decision by PSC 3 to cancel the IWRM component (as same was covered by GWP), enabled savings to be made and/or channeled to other areas such as the agricultural water use surveys and the F4T scenarios.

On the whole, the actual expenditures were in consonance with the planned expenditures except in a few areas as explained above and indicated in the Table. The excess expenditures were made up by funds allocated for the IWRM component and the savings made in operational expenses.

#### **5.4.2 National Inputs**

FAO-Nile did not anticipate financial contributions by the participating countries. The FPI continued to provide the project coordinators on part-time basis. However, there was no continuity in some countries due to changes within the FPI and staff migration. Offices were provided by the FPI but according to the questionnaire response, the national inputs are rated average/satisfactory. During the visit to Ethiopia FPI, it was reported that the FPI could not maintain some of the equipment such as plotters, partly due to lack of funds, and access to spares and software updates. The equipment and software supplied by the project headquarters using Uganda based distributors could not be supported by Ethiopian companies. This may be true in most of the project countries.

### **6.0 ASSESSMENT OF PROJECT ACTIVITIES AND OUTPUTS**

#### **6.1 Achievements**

FAO Nile has provided the following outputs:

- Hydro-meteorological Monitoring Network
- Database Development
- Nile DST
- GIS Information
- Agricultural Baseline Survey and Water Productivity Analysis
- Measures to Increase Agricultural Production
- Assessment of Demand for Agricultural Produce in the Nile Basin for 2030
- Multi-media Products
- International Law and Negotiations Skills Training Program Law
- Information Dissemination
- Capacity building

##### **6.1.1 Hydro-meteorological Monitoring Network**

According to the project progress report for the April September, 2008 reporting period and the overview of project outputs handout of November, 2008 prepared by the project management, the project activities and expected outputs are substantially complete. Countries continued to operate and maintain the equipment earlier supplied by the project as part of their national networks, collect, analyse and archive the data.

An in-depth analysis was made of the major constraints in hydro-meteorological data acquisition in the Nile countries. A strategy was developed for sustainable data acquisition that focused on reducing operating expenses, streamlining data processing, and reducing vandalism. A selected set of new technologies were introduced that would bring operating expenses within the budgetary means of the respective water departments.

Under this component, 7 training manuals were prepared and 10 training workshops were organized (see Annexure D for the list of FAO Nile's training manuals, publications, Reports and training programs).(mission to verify distribution). A core group of trained professionals conversant in installing, operating, and maintaining the new instrument was created through on-the-job training programs within the respective hydrometric agencies; and a methodology

was developed to conduct ADCP flow measurements under high sediment conditions. Limited funds were made available for extension of the network. A total of 19 stations have been installed and made operational in the basin (see Annexure E for details). It was further indicated (Uganda) that the project provided, in limited quantities, spares for the installations to support countries maintain and operate the stations.

### **6.1.2 Database Development**

A standard database structure for time series data has been developed. A large set of hydrologic and meteorological data was transferred into electronic format and subjected to systematic quality control. A hydro-meteorological data set of adequate quality and coverage is now available in the Nile basin. It supports informed decision and policy making at national and Nile basin scale, and provides the basis for simulation models like the Nile DST.

The database development activity was mainly implemented by counterpart staff and the activity contributed to building valuable skill sets at the respective departments. Under this component, data acreage, yield, and production for the most important crops were collected at district level by teams of national consultants and stored in a geo-referenced database. Cropping calendars were added for evapotranspiration assessments. Data obtained vary in the quality, reflecting the differences/capacities in data acquisition and accessibility among the riparian countries. The resulting agricultural production dataset is the most comprehensive yet available in the basin.

Special attention was given to the development and validation of a detailed Nile Basin irrigation layer. It includes the actual geographic locations of the irrigated areas, as well as a set of basic descriptors like crop, type of water control, area equipped for irrigation, and area effectively irrigated.

National databases were compared with international datasets and satellite imagery. The latter included FAO–Frankfurt Global Map of Irrigated Areas, Africover, and Landsat. A number of field visits were organized to verify unclear situations.

The map represents the most detailed irrigation layer available in the Nile Basin so far but the quality varies per country. For instance, detailed information for Burundi and DR Congo could not be obtained.

The project prepared a meta-database of international GIS data and periodically distributed useful datasets to the counterpart agencies. It concerns both public domain and proprietary data. The main categories are topography, climate, and socio-economic.

### **6.1.3 Nile Decision Support Tool (Nile DST)**

The project updated the Nile-DST River Simulation and Reservoir Operation Module (RS-RO) and added the following facilities:

- 6 potential hydropower facilities in Uganda ( Bujagali, Karuma, Kalangala, South Ayago, North Ayago, and Murchison Falls)
- Merowe Dam on the Main Nile in Sudan
- Roseires on the Blue Nile in Sudan, and
- Tana-Beles Hydropower facility.

Detailed technical report and user manual were produced for the consolidated RS-RO module. Another report was prepared that documents the Nile-DST system structure. A Nile-DST training workshop was held in September 2006 jointly with the SVP Water Resources Planning and Management Project (WRPM). The training focused on using the updated RS-RO module and transfer DST technology to the Nile countries. Prior to the event, a three-week internet-based training was implemented to create a level knowledge base among participants.

As a follow-up activity, national Nile-DST workshops were organized in a number of riparian countries aimed at expanding the user base and encourage widespread use of the tool in relevant agencies.

The above activities concluded the project’s involvement in the Nile-DST. Further development of decision support technology in the Nile basin is being implemented by the SVP Water Resources Planning and Management Project. In line with the agreement with the NBI secretariat, all Nile-DST activities were handed over to this project.

#### 6.1.4 GIS Information

To support the public policy process, a set of posters was developed to better enable stakeholders to participate in the discussions regarding development of the shared Nile water resources as shown in **Table 2** below.

A comprehensive methodology was developed to convert land cover to land use. It integrates expert knowledge on cropping activities with district statistics and the AFRICOVER database. It also incorporates information on vegetation dynamics derived from the MODIS TERRA satellite. A land use layers with a 90 X 90 meter resolution was prepared for Uganda. Similar layers for Ethiopia and Sudan are in progress

**Table 2- FAO-Nile Poster Series**

No.	Poster	Subject matter
1.	Nile Flows Poster	It presents the hydrology of the Nile river and shows the relative contribution of the various tributaries to the annual Nile flows. The map uses a hill-shaded Digital Elevation Model (DEM) as background to show the relief of the terrain. Graphs of mean monthly flow at key river sections exhibit the seasonal variability of runoff over the basin
2.	Population Prospects in the Nile Basin	This poster presents two images of human population distribution in the Nile countries: an estimate for 2005, and a projection for 2030.
3.	Observed Biomass Production	It visualizes the spatial and temporal variability of vegetation cover over the Nile region. It further relates annual biomass production to irrigation volumes withdrawn from the Nile and total annual rainfall. Biomass production is calculated – on a monthly basis – using the Normalized Difference Vegetation Index (NDVI).
4.	Dominant Crops in the Nile Basin	This poster demonstrates the regional variations in the dominant crops typically found throughout the Nile Basin. It aims to provide an entry point into the cropping complexities of the Nile’s farming systems. A “regional landscape transect” is used to simplify the main factors of topography, climate systems and rainfall.
5.	“Food for Thought” Scenario Poster	It visualizes the extent of the F4T scenario set. To maximize the spread of a scenario set – in order to capture a wider range of the future – stories are developed at the extreme corners of a two-dimensional scenario space.
6.	Agricultural Trade in the Nile Countries	This poster shows the balance of trade of agricultural commodities of the riparian countries expressed in monetary values. Total exports and imports per country have been averaged over the period 2000-2004 with the objective to attenuate annual

		price and production swings caused by weather and market conditions. The values were obtained from FAOSTAT and represent the entire country – not only the Nile basin part.
7.	From Producer to Consumer Some Constraint in Agricultural Production and Trade	This photo series aims to illustrate some of the socio-economic constraints in agricultural production. It follows agricultural produce from the fields around Mbale – Eastern Uganda – to the market in Kampala. Lack of storage capacity, poor infrastructure, and inefficient and expensive processing are responsible for the vast gap between market and farm gate prices.
8.	Water Resources Infrastructure in the Nile Basin	It shows the location of the main dams, weirs and irrigation systems in the Nile Basin, together with associated attributed information. The poster also presents a selection of planned dams and canals, as proposed by the respective national focal point institutions.
9.	Nutrition Requirements in the Nile Basin for 2030	This poster presents a realistic range of food supply requirements in the Nile Basin for 2030. The poster shows baseline figures for 2005, the assumptions of the key state variables per scenario, and the annual calorie requirements for 2030 per country.
10.	Rwenzori Poster Series	Four posters were prepared for the centenary anniversary in 2006 of the climbing of the Rwenzori by a scientific expedition headed by Luigi di Savoia, the Duke of Abruzzi: <ul style="list-style-type: none"> <li>geography and geology of the Rwenzori mountain range;</li> <li>land cover of the Rwenzori mountains and surroundings, derived from AFRICOVER;</li> <li>glacier retreat in the period 1906 to 2005;</li> <li>various satellite images of the Rwenzori mountains.</li> </ul>

### 6.1.5 Agricultural Baseline Survey and Water Productivity Analysis

A baseline survey of agricultural production in the Nile Basin was conducted. Data on acreage, yield, and production for the most important crops were collected at district level by teams of national consultants and stored in a geo-referenced database. Combining the agricultural statistics with information on rainfall and potential evapotranspiration, an analysis was made of current water productivity in agriculture in the basin.

### 6.1.6 Measures to Increase Agricultural Production

A team of national consultants studied the resources of farmers, and identified criteria for grouping farms into similar types. Each typology is assumed to be faced with a similar environment and can benefit from the same interventions. A GIS layer of farming systems was developed for a number of Nile countries. Based on the farming system survey, an analysis was made of the full set of constraints (bio-physical, social, and institutional) limiting farm productivity and production. Possible solutions to the constraints were identified.

### 6.1.7 Assessment of Demand for Agricultural Produce in the Basin for 2030

FAO Nile engaged in a scenario building exercise to examine the agricultural demand function in the Nile basin for the horizon year 2030. A scenario approach was adopted to explicitly acknowledge the inherent uncertainties associated with the future. Four alternative but plausible scenarios were produced.

The scenario exercise – Food for Thought (F4T) – entailed a highly interactive process. Built by a core group of some 25 participants from all Nile countries, it evolved into a tool for a systematic and multi-stakeholder analysis of the complex rural development question in the Nile basin. It combined information from three main sources: demographic prospects by the United Nations Population Division; nutrition trends and statistics reported by FAO; and the 4FT scenario set.

By adopting a scenario approach, important additional information was added to the calculations. In particular, it adds qualitative insights to the figures obtained, which should help policy makers to better appreciate their implications and formulate more appropriate food security and agricultural development strategies.

### **6.1.8 Multi- Media Products**

Three multi-media products were developed under the project:

- *F4T Scenario Logics*: they describe the causal system that determines the agricultural demand function in the Nile Basin.
- *Temporal and Spatial Variation of Biomass in the Nile Basin* presents a sequel of 12 successive monthly images of vegetation cover in the Nile Basin as observed by MODIS TERRA.
- *From Producer to Consumer – Some Constraint in Agricultural Production and Trade*: a photo series follows agricultural produce from the field around Mbale – Eastern Uganda – to the markets in Kampala.

All multimedia products were produced in Macro Media Flash and are available on the project web site.

### **6.1.9 International law and Negotiations Skills Training Program**

A training package, “FAO Training Manual for International Water Courses/River Basins including Law, Negotiation, Conflict Resolution, and Simulation Exercises” was developed following a PSC decision. The 124 page document is accompanied by a 60-page teacher’s manual.

As part of its capacity building program, the project organized two large institutional strengthening events. It integrated negotiation skills training with international water law and policy education. It was based on the core elements of the ‘principled negotiation approach’ developed by the Harvard Negotiation Project. It employed the F4T scenario set developed by the project as case study in a number of advanced simulation exercises. The principled negotiation approach aims to shift the focus of the discussion from position to interests. The workshops also discussed the role of facilitation and mediation.

### **6.1.10 Information Dissemination**

FAO Nile was the subject of four television specials:

- A 20 minutes’ news story by RAI International, the global wing of the Italian national broadcaster, on water management in relation to the World Water Day.
- Two 6 minutes specials on the Nile by EURONEWS.
- 5 minutes’ story by NTV – EAST AFRICA.

The poster series forms the principal communication tool. Most project data products were transferred into poster format. It is based on the assumption that graphic illustrations are far better accessible than written text. Taken together, the posters tell a big part of the story of the Nile basin including: where the water originates, how it travels to the Mediterranean, where the people live, how rural smallholders make their living, where water is the principal constraint to agricultural production, what difficulties are associated with producing for domestic markets, and the agricultural trade flows and market opportunities. A web page was maintained on project background, activities, and outputs.

### **6.1.11 Capacity building**

The second overall project objective was concerned with strengthening government capacity at national level to manage scarce water resources and deal with competing demands from different sectors in society. To this end, a substantial capacity building component was implemented. It was geared towards developing relevant technical skills and competence of individuals at the respective technical water agencies. Although the main thrust was on IT skills and knowledge of hydro-meteorological monitoring practices, the program covered a broad scope ranging from negotiation skills training to courses in the English language. A total of 60 events were organized benefiting 562 trainees. The training program activities are set out in Annexure D.

In line with NBI operational policies, project staff was mostly recruited from the Nile basin countries to ensure that valuable skills, experience, and knowledge of the Nile system were retained in the region. Of the 16 professionals who worked at the project office, 13 were Nile basin nationals.

## **6.2 Assessment**

On the whole, the project's outputs are in line with the project documents and the work-plans. The prescribed outputs were rather ambitious having regard to the time frame for project implementation and the socio-economic and political circumstances of the basin. In spite of the limitations, a commendable output was realized. We provide below, specific assessments of each of these outputs:

### **6.2.1 Hydro-meteorological Monitoring Network**

The outputs are in line with the project document and the project support in this area is well appreciated by the Countries/FPI as new technologies were introduced that modernized hydro-meteorological monitoring practices. The component made a valuable contribution to strengthening government capacity at national level. By harmonizing monitoring practices in the Nile basin, data acquisition was standardized. This facilitated data sharing and contributed to creating a common knowledge base.

From the mission visits, it was reported that there are problems experienced with maintaining the hydro-meteorological equipment due to thefts of solar panels and at least one station was fully vandalized in Karamoja, Uganda. The ACDP also is not functional and the FPI is not getting it repaired or replaced. It is not clear how widespread the problem is but it has the potential to affect sustainability of project outputs. However, Uganda reported that it had purchased ACDP equipment using government resources which is a good indication of the government's interest and capacity to continue using the technology.

### **6.2.2 Database Development**

the outputs complete the activities stipulated in the project document. The databases are an essential part of the common knowledge base in the Nile Basin. They also strengthen the capacity of the respective water agencies for informed decision making at national and Nile Basin scale. The datasets are basic inputs for the development of simulation and assessment models. The data collected vary in quality reflecting differences in data acquisition in the Nile countries. Database integrity at Nile Basin scale can not be guaranteed because of the absence of a data sharing mechanisms. The mission was informed that NBI is addressing this shortcoming through the conclusion of a data sharing protocol among the riparian countries. This is vital for the development and use of the planned Decision Support Systems (DSS).

### **6.2.3 Nile Decision Support Tool (Nile DST)**

the outputs complete the Nile DST activities stipulated in the project document. The Nile DST has the potential to be a key component of the common knowledge base in the Nile Basin. However, it is not widely used and may be superseded by a more comprehensive system, the DSS, currently being developed by NBI. As planned, the DST component has exposed technical staff, researchers and decision makers to the potential of DST technology and transferred relevant know-how to the basin.

From the mission questionnaire and meetings in Egypt, Uganda and Ethiopia as well as meeting with the SVP-WRMP lead specialist, it was reported that the DST is not operational and could, at best, be used for training purposes and research. The DST was modified by its designer, Prof. Aris Georkarkos, with the support of the World Bank for use by ENSAP for a scoping study to establish baseline scenario of current conditions in the Eastern Nile and an “evolving conditions” scenario that describes what is happening presently in terms of unilateral development within the context of the Joint Multi-purpose Project (JMP). The output is a restricted document for ENSAP use only.

The DST only covers upstream of the Nile Basin: starting at the outlet of Lake Victoria and ending at Aswan High Dam. Issues related to reluctance to share data also limit its utility as a sustainable product of the project. Moreover, its anticipated linkage with the NBI’s DSS project is not certain as the DSS development is yet to take place; and will take three years to develop. It was therefore a good decision to limit the project’s further involvement with the DST development and use; as further investment in the tool would attract commensurate utilization and ownership by the countries. There are lessons for NBI to learn on handling the DSS development and application. Most of the government staff trained by the FAO Nile on the DST has been employed by the NBI WRMP, so skills are available to support DSS development and application. However, this means that capacity at national level built by the project is now not available and more have to be trained

### **6.2.4 GIS Information Products**

the above outputs are in line with the activities stipulated in the project document. In particular the poster set makes a relevant contribution to the common knowledge base. It transfers a large set of data into accessible information for decision makers and stakeholders alike, and enables broader participation in the discussions regarding the development of the shared Nile resources. The poster set will be an important part of the information dissemination effort and provide a valuable contribution to the Nile dialogue.



### **6.2.5 Agricultural Baseline Survey and Water Productivity Analysis**

The activities implemented were in line with the project document but do not complete the component. An important data set was collected, organized, and analyzed. A good picture was obtained of the current status of agricultural activities in the Nile basin. However, synthesized information was not disseminated to counterparts or stakeholders, and was not internalized by experts and decision makers. The data set is the first of its kind in the Nile Basin and could form an important part of the common knowledge base. However, its effective value is limited if not used in planning and decision making processes. Moreover, in the absence of data exchange modalities in the Nile basin, maintenance of basin scale integrity of the data set is not guaranteed. A data protocol is currently being negotiated by the riparian countries to address data exchange challenges in the basin, but the process is yet to be completed. Until then, FAO would remain the custodian of all project data.

### **6.2.6 Measures to Increase Agricultural Production**

The project document did not specify the water productivity concept. The project opted for a comprehensive analysis and adopted a farming system approach. Apart from bio-physical constraints, it also looked at the social-economic and institutional constraints in agricultural productivity. A GIS component was also added.

Even though the approach went beyond the original scope, the activity is highly relevant, as it provides insights into the intractable problem of rural development in the Nile region. It could also shift the focus of the Nile discourse away from water – a potentially contentious topic. The reports and data received are valuable but have not been fully analyzed. Hence, the potential of this component has not been fully captured and the likelihood of sustaining the project activity is doubtful.

### **6.2.7 Demand for Agricultural Produce in the Nile Basin for 2030**

The results of the F4T activity went far beyond the original objective. Apart from producing a realistic assessment of future nutrition requirements in the basin, a practical tool was developed to facilitate systematic and multi-stakeholder dialogue on relevant policy issues. Examples are rural development, food security, and agricultural trade. F4T contributed to Nile basin knowledge base, was useful in enhancing the Nile debate and confirmed the scope for regional cooperation. However, the activity did not involve many participants; was headquarters driven with limited involvement of FPI and NPCs; it involved experts beyond the water sector, and is new and not fully developed and internalized to make dissemination of the output usable or beneficial to the countries. Sustainability of this work or opportunity for continuation, even under the NBI is not assured, without additional support by the project.

### **6.2.8 Multi-media Products**

Project made a modest contribution to project objective 3- Information Dissemination.

### **6.2.9 International Law and Negotiation Skills Training Program**

The impact of the negotiation skills training was positive but limited. The workshops were well received. However, the scope of the subject was too broad to be covered and internalized in a short timeframe. The output contributed to the common knowledge base and strengthening government capacity.

### **6.2.10 Information Dissemination**

The outputs produced are in line with the project document. They provide a comprehensive picture on some aspects of the Nile system and a useful background for policy discourse. However, the project did not actively disseminate the products.

### **6.2.11 Capacity building program**

The output is in line with the project objective. The capacity building program entailed a substantial effort and output spread over various project components. However, given the overwhelming needs for human and institutional capacity building in the riparian countries and the available project resources, it was modest and did not adequately address the capacity building needs of the respective countries. Although no critical mass could be built, in individual areas – in particular the hydro-meteorological monitoring and GIS – the project did make an inroad into capacity building.

## **7.0 ASSESSMENT OF PROGRESS TOWARDS ACHIEVEMENT OF PROJECT OBJECTIVES AND SUSTAINABILITY**

### **7.1 Progress towards Achievement of Objectives**

FAO Nile builds upon the two previous Italian government funded projects. It is designed to deliver policy-neutral information products at the request of the riparian countries and with their active cooperation; and then inform basin policy decision-making. To that end, the project has undertaken various activities and provided various products as indicated in the preceding chapter.

The data collection and maintenance of data collection networks as well as the databases are managed by the riparian countries. These activities will continue after the project's life span, and the equipment and capacity imparted through the project will continue to be of great value and use to the riparian countries.

Outputs of the project such as tools, posters, GIS database and reports will continue to be used by the countries; except the DST which could be of limited use, and could be employed in areas such as training.

The trained manpower remaining in government or in the countries or working for NBI will be of use to the countries and thus contribute to ensuring sustainability of project products. The project staff currently in the employment of the NBI provides readily available skills to support NBI cooperative deployment plans for the Nile.

### **7.2 Sustainability and Environmental impact of results**

The high staff turnover from national governmental institutions to the NBI and elsewhere will negatively impact on the effective utilization of project outputs at the national level.

Further, there are important project activities that have not been finalized such as the agricultural systems surveys, water resources surveys and the F4T scenarios; as well as their synthesis and dissemination. There is not enough trained manpower exposed to propel the activities and ideas for further analysis and use. These may not be sustained beyond the project.

The institutions involved in the project implementation are the FPI institutions for water resources management. They will therefore continue to use most of the project outputs such as data, database and GIS capability and equipment, if properly maintained. However, the new activities and project outputs such as those on agriculture and F4T have not been adequately internalized by the relevant ministries and agencies to be of much application. The activities may, however, continue in some countries such as Egypt, Sudan and Ethiopia.

The data will be used for water resources management and agricultural development options. These activities will contribute towards FAO Nile's objective of strengthening the ability of the governments of the riparian states to take informed decisions with regard to water resources policy and management. These activities will positively impact on the environment.

### **7.3 Gender equity**

There was no direct attention or activity on gender issues. However, water use in agriculture is of interest to women; indeed most women in the rural communities are engaged in agriculture. The training involved both men and women. This was an equal opportunity project.

## **8.0 ASSESSMENT OF COST EFFECTIVENESS OF THE PROJECT**

### **8.1 Outputs and activities**

The project's outputs and activities prescribed in the project document and the AWP were rather ambitious considering the limited capacity in most of the riparian countries and the time frame for project implementation. Planned expenditures were thus exceeded in some instances as in the agriculture and F4T related activities; but savings were also made in others. For instance, budgetary allocation for improving internet access at the FPI was reduced as internet became a standard provision at most government departments.

### **8.2 Cost-effectiveness**

The project implementation was also cost-effective in several respects:

- In consonance with the NBI operational policies, project staff was mostly recruited from the riparian countries instead of relying on expatriates who would otherwise have enjoyed higher remuneration.
- A number of project outputs, including the Nile DST, database development, hydro-meteorological monitoring, and GIS information products built directly on the results of the previous projects.
- Trained counterpart staff, functioning GIS units, equipment, and training material could be used directly in the new project.
- The farming system analysis and agricultural water use survey components were implemented mostly by consultants from the riparian countries who are more cost effective than international consultants. Moreover, they have a better grasp of the specific national conditions, better contacts, and better knowledge of data sources and availability.

This, however, resulted in varying quality of outputs and speed of implementation, depending on the circumstances of each riparian country.

- Process facilitation of the scenario exercise proved very effective; the systematic and multi-stakeholder approach was designed to capture the collective insights of a group of knowledgeable insiders. It resulted in a sound and shared analysis of the drivers of agricultural demand in the Nile basin. The analysis was accomplished in a relatively short period of time and with limited inputs.

On the whole, the implementation of the project was cost effective. Even though not all the project objectives were realized, the outputs are commendable in view of the resources and the challenges entailed in executing a project covering a large expanse of land with varying differentials in the political and socio-economic circumstances of the riparian countries.

## **9.0 CONCLUSIONS AND RECOMMENDATIONS**

### **9.1 Conclusions**

The FAO Nile project builds upon the two previous projects funded by the Government of Italy and executed by the riparian countries with the technical support of FAO and within the umbrella of the NBI. Its overall objective is to strengthen the ability of the governments of the riparian states to take informed decisions with regard to water resources policy and management in the Nile basin. It is thus designed to provide a set of capacity building and information products; and with the active cooperation of the riparian states, inform Nile basin policy decision making.

To achieve these developmental goals, the project document identifies 3 immediate objectives:

- i. Integrated data products used for making informed water resources management decisions**
- ii. Strengthen the ability to carry out surveys, case studies and benefit-sharing scenarios**
- iii. Dissemination of information and knowledge**

To date, the 1st objective is substantially complete. In objective 2, various products have been prepared or are in the process of being finalized. With regard to objective 3, not much has been achieved except in the area of posters and web-based information. Essentially therefore, the project is at the information acquisition stage. However, acquisition of information alone is not enough; the information should be disseminated, internalized and used for policy- level decision making.

As matters stand, the information and limited products are in the domain of the project headquarters and the FPIs. There is the need to assemble all these data for analysis, synthesis and use for decision making, especially for basin-wide assessment of cooperative development options.

Some of the countries are yet to complete and submit agricultural productivity and farming systems surveys. This, among other things, is a reflection of the varying socio-economic and

political circumstances of these countries. Accordingly, there is the need for more time and resources to complete the studies.

The anticipated close linkage with NBI projects especially those under the SVP portfolio did not materialize as expected. Owing to the varying levels of implementation between FAO Nile and NBI, projects did not support the close linkage anticipated and smooth takeover of FAO Nile outputs by the NBI projects. Moreover, each of the projects had set objectives and outputs and implementation schedule and arrangements. As of now, there is no project under NBI that can take over and complete what the project has initiated and not concluded.

The inability to fully accomplish the project's objectives, in addition to the foregoing, was because these were rather ambitious in scope considering the limited capacity in most of the riparian countries and the time frame for project implementation. The ambitious nature of the project entailed much time and expense in their realization, leaving little or no time for the dissemination of the outputs. Also the needed cooperation from some of the FPIs in the project implementation was not achieved as originally envisaged. The project management team could also have been more active in its oversight role, for example through periodic visits to FPIs. However, this also would have entailed a lot of time and expense in view of the geographical spread of the project and the number of participating countries involved in the project. Accordingly, there is the need for an extension of the project.

The need for extension of the project was acknowledged by the PSC as far back as December, 2007. Indeed at its 4<sup>th</sup> meeting held in December 2007 in Nairobi, the PSC resolved to contact their Ministers, TAC members, and other relevant officers on the continued relevance of the project and the justification for extension. One year down the line, no such follow up action was taken by the PSC either with the Donor or "other relevant officers" to press the case for the project's extension. Perhaps if the PSC had been proactive, the prospects for the extension of the project would have been enhanced. The project is considered relevant by all participating countries and is in consonance with the shared vision of the riparian states: it is important for integrated water resources management of the basin, as it builds capacity and enhances cooperation and confidence building among the riparian states and their public institutions. The attainment of the project objectives is thus critical to the attainment of the vision.

## **9.2 Recommendations**

### **9.2.1 General Recommendations**

The overall objective of FAO Nile is to develop information products for decision making and build human and institutional capacity to manage the scarce water resources of the Nile as well as build confidence in the public. These activities were expected to contribute to the efforts of the Nile Basin countries to develop and assess cooperative development actions geared at win-win solutions for the benefit of the people in the basin, especially, the poor.

The project has produced information management tools and products; and assembled very useful data on agricultural systems and productivity potentials, using expertise from the basin. These outputs are now available for analysis, synthesis, dissemination and use. The data, information and the information products produced are of little value unless disseminated, internalized and used for decision making.

The mission is cognizant of the fact that projects of this nature have specific duration. However, in the light of the foregoing conclusions, we recommend that the project be extended for an additional 18 months. The period should serve to consolidate the project outputs, their dissemination, internalization and use. The period should also be used to transfer project outputs into the domain of NBI as well for the parties to decide on their future cooperation program.

In the light of the foregoing, we proffer for consideration, the following recommended actions by the various stakeholders as below:

### **9.2.2 The Donor**

Additional funding would be required for the consolidation / follow-up phase. As indicated, the Italian Government has so far injected over US\$ 16 million over a 12-year period into the Nile basin process. This investment would not have achieved much dividend if the project were to end at this stage when the products have not been disseminated. Provision of additional funding by the Donor could enable the project realize all its objectives and contribute to the sustainability of the project's outputs. In this regard, the minimum requirement would be provision of adequate level of funding to meet the finalization and dissemination of the products at basin, sub- basin and national levels; including project office and staff requirements.

### **9.2.3 Participating Countries**

- Identify/confirm FPI and assign staff with clear responsibility as NPC.
- Strengthen implementation oversight through committees for country-level implementation and internalization of project activities.
- As far as applicable and appropriate, integrate project activities into relevant national programs and plans.
- Ensure integration of project and its outputs into basin-wide, NBI activities.

### **9.2.4 NBI**

- Prepare and create capacity to assume control and ownership of FAO Nile's outputs and products upon expiration of project extension. In that regard, Nile-TAC and Nile-Sec should collaborate with the FAO Nile PSC and project management to achieve the above objective.
- Ensure project reports are internalized and disseminated widely to NBI governance, NBI partners and member states as appropriate.

### **9.2.5 FAO/ Project execution and management**

- Prepare and disseminate project completion report.
- Prepare detailed project write up and or/ work plan for the extension.
- Provide competent project team and backstopping for project exception.
- Ensure active support and follow-up by FAO Country offices in the basin of project activities.
- Vet, present and/or package project outputs in a manner or form that could be presented to the NBI to assume ownership.

### 9.3 Alternative recommendation

In the event that further donor support is unavailable after the expiration of the project, FAO Headquarters, working in close collaboration with NBI Secretariat, should assume control of the project, manage same, vet and package the outputs with the view to eventually transferring same to the NBI and the countries, as appropriate.

It is further recommended that FAO works with NBI to ensure a reasonable level of dissemination and internalization of the outputs and products. A booklet could be produced to document what is available in terms of datasets, nature of the data, the products and their details with the view to establish, in summary, what the project has delivered and how and in what manner, including controls and authorization procedures. This would facilitate access and use of project products and datasets by various interested parties, while giving the countries a say on how the products and datasets could be managed and accessed.

## 10.0 LESSONS LEARNED

### 10.1 General

As noted, not all the project objectives could be accomplished: the 1st objective is substantially complete. In objective 2, various products have been prepared or are in the process of being finalized. In the baseline survey of agricultural water use and productivity and agricultural production database components, for example, important data set has been collected, organized, and analyzed; but same has not been disseminated to counterparts or stakeholders.

Several weaknesses and/or shortcomings in the project's objectives, design and implementation account for these and provide lessons and/or could constitute the “**dos and donts**”, in the design and implementation of another or similar large-scale basin wide project involving several countries with varying political and socio-economic circumstances as obtains in the Nile basin.

### 10.2 Project Objectives and Design

The project's objectives and design were ambitious. Indeed some of the project's components such as F4T, Farming System Analysis, Water Use Survey, and Identifying Basin Wide Agricultural Development Options could be individual projects in their own rights in a 10-country environment. Furthermore, the complex challenge of implementing activities that did not squarely rely on the FPI's staff expertise and required skills and knowledge from multi-institutional and multi-disciplinary collaboration was underestimated for the agriculture and F4T related activities.

The project outputs and activities prescribed in the project document and the AWP's were rather ambitious in scope considering the limited project resources, capacity in most of the riparian countries and the time frame for project implementation.

Moreover, the project policy was to treat all riparian countries equally, irrespective of their size, GDP, contribution to the Nile flows, perceived development challenges, or capacity of the national water agencies. It was recognized that this setup did not reflect the varying capacities and needs at national level, but was considered a practical formula for transparently distributing project funds and benefits to all countries. Moreover, this is the approach used by the Nile Basin Initiative, under whose framework the project is implemented and the previous FAO/Italy supported projects worked on that principle.

A way out of addressing the foregoing challenges in the future would be to proceed cautiously based on assessed capacities and needs of different countries and allow for more resources and time for implementation.

### 10.3 Project Management and Implementation

Project implementation is **directed and supervised** by the PSC. The PSC reports to the Nile-TAC and the Nile-COM. The PSC meets once a year. This is not enough having regard to its functions, and in the light of the numerous project activities. The PSC accordingly was not effective. The project steering and management therefore, to a large extent, devolved on the project management team and FAO. A 6<sup>th</sup> monthly meeting (i.e. 2 meetings a year) of the PSC with a participant from each country (instead of 2 to reduce cost) could improve upon the effectiveness of the PSC. The PSC also needs to be proactive in its functions. For instance active follow up on PSC decisions such as the identified need for extension as captured in its minutes of December 2007, could have positively impacted on the fortunes of the project.

At the country level, the institutional setting and linkages, within country focal point institutions (FPI) internalization was inadequate. Project coordinators were part-time, and did not create enough integration of project activities within the national programs. Indeed, the project's activities did not form part of a coherent national program. No requirement for national level project coordination and management was put in place, and the respective FAO country offices were not effectively linked with the project activities at national level. They did not monitor progress on the project and were only given copies of periodic reports submitted to the project headquarters.

Inadequate national level steering and follow-ups impacted negatively on the project implementation, progress and the sustainability of project outputs. The establishment of oversight committees for country-level implementation and internalization of project activities, backed by budgetary support could enhance project implementation at the national level and also provide a means or mechanism for quality assurance or the vetting of outputs of the project's national consultants. The various FAO country offices should also take interest in future project activities and monitor performance of project consultants endpoints.

At the project headquarters level we noted that the AWP's were rather ambitious in scope, the activities to be implemented were rather many; hence targets could not be achieved in some instances whilst in others such as the F4T scenarios, the activities went far beyond the planned scope. Monitoring of project activities by project headquarters was not adequate; it was limited to monthly Reports by the NPC's and periodic reports by the various project consultants. The quality of the reports varied from country to country. Egypt, Sudan, DRC Congo, Ethiopia, Kenya and Uganda for instance provided comprehensive reports, whilst Burundi and Tanzania did not submit any reports.

The use of telecommunication facilities such as teleconferences and E-mails as well as periodic visits/inspections of projects in the riparian countries by the CTA could have helped enhance project implementation.

### Annexure A: Evaluation mission TOR



## **Project GCP/INT/945/ITA: Information Products for Nile Basin Water Resources Management**

### **Terms of Reference for a Joint Terminal Evaluation Mission by Italian Cooperation, FAO and the Governments of the Nile Basin riparian countries (Host Government of Uganda)**

#### **1. Background**

The Nile is shared by ten countries. With rising water scarcity concerns within the Nile river basin, it is becoming increasingly important to ensure that water resources are used effectively to meet diverse socio-economic goals. Inability to agree on joint development of the Nile waters could delay the use of this resource for the benefit of its people.

Recognizing these challenges, the Nile Council of Ministers launched the Nile Basin Initiative (NBI) in 1999.

Through a participatory process of dialogue, the riparian states of the Nile basin agreed on a shared vision “to achieve sustainable socio-economic development through equitable utilization of, and benefits from, the common Nile basin water resources”.

Within this context, project “Information Products for Nile Basin Water Resources Management” started in December 2004. It was endorsed by the Nile Council of Ministers and is implemented under the umbrella of the NBI.

The project has convened all 10 riparian countries of the Nile Basin and is delivering policy-neutral information products at the request of the riparian countries and with their active cooperation. The project outputs (specific information products and tools) are then injected into the NBI to inform regional/basin policy decision making.

The overall objective of the project to strengthen the ability of the governments of the Nile Basin states to take informed decisions with regard to water resources policy and management in the Nile Basin.

The specific purpose of the project is to provide a set of capacity building and information products. These outputs have been designed to enhance the work of the riparian countries and within the umbrella of the NBI.

The Project has been operational since December 2004 and is due to close in December 2008. It has been operated and supported technically by NRLW with the support of LEGN. The Project Management Unit is located in Entebbe, hosted by the Ministry of Water and Environment.

This project builds upon two of prior Nile Basin projects supported by Italian Cooperation:

1. Operational Water Resources Management and Information System in the Nile Basin Countries (March 1996-November 1999)
2. Capacity Building for Nile Basin Water Resources Management (December 1999-November 2004)

The present project should be seen as the culmination of the cooperation, ending up with a high level of internalization.

The major activities and outputs are the information products that have been designed to provide a policy-neutral basis upon which the Nile Basin countries are able to evaluate natural resource management policies and strategies, particularly in relation to agricultural water management. The products themselves have been generated and disseminated through a series of training, capacity building and consultation processes.

One area where the project has difficulty is in the formal adoption of the information products within the NBI. Many of the process activities have been held in conjunction with NBI activities and have proved highly complementary. However, the explicit uptake of project outputs by NBI has proved challenging.

## **2. Purpose of the Evaluation**

The purpose of this terminal evaluation is to provide recommendations to the Government, FAO and the donor on the further steps necessary to consolidate progress and ensure achievement of objectives. Any further need for external assistance, will be identified but without placing any obligation on the donor, FAO or governments.

## **3. Scope of the Evaluation**

The following represents the minimum coverage of points to be included, but in any case, it should be adapted to specific concerns and issues that the mission is expected to address:

The mission will assess the:

- a) Relevance of the project in terms of current development priorities and needs in the context of basin wide collaboration.
- b) Clarity, and realism of the project's development and immediate objectives, including specification of targets and identification of beneficiaries and prospects for sustainability.
- c) Quality, clarity and adequacy of project design including:
  - clarity and logical consistency between, inputs, activities, outputs and progress towards achievement of objectives (quality, quantity and time-frame);
  - realism and clarity in the specification of prior obligations and prerequisites (assumptions and risks);
  - realism and clarity of external institutional relationships, and in the managerial and institutional framework for implementation and the work plan;
  - likely cost-effectiveness of the project design.
- d) Efficiency and adequacy of project implementation including: availability of funds as compared with budget for both the donor and national component; the quality and timeliness of input delivery by both FAO, the NBI and member Governments; managerial and work efficiency; implementation difficulties; adequacy of monitoring and reporting; the extent of national support and commitment and the quality and quantity of administrative and technical support by FAO.

- e) Project results, including a full and systematic assessment of outputs produced to date (quantity and quality as compared with workplan and progress towards achieving the immediate objectives). The mission will especially review
  - How the project activities and outputs have contributed to strengthening the common knowledge base in the Nile basin
  - The achievements and impacts of the capacity building component, both at technical and policy making level
  - The quality and impact of the project's database development component
  - How the project has contributed to arriving at a better understanding of the relation between water and agriculture at Nile basin scale, and how this has impacted decision and policy making
  - the status and quality of work on data projection, dissemination
  - the impact on policy makers, decision making processes and water resource management in the basin
  - Degree to which the environmental, human and equity dimensions of water basin management have been taken into account (regional and local equity in the sharing of the resource, implications for food security, rural development, gender and the environment)
- f) The prospects for sustaining the project's results by the beneficiaries and the host institutions after the termination of the project. The mission should examine in particular
  - The degree to which project outputs have been defined based on adequate consultation with potential product users, and used and internalised by the NBI as well as by the national focal point institutions once produced
  - The outcomes of the consultation processes used by the project
  - The scope for uptake by other related initiatives in the region
- g) The cost-effectiveness of the project (*see definition in Annex 1*).

Based on the above analysis the mission will draw specific conclusions and make proposals for any necessary further action by Government and/or FAO/donor to ensure sustainable development, including any need for additional assistance and activities of the project prior to its completion. The mission will draw attention to any lessons of general interest. Any proposal for further assistance should include precise specification of objectives and the major suggested outputs and inputs.

#### **4. Composition of the Mission**

The mission will comprise 2 consultants

- Specialist international water resource management and information products;
- Specialist natural resources negotiation processes

Mission members should be independent and thus have no previous direct involvement with the project either with regard to its formulation, implementation or backstopping. They should preferably have experience of evaluation.

#### **5. Timetable and Itinerary of the Mission**

The mission will assemble at the Project headquarters in Entebbe at the end of October 2008. There the FAO guidelines for project evaluation will be examined in detail.

The team will then be generally briefed by the project staff. The mission will also initiate telephone interviews with country coordinators and experts on the basis of a set of emailed

questions. Written responses can be submitted by each participating country before representatives travel to Entebbe at the end of the month.

The team will then travel to Egypt (3 days), Ethiopia (3 days) and return to Uganda (4 days) where they will be supported by project coordinators to evaluate the project in each of these countries. The aim is to evaluate the project impact in a downstream and upstream riparian countries.

The team will then return to Entebbe to prepare preliminary findings in discussion/interview with country representatives immediately prior (24<sup>th</sup> and 25<sup>th</sup>) to the final PSC meeting scheduled for the 26<sup>th</sup> and 27<sup>th</sup> of November. The mission can then present preliminary findings to the PSC on the afternoon of the 27<sup>th</sup>. Finally mission will then prepare a draft report and be de-briefed by project staff and technical officers before returning to home base.

Sat	1 Nov 08	
Sun	2 Nov 08	Arrival in Entebbe (George Sarpong)
Mon	3 Nov 08	Assemble at project office; brief by CTA
Tue	4 Nov 08	Examine evaluation guidelines & project docs
Wed	5 Nov 08	Interview CTA
Thu	6 Nov 08	Interview CTA & project staff;
Fri	7 Nov 08	Prepare email questions for NCs
Sat	8 Nov 08	
Sun	9 Nov 08	Travel to Cairo
Mon	10 Nov 08	Interviews Cairo day 1 (Metawie; Ahmed Bahaa)
Tue	11 Nov 08	Interviews Cairo day 2 (Marmar Bahr, Amal Gasser)
Wed	12 Nov 08	Travel to Addis Ababa
Thu	13 Nov 08	Interviews Addis Ababa day 1 (Girma, Teshome)
Fri	14 Nov 08	Interviews Addis Ababa day 2 (Tsegaye, TAC member)
Sat	15 Nov 08	Return to Entebbe
Sun	16 Nov 08	
Mon	17 Nov 08	Interviews Uganda day 1 (Nebert, Kyosingira, Shillingi)
Tue	18 Nov 08	Interviews Uganda day 2 (ED NBI, Waako, Simon, Calist)
Wed	19 Nov 08	Preparation of interim report
Thu	20 Nov 08	Preparation of interim report
Fri	21 Nov 08	Preparation of interim report
Sat	22 Nov 08	
Sun	23 Nov 08	
Mon	24 Nov 08	Interview NCs (4 countries)
Tue	25 Nov 08	Interview NCs (3 countries)
Wed	26 Nov 08	PSC 5
Thu	27 Nov 08	Presentation of Preliminary Findings to PSC 5
Fri	28 Nov 08	Debriefing by HQ Technical Officers & CTA
Sat	29 Nov 08	Return to Accra (for George Sarpong)
Sun	30 Nov 08	
To 15 December		Completion of Final Evaluation Report

## 6. Consultations

The mission will maintain close liaison with the Representatives of the donor and FAO and the concerned national agencies, as well as with national and international project staff. Although the mission should feel free to discuss with the authorities concerned anything relevant to its assignment, it is not authorized to make any commitments on behalf of the Governments, the donor, or FAO.

## **7. Reporting**

The mission is fully responsible for its independent report which may not necessarily reflect the views of the Governments, the donor or FAO. The report will be written in overall conformity with the standard FAO guidelines given in Annex 1. A suggested structure is detailed here:

2. Executive Summary
3. Introduction
4. Project Context
5. Project Objectives and Relevance
6. Project Design
7. Project Management and Implementation
8. Project Activities and Outputs
9. Progress towards Achievement of Project Objectives and Sustainability
10. Cost Effectiveness of the Project
11. Findings and Conclusions
12. Recommendations
13. Lessons Learned

The draft report will be completed at the Project headquarters in Entebbe and the findings and recommendations fully discussed with all concerned parties during the course of the final PSC meeting in Entebbe. Wherever possible consensus will be achieved.

The mission will also complete the FAO Project Evaluation Questionnaire given in Annex 2

The mission leader bears responsibility for finalization of the report, which will be submitted to FAO within two weeks of mission completion. FAO will submit the report to Governments and donor together with its comments.

## **Outline of an On-going Evaluation Report<sup>3</sup>**

- I. Executive Summary (Main Findings and Recommendations)**
- II. Introduction**
- III. Background and Context**
- IV. Assessment of Project Objectives and Design**
  - A. Justification
  - B. Objectives
  - C. Project Design
- V. Assessment of Project Implementation, Efficiency and Management**
  - A. Project Budget and Expenditure
  - B. Activities and Outputs
  - C. Government Support
  - D. Project Management
  - E. Technical and Operational Backstopping
- VI. Assessment of Results and Effectiveness**
  - A. Effects and Impact
  - B. Sustainability and Environmental Impact of Results
  - C. Gender Equity in Project Implementation and Results
  - D. Cost-effectiveness
  - E. Major Factors Affecting the Project Results
- VII. Conclusions and Recommendations**
  - A. Conclusions
  - B. Recommendations
- VIII. Lessons Learned**

### **Annexes**

- 1. Terms of Reference
- 2. List of places visited and key persons met by the mission
- 3. List of documents and other reference materials consulted by the mission

### **Annex 1**

## **Contents of the Report of an Ongoing Evaluation Mission of a Technical Cooperation Project<sup>4</sup>**

- I. Executive Summary (Main Findings and Recommendations)**

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<sup>3</sup> This outline is applicable to FAO-executed projects, especially Trust Fund projects - for UNDP funded projects, the UNDP format may be used.

<sup>4</sup> Not all evaluations would be able to adequately cover each and every aspect. On-going (internal and external) evaluations are likely to be limited in their treatment of effectiveness and impact, focusing more on the implementation process and the assessment of outputs. The evaluation team is also encouraged to check this list of contents against the aspects covered in the Project Evaluation Questionnaire issued by FAO.

It should read as an executive summary and contain a brief recapitulation of the main findings and recommendations for action. The points covered include:

- A summary of the project purpose and structure and a brief description of the reason for the evaluation, along with composition and timing of the mission.
- Main findings, including a critical overview of major factors and conditions that have affected positively and negatively the efficiency and effectiveness of the project. These may cover the original project concept and design (including underlying assumptions), conditions affecting the project implementation (institutional/infrastructural constraints, management and coordination of the project, constraints in mobilising the necessary resources) as well as the socio-economic and policy factors affecting the participation of the beneficiaries in the project.
- Recommendations for future orientation and follow-up action to Donor, FAO and Government.

The summary should be brief (not more than 2-3 pages) and with cross references to the text to ensure it can be read easily by key people.

## **II. Introduction**

Reasons for mounting the evaluation mission (terms of reference to be annexed to the report) and its composition . The persons met, mission itinerary and documents consulted by the mission should be shown in Annex.

## **III. Background and Context**

Brief description of the project and its rationale, including the problems and constraints to be addressed by the project; the institutional, socio-economic, technical and environmental setting at the time of its approval. Any major changes in the setting which may have taken place since then; complementarity with other programmes or projects in the country/region; cost, starting date and duration of the project.

## **IV. Assessment of Project Objectives and Design**

### **A. Justification**

A critical analysis of project concept and its economic and social significance in terms of: needs of the sector/sub-sector; the people involved; government policies; and the institutional framework within which the project operates. Cost-effectiveness of the technology and relevance of the approach chosen.

### **B. Objectives**

A summary of the original project objective statements and any revisions which may have taken place since approval.

A critical reappraisal of the project's immediate and long-term objectives, in terms of their clarity, precision and relevance to: (a) the ultimate development action(s); (b) identified needs

to which the project is expected to contribute, and (b) realism/validity of underlying strategic considerations in realizing the objectives. As objectives, especially the immediate objectives, may not be clearly stated, it may be necessary to provide an interpretation of what the project was intended to do.

### **C. Project Design**

1. Adequacy in identifying the immediate and ultimate beneficiaries of the project, including the assessment of their specific needs and specification of the strategy and mechanisms by which the beneficiaries are expected to be reached.
2. Assessment of the overall project logic, i.e. adequacy of linkages between inputs, activities, outputs and objectives, including whether the project design represents the cost-effective response to the problems being addressed.
3. Clarity and precision of description of project outputs; adequacy with which outputs are specified so as to fulfil immediate objectives.
4. Clarity and precision in the description of planned project activities; realism in the project's workplan (scheduling and duration of major project activities); adequacy of planned project inputs to be supplied by donor and host government; adequacy and realism of project duration.
5. Clarity and appropriateness of the project's internal management structure.
6. Major risks and assumptions explicit or implicit in the project design.
7. Review of the institutional setting and external linkages (e.g. Government policies and programmes) which have a bearing on project objectives and operations.

## **V. Assessment of Project Implementation, Efficiency and Management**

### **A. Project Budget and Expenditure**

Assessment of the rate of delivery and the quality of project inputs from both donor and Government, compared to original plan in project document.

### **B. Activities and Outputs**

Systematic comparison of actual project activities and outputs with those foreseen in original project document and subsequent workplans in terms of quality, quantity and adequacy; indications of gaps and delays in the execution of activities and production of outputs and causes thereof, including those outside the direct control of project management; effects of such gaps and delays on planned output and follow-up action; remedial measures taken or contemplated, if any.

### **C. Government Support**

Direct government support in terms of policy and degree of participation in project operations; the role and effectiveness of the coordination bodies/committees (if any) in solving project difficulties and giving it the needed support and direction.



**D. Project Management**

Effectiveness and efficiency of project management; collaboration with host institution; any steps taken to transfer of full responsibility of project management to national staff

**E. Technical and Operational Backstopping**

Extent and quality of operational/administrative and technical backstopping received by the project staff; effectiveness of the role played by the representative of donor and executing agencies at the country level; use made of monitoring information by management (at project and FAO Regional/HQ levels); extent to which internal evaluations (including Tripartite Reviews) have been carried out, their efficiency and effectiveness (corrective actions taken based on their findings).

**VI. Assessment of Results and Effectiveness**

**A. Effects and Impact**

Use made of outputs by the intended or actual target group(s) and progress achieved towards the realisation of project objectives. Actual and likely future effects of the project should be discussed. Probable effects should be compared with project's immediate objectives and include any unplanned effects.

Extent to which project effects are likely to contribute to the development objective; significance of such contribution (developmental change); prospects for appropriate policy decisions and mobilisation of resources (both internal and external).

**B. Sustainability and Environmental Impact of Results**

Prospects for continued use of project results by beneficiaries: their receptivity to, and adaptation of, project outputs for further development activities; maintenance of acquired capabilities at local and institutional levels; if appropriate, impact on existing natural resources in terms of maintenance or regeneration of the production base.

**C. Gender Equity in Project Implementation**

existing natural resources in terms of maintenance or regeneration of the pAnalysis of measures taken by the project to address specific gender issues, together with the assessment of their adequacy, relevance and effectiveness in redressing the limiting factors identified.

**D. Cost-Effectiveness**

Assessment of the extent to which the project (as designed and implemented) has served (is serving) as an effective means for achieving the immediate project objectives within the limit of resources available to the project (or simply put, the same resources could have been used for another alternative design that could have achieved the same objectives more effectively?). Check also if there is evidence that efforts have been made to consider alternative means and ways of achieving the objectives, including the selection of outputs.

**E. Major Factors Affecting the Project Results**

A synthesis analysis of major factors and conditions that have affected positively and negatively the effectiveness and efficiency of the project - these may have arisen from the project design, the implementation process as well as external changes beyond the control of the project (also included in the second item of Section I above). This analysis should serve as a main basis for drawing lessons and recommendations for future actions.

## VII. Conclusions and recommendations

### A. Conclusions

This section should present a concise synthesis of main findings in the preceding sections of the report and should draw conclusions regarding the relevance and adequacy of the project objectives and design, the efficiency in project execution and effectiveness in reaching the intended objectives (the production of outputs, the probable effects and impact), strengths and weaknesses of the design and implementation of the project, and the prospects for follow-up. The findings should provide a clear basis for the recommendations which follow.

### B. Recommendations

Recommendations should be clearly addressed to each one of the concerned parties, i.e. the donor, the host Government, the executing agency and the project management, as appropriate. They should be realistic, specific and stated in operational terms to the extent possible. Recommendations concerned with on-going project activities and those concerned with follow-up activities once the project is terminated should be presented separately.

A mid-term evaluation should normally include a suggested workplan as an annex and should summarise major changes required in planned inputs and outputs and, if applicable, objectives.

A terminal evaluation, if it recommends a follow-up phase, should include at least the objectives, major outputs and activities, and an indication of the inputs required.

Detailed technical recommendations are encouraged but may appear in a separate annex.

## VIII. Lessons Learned

Key findings (substantive, methodological or procedural) relevant to the design and implementation of similar projects of programmes should be highlighted. It may also cover critical issues of a generic nature that would require attention in designing and implementing similar projects and programmes.

Evaluation Questionnaire

### **PROJECT EVALUATION QUESTIONNAIRE FOR COMPLETION BY ALL EVALUATION MISSIONS**

The questionnaire has been designed to summarise the basic findings of each project evaluation. It covers all the key aspects to be reviewed by the evaluation mission and may be used by the mission as a checklist while evaluating the project. The completed questionnaire serves to build up the data bank on evaluation reports which is used for providing feedback from evaluation in improving project selection design and management, i.e. internal reports, sector and sub-sector reviews of field projects, reports to Governing Bodies and other ad hoc searches on the characteristics of the Field Programme.

**Each evaluation mission is requested to respond to all points of the questionnaire.** The questionnaire should be completed in the field (simultaneously with drafting of the report) and returned to the Evaluation Service (PBEE) together with the mission's draft report.

<b>I. BACKGROUND INFORMATION</b>			
Project Title:		Project Phase (I, II etc.):	Symbol:
Project Start Date:		Project Completion Date (expected/actual):	
Total Donor Budget (US\$):		Budget FAO Component (US\$):	
Type of Execution	National	FAO	Other agency (specify):
Mission dates in the country(s):		From:	To:
Type of evaluation		Mid-term	Final/terminal Ex-post
<b>Mission Composition</b>	<b>Name</b>	<b>Title or Discipline*</b>	<b>Mission Leader in Current Mission</b>
Donor Representative			Yes/No
Host Government Representative			Yes/No
FAO Representative			Yes/No
Other Participants			Yes/No
<b>Mission Arrangements</b> one box for each aspect of the mission arrangements			
1. Briefing	Poor	Satisfactory	Very comprehensive
2. Debriefing	Poor	Satisfactory	Very comprehensive
3. Clarity of mission terms of reference	Unclear	Reasonably clear	Very clear



5. Validity of means >ends relationship between inputs, outputs and objectives				
6. Implementation arrangements and managerial structure	Clarity of definition		Appropriateness	
7. Workplan including timing of inputs, activities and outputs	Clarity		Realism	
8. Realism of identified prerequisites and risks for project success				
9. Adequacy of partnerships with other related institutions and organizations				
10. For achievement of project objectives, the realism of:				
- Project duration (time horizon)	Too short	About right	Unnecessarily long	
- Project resources	Too few	About right	Too many	
11. OVERALL ASSESSMENT OF PROJECT DESIGN (score 1-5)				

<b>IV. PROJECT IMPLEMENTATION</b>		<b>Not included in the Prodoc or not due to be provided by time of evaluation</b>	<b>Score (1-5)*</b>
* Assess project implementation on the following (1-5) value scale: 1 = very poor 2 = Less than Satisfactory 3 = Average/Satisfactory 4 = above average/good 5 = Excellent.			
<b><u>Donor Inputs:</u></b>			
1. Budgetary disbursements			
2. Project personnel including consultants			
3. Equipment and supplies			
4. Fellowships/study tours and other formal training			
5. Other (specify)			
<b><u>National Inputs</u></b>			
6. Budgetary disbursements			
7. Personnel			
8. Equipment and physical infrastructure			
9. Other (specify)			
<b><u>Internal Management</u></b>			
10. Project workplanning, monitoring and reporting			
11. Coordination and relation with other organizations/departments			
12. Flexible management response to problems and/or changed circumstances			
13. National project director	Was the national project director:	Part time	Full time
	Did the national project director have in practice the main responsibility for project management?	Yes	No
	Assessment of the effectiveness of the national project director (score 1-5)		
14. Overall assessment of internal project management (score 1-5)			
<b><u>External Support/Inputs to Management and Implementation</u></b>			
15. Technical support by FAO			
16. Administrative support by FAO			
17. Management support/Decision-making by: - donor(s)			
- government(s)			
18. External management committee and tripartite (donor-recipient) meetings			
19. Assessment of evaluation and review processes			
20. OVERALL ASSESSMENT OF PROJECT IMPLEMENTATION (Score 1-5)			

<b>V. PROJECT OUTPUTS</b>		<b>Score (1-5)*</b>
<p>The assessment of the outputs produced should be made with respect to the planned targets and <b>reasonable expectations of productivity</b>.</p> <p>*Assess the outputs of the project using the following (1-5) value scale 1= Very poor, 2= Less than satisfactory, 3= Average/Satisfactory, 4= Good, 5= Excellent</p>		
1. Quantity		
2. Quality		
3. Use made, or expected to be made, of outputs		
4. OVERALL ASSESSMENT OF OUTPUTS ACHIEVED		

<b>VI. COST-EFFECTIVENESS OF THE PROJECT</b>		<b>Score (1-5)*</b>	
1. Given your knowledge of similar projects, how cost-effective was this project (1= Very poor, 2= Less than satisfactory, 3= Average/Satisfactory, 4= Good, 5= Excellent)			
2. If answer to question 1 is 1 or 2, how could the project be or have been more cost-effective?			
3. Were there substantial cost over-runs (extension of budget) to complete the project?		Yes	No
4. Tick any of the following which had a particularly negative effect on cost-effectiveness:	FAO procedures	Donor procedures	Government procedures

<b>VII. SUSTAINABLE EFFECTS AND IMPACT (in relation to project objectives)</b>  Sustainable effects and impact mean the extent to which the project outputs/results continue to be applied and used effectively, and can be expected to make a continued contribution to the welfare of ultimate end-beneficiaries and/or the maintenance/preservation of the physical natural environment.	<b>Planned as objective in the project document.</b>  Tick at least one box	<b>Sustainable Effects and Impact</b> (Expected at time of Evaluation – Use scale of 1-5 where 1= none or negligible 2= slight 3= some 4= considerable 5= very substantial)
1. Sustainable effects and impact on the following areas: - Policy/planning/legislative improvements - National Institutional capacity (including staff skills) - Uptake/use of technical improvements - Replication/expansion of pilot activities - Follow-up Investment - Other (specify)		
2. Can the project be expected to have sustainable effects and impact on the following categories of ultimate end-beneficiaries (categories are not mutually exclusive):	Score 1-3 (1= Negative impact; 2= No impact; 3= Positive impact)	
- Farmers/fisherfolk/pastoralists/livestock-keepers		
- The rural poor		
- The urban poor		
- Women		
- Private sector (other than farmers/fisherfolk etc.)		
- The natural environment		
- Other (specify)		
3. How well did the process of implementation followed by the project facilitate national ownership of results?	Score 1-5 (1= Very poor; 2= Less than satisfactory; 3= Average/satisfactory; 4= Good; 5= Excellent)	
4. OVERALL ASSESSMENT OF SUSTAINABILITY OF PROJECT EFFECTS AND IMPACT (value 1-5)		



**VIII. PROJECT FEATURES WHERE THERE IS GREATEST NEED FOR IMPROVEMENT**

These questions are intended to help identify those aspects of projects where there is most room for improvement

1. What do you consider to have been the aspect of this project where there was greatest room for improvement if sustainable effects and impact were to be <u>more</u> cost effectively achieved? (tick one box only)	
- Project Selection (i.e. the concept and immediate objectives of the project)	
- Project Design	
- Project Implementation and Management	
- Project Supervision and Adjustment (revision)	
2. Which of the following factors are <u>most</u> likely to limit the sustainability of the project effects and impact? Tick a maximum of two as this question is intended to identify the areas which need most attention in future projects	
- Weaknesses in national institutions	
- Non-economic attractiveness/viability of the outputs developed by the project	
- Technical weaknesses in project outputs/recommendations	
- Lack of attention to natural resource sustainability	
- Lack of social/political realism in project outputs/recommendations	
- Insufficient involvement/participation by beneficiaries	
- Insufficient national financial resources to follow-up on the project	
- Insufficient national manpower resources to follow-up on the project	
- Lack of national priority/commitment to this type of development	
- Other (specify):	

**VIII Comments:** (to be provided at your discretion to complement the evaluation presented in the report and clarify any points which are unclear above):

## Annexure B: Project Schedule of Activities and List of Persons Met

### Schedule of Activities

Serial No.	Date	Activity	Remarks
(a)	(b)	(c)	(d)
1	<b>Saturday</b> , November 1 <sup>st</sup> , 2008	Depart Accra for Entebbe. Arrive on 2 <sup>nd</sup> November, 2008 (George Sarpong).	
2	<b>Monday</b> , November 3 <sup>rd</sup> , 2008	i. Team assembles at project Headquarters, Entebbe. ii. Introduction of project staff and briefing by CTA. iii. Teleconference with Senior Water policy Officer, FAO/Rome iv. Mission planning, scope of work, documents review	
3	<b>Tuesday</b> , November 4 <sup>th</sup> , 2008	i. Documents and literature review ii. Informal meeting with Project Officer, NBI	
4	<b>Wednesday</b> , November 5 <sup>th</sup> , 2008	i. Meeting with CTA ii. Documents and literature review iii. Review of responses to questionnaires	
5	<b>Thursday</b> , November 6 <sup>th</sup> , 2008	i. Meeting with Commissioner, Directorate of Water Resources Management (DWRM), Uganda and the National Coordinator ii. Meeting with Regional Coordinator, Global Water Partnership, Eastern Africa i. Documents and literature review ii. Meeting with Agric Water Productivity Consultant, Project Secretariat iii. Meeting with Scenario Researcher and Writer,	
6	<b>Friday</b> , November 7 <sup>th</sup> , 2008		
7	<b>Saturday</b> , November 8 <sup>th</sup> , 2008	Review of week's activities	
8	<b>Sunday</b> , November 9 <sup>th</sup> , 2008	Depart for Cairo	
9	<b>Monday</b> , November 10 <sup>th</sup> , 2008	i. Meeting at the Directorate for Nile and International Waters with members of the agricultural systems survey team: ii. Courtesy call on Chairman Nile Sector	
10	<b>Tuesday</b> , November 11 <sup>th</sup> , 2008	i. Meeting with project implementation team Nile DST trainer, senior engineer, technical office, NWS; senior programme officer, national NBI office; , livestock specialist	
11	<b>Wednesday</b> , November 12 <sup>th</sup> , 2008	i. Depart for Addis ii. Assessment of consultation in Egypt, and plan for meetings in Ethiopia	
12	<b>Thursday</b> November 13 <sup>th</sup> , 2008	i. Meeting at the Ministry for Water Resources with head, water resources info meta data centre, 2nd PSC member; and the GIS team leader& GIS contact person for information products ii. Meeting with the Head, Transboundary River Affairs Department and TACmember for Ethiopia; Deksyos Tarefekefn, national DSS specialist, Nile basin; and Wubeshat Demeke iii. Meeting with DSS Lead Specialist, WRM of NBI.	
13	<b>Friday</b> , November 14, 2008	i. Meeting at FAO sub-regional Office, Addis with the assistant FAOR; national consultant and the programme clerk(operations)	The national project coordinator was unavailable at the time of the mission.
14	<b>Saturday</b> , November 15, 2008	Depart for Entebbe	
15	<b>Monday</b> , November, 17 2008	i. Meeting with CTA on visits to Egypt and Ethiopia ii. Finalization of notes preparation on visits	
16	<b>Tuesday</b> November 18, 2008	i. Meeting at NBI for briefing by the program officer and Juliet Nakasagga, librarian ii. Meeting at DWRM, Uganda with the Ag. Assistant Commissioner PC-Nile basin and the, GIS technician; the, water officer; the, Ag senior water officer; the assistant computer operator; the, hydro data officer; and the, data and information officer	
17	<b>Wednesday</b> November 19, 2008	Preparation of Report at FAO Nile	
18	<b>Thursday</b> November 20, 2008	i. Preparation of Report at FAO Nile ii. Discussions with the, M.D; and the, Director and Technical Consultant, Office of the Italian Development Cooperation iii. Discussions with the FAO Representative, Uganda	

19	<b>Friday</b> November 21, 2008	Preparation of Report at FAO Nile	
20	<b>Saturday</b> November 22, 2008	Preparation of Report	
21	<b>Monday</b> November 24, 2008	Meeting at FAO Nile with officials from DR Congo, Eritrea, Sudan and Burundi to discuss questionnaire: DR Congo: Mbuyulu Bela (NC), Batumbo Arly (2 <sup>nd</sup> PSC). Burundi: Nakaha Stanislas* Sudan: Elrayah –Mohamed- Hamed (2 <sup>nd</sup> PSC), Ahmed Mahmoud Abdalla (NC). Eritrea: Tesfamichael Keleta (2 <sup>nd</sup> PSC, NC)	* Not in official capacity.
22	<b>Tuesday</b> November 25, 2008	Meeting at FAO Nile with officials from Kenya, Tanzania and Rwanda to discuss questionnaire: Kenya: Peterson Njiru (NPC), Eugen Mwandoe, Ministry of Water and Irrigation. Rwanda: Munyaneza Sylvre, Prime Minister's Office, Mwanga Robert, Ministry of Natural Resources	
23	<b>Wednesday</b> November 26, 2008	PSC Meeting, Lake Victoria Hotel, Entebbe	
24	<b>Thursday</b> November 27, 2008	i Presentation of preliminary Findings to PSC ii Debriefing by FAO backstopping Team	
25	<b>Friday</b> November 28, 2008	Debriefing by Project Staff	
26	<b>Saturday</b> November 29, 2008	Depart for Accra (George Sarpong)	

## **List of Persons Met**

### **Burundi**

1. Amb. Stanislas Nakaha, Consul General Ministry of External Relations

### **DR Congo**

1. Mr. Mbuyulu Bela Mpotizolo, National Coordinator.
2. Mr. Arly Batumbo, 2<sup>nd</sup> PSC member and Head of Geomatic Division, METTELSAT

### **Egypt**

1. Dr. Abdel Fattah Metawie, Chairman Nile Water Sector.
2. Rebhad A. Abo Elemein, Team Leader
3. Walid Sayed El Dash, GIS specialist
4. Enas Mohammed Abbas Saleh, agricultural economist
5. Eng Aref Gharib, Nile DST trainer, senior engineer, technical office, Nile Water Sector.
6. Eng. Magdy Sayed Ahmed, Inspector, Nile Water Sector.
7. Ms. Marmar Badr Mohamed, Senior Engineer, Nile Water Sector.
8. Mohammed El-Wardani, livestock specialist.

### **Eritrea**

Mr. Tesfamichael Keleta Director, Water Resources Assessment and Information, Ministry of Land, Water and Environment

### **Ethiopia**

1. Mr. Teshome Atnafie Guyo National Coordinator and Head - Irrigation & Drainage Dev't Studies Department, Ministry of Water Resources
2. Mr. Wubeshet Demeke Head, Water Resources Information & Meta – Database Centre, Ministry of Water Resources

3. Mr. Tsegaye Debede, the GIS team leader& GIS contact person for information products
4. Mr. Tefena Beyenee, Head, Transboundary River Affairs Department and TACmember for Ethiopia
5. Mr. Deksyos Tarefekefn, national DSS specialist
6. Mr. Abdul Karim, lead DSS specialist
7. Mr. Hassan Ali, Assittant FAOR
8. Mr. Getacher Felleke, National Consultant
9. Ms. Ayele Martha, the programme clerk(operations)

## **Kenya**

1. Mr. Peterson Nyaga Njiru, National Coordinator and Database GIS Officer, Water Resources Management Authority.
2. Mr. Eugen Mwandoe Mnyamwezi, 2<sup>nd</sup> PSC member.

## **Rwanda**

1. Mr. Robert Muganga, National Coordinator
2. Mr. Sylvère Munyaneza, 2<sup>nd</sup> PSC member and Director of Land and Environment Prime Minister's Office.

## **Sudan**

1. Eng. Ahmed Mahmoud Abdalla National Coordinator, and Engineer, Ministry of Irrigation and Water Resources
2. Eng. El Rayah Mohamed Hamed , 2<sup>nd</sup> PSC member and Advisor, Ministry of Irrigation and Water Resources

## **Tanzania**

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## **Uganda**

1. Eng. Nebert Wobusobozi 2<sup>nd</sup> PSC member and Commissioner, Water Resources Monitoring & Assessment, Directorate of Water Resources Management.
2. Mr. Fred Kyosingira, Ag Assistant Commissioner, Directorate of Water Resources Management.
3. Dr. Callist Tindimugaya, Commissioner, Regulation Department, Directorate of Water Resources Management.
4. Eng. Cong Richard, Commissioner, Ministry of Water and Environment.
5. Mr. John Metzger, Water Resources Management Adviser, Directorate of Water Resources Management.
6. Mr. Twinomuhangi B. Maximo, Senior Water Officer – Information Management, Directorate of Water Resources Management.
7. Mr. Leo Mwebembezi, Principal Water Officer, Directorate of Water Resources Management.
8. Ms. Aimo Faima, GIS Technician, Directorate of Water Resources Management.
9. Carolyn Nakalyango, Water Officer, Directorate of Water Resources Management.
10. Vivian Nabyonga, assistant computer operator, Directorate of Water Resources Management.
11. Charles Kiwalabye, hydro data officer, Directorate of Water Resources Management.
12. Mr. Tom Waako, Program Officer, Nile Basin Initiative Secretariat.
13. Juliet Nakasagga, librarian, Nile Basin Initiative Secretariat.

14. Mr. Simon Thuo
15. Mr. Ssebuggwawo Vincen, National PSS Specialist – Uganda Nile Basin Initiative, WRP & M Project
16. Mr. John Ogwang, Regional Monitoring & Evaluation Specialist Nile Basin Initiative Secretariat
17. Mr. Percy W. Misika, FAOR in Uganda.

### **Italian Cooperation in Uganda**

1. Mr. Sergio Regi, Director and Technical Consultant, Office of the Italian Development Cooperation.
2. Mr. Atonio Aloi, MD Italian Cooperation.

### **Project team**

Mr. Bart Hilhorst - Chief Technical Advisor  
Mr. Ben Bukenya – Web and Graphic Designer  
Mr. Abbey Kaboyo – Project Driver  
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### **FAO Headquarters**

Pasquale Pasquale Steduto- Chief, NRLW  
Jacob B. Burke- Senior Water Policy Officer

## Annexure C: Relevant Documents and Literature Examined

**1. Project GCP/INT/945/ITA: Information Products for Nile Basin Water Resources Management: Terms of Reference for a Joint Terminal Evaluation Mission by Italian Cooperation, FAO and the Governments of the Nile Basin riparian countries (Host Government of Uganda)**

2. Project GCP/INT/945/ITA: Project for the Governments of Burundi, Democratic Republic of Congo, Egypt, Eritrea, Ethiopia, Kenya, Rwanda, Sudan, Tanzania and Uganda. Project Document

3. Minutes of PSC 1-4 (GCP/INT/945/ITA)

**4. FAO Training Manual, *International Water Courses/River Basins including Law, Negotiation, Conflict Resolution and Simulation Training Exercises*; (Prepared for FAO by Richard Paisley, March 2008)**

**5. FAO Teachers' Manual for *International Water Courses/River Basins including Law, Negotiation, Conflict Resolution and Simulation Training Exercises*; (Prepared for FAO by Richard Paisley, March 2008)**

6. Richard Paisley, *Nile Basin Draft Road Map / Inception Report* (March, 2007)

**7. FAONile, *Food for Thought: Demand for Agricultural Produce in the Nile basin for 2030:4 Scenarios* (FAONILE, 2009)**

8. FAO Nile, *Project Synthesis Report*

9. FAO Nile, Recommended Follow-up to FAO Nile: Concept Note for Submission to Nile-TAC (October, 2008)

10. FAO Nile, Terms of Reference for National Farming Systems Survey Consultancy

11. FAO Nile, Terms of Reference for Agricultural Water Productivity Consultant

### Websites

**1. [www.nilebasin.org](http://www.nilebasin.org)**

**2. [www.faonile.org](http://www.faonile.org)**

**3. [www.fao.org](http://www.fao.org)**

## Annexure D: Project outputs

### List of Training Manuals, Publications, Reports and Training Programs

List of manuals developed and made available on the project CD.

Nr	Title	Description
	<b>Hydrometric monitoring</b>	
1	Campbell Scientific Automatic Weather Station	Detailed guidelines for installing, operating, and maintaining the Campbell Scientific automatic weather station introduced by the project in a number of riparian countries.
2	Evaporation Measurement Buoy Station	This document presents detailed instructions on how to install, operate, and maintain the buoys stations on Lake Nasser that are equipped to measure evaporation. The instrument set was procured from Campbell Scientific.
3	Campbell Scientific Automatic Water Level Recorder	Detailed guidelines on how to install, operate, and maintain the Campbell Scientific automatic water level recorders introduced by the project in a number of riparian countries.
4	Data Retrieval and Storage for Campbell Scientific Monitoring Equipment	Step-by-step instructions for data retrieval, processing, and storage for automatic monitoring equipment procured from Campbell Scientific.
5	Thalimedes AWLR	This manual presents guidelines on how to install and operate the Thalimedes automatic water level recorder. It also covers data retrieval, processing, and quality control.
6	Tipping Bucket Rain Gage	This documents provides instructions how to install and operate a Texas Electronic tipping bucket rain gage coupled to a HOBO datalogger.
7	ADCP Measurement Under High Sediment Conditions	Guidelines to perform discharge measurements during extreme sediment conditions using the Teledyne RDI Acoustic Doppler Current Profiler. It also provides information on required peripheral devices.
	<b>Database Development</b>	
8	Data quality control guidelines in MS Access	A set of queries for systematic quality control of time series databases in MS Access.
9	Workbook: Blue Water Poster for Nile Sub Basin	Detailed instructions to visually explain the hydrologic regime of a river. It prepares a poster against a hill shaded image of the watershed.
10	Workbook: Geo-referencing of Scanned Spatial Data Sources	Step-by-step instructions on how to reference a scanned image in Arc View.
11	Workbook: Satellite Imagery Processing for Agro-Meteorological Assessments	Instructions for analyzing MODIS vegetation time series in IDRISI GIS software.
12	Introduction to Image Analysis	Guidelines to use Arc View Image Analysis. It

	in ArcView 3 – Land Cover Changes in the Rwenzori Mountains 1973-2005.	includes training material for a case study of the Rwenzori Mountains.
13	Projections	Instructions for using the Arc View projections utility.
14	Hydro Tools: Watershed Delineator	Instructions for using the Arc View watershed delineator utility.
	<b>Nile DST</b>	
15	Nile-DST Technical Report (volume 1 & 2)	Detailed write-up on the Nile-DST.
16	Nile-DST RSRM User Manual	Instructions for using the Nile DST River Simulation-Reservoir Operation module.
17	Nile-DST RSRM Exercise	A set of exercises for the Nile DST River Simulation – Reservoir Operation Module.
	<b>Miscellaneous</b>	
18	FAO Training Manual: Law, Negotiation, Conflict Resolution	Comprehensive package for training in negotiation skills, conflict resolution, and law focused on the context of international river basins.
19	Nile Google	Manual to operate the Nile Google spatial text library.

. Articles:

1. Supporting the Nile Basin Shared Vision with “Food for Thought”: Jointly Discovering the Contours of Common Ground.
2. Quantifying Nutrition Requirements in the Nile Basin for 2030 Using a Scenario Approach.
3. Sustainable Hydro-meteorological Data Acquisition in the Nile Basin through the Introduction of State-of-the-Art Monitoring Technology.

Reports:

1. Food for Thought, Demand for Agricultural Produce in the Nile Basin for 2030: Four Scenarios
2. Synthesis Report.



#### D. Training Programs

COUNTRY	DESCRIPTION	DURATION	NO. OF TRAINEES.	DATES & VENUE
ALL COUNTRIES	First Regional GIS Workshop	9 days	20	ENTEBBE, Sep & Oct 2005
ALL COUNTRIES	Regional Negotiation Workshop	5 days	42	Bujumbura, 12-16 Feb 06
ALL COUNTRIES	ESRI Virtual Campus	na	30	
ALL COUNTRIES	Nile DST Workshop	12 days	24	25 Sep – 6 Oct 06
ALL COUNTRIES	Nile DST Internet Training	24 hours	24	Sep 2006
ALL COUNTRIES	GIS - Irrigation Layer Workshop	1-week	20	Feb 2007
ALL COUNTRIES	Second regional negotiation skills workshop	1 week	45	3-8 Dec 07
KAGERA COUNTRIES	Hydro monitoring	6 days	16	16 - 21 July 2007
BURUNDI	MS Access	2-days	12	Mar 2006, Gitega
BURUNDI	AWS - Monitoring Instruments	5-days	4	Dec 2006, Gitega
BURUNDI	Basic GIS for department staff	5-days	6	Jan 2007, Gitega
BURUNDI	Access Database Management	3-days	6	Jan 2007, Gitega
BURUNDI	Hydro monitoring	3-days	6	Jan 2007, Gitega
BURUNDI	Nile DST	5-days	7	17-21 Sept 07, Gitega
DRC	ITC-UCLAS GIS Training	9 months	1	Sep 05 – Jun 06, TNZ
DRC	MS Excel training	1 week	4	Feb 2006, Kinshasa
DRC	MS Access training	1 week	3	Feb 2006, Kinshasa
DRC	National GIS workshop	2 days	10	Feb 2006, Kinshasa
DRC	English Language	1 week	1	Jan-07
DRC	Nile DST	4 days	8	May 2007

	Training			
EGYPT	MicroSoft Office	2 weeks	1	Jul – Sep 06, Cairo
EGYPT	Project Management	4 weeks	1	Jul - Dec 06, Cairo
EGYPT	MicroSoft Project	1 week	1	Jul – Sep 06, Cairo
EGYPT	GIS	2 weeks	2	Jul – Sep 06, Cairo
EGYPT	Computer Programming	2 weeks	1	Jul -Sep 06, Cairo
EGYPT	Information Technology	1 week	1	Jul -Sep 06, Cairo
EGYPT	Nile DST Training	3-days	8	12-14 November 2007
EGYPT	MODIS training	4-days	15	14-18 March 2008
ERITREA	Database Design & Management	100 hours	5	Authorized
ERITREA	Visual Basic and ADO database programming	120 hours	13	Asmara, July 06
ERITREA	Negotiation skills and conflict resolution	40 hours	14	Asmara, July 06
ERITREA	Hydromet training	1-week	4	Asmara, 28 Feb - 3 Mar 06
ERITREA	MODIS & AFRICOVER	1-week	20	Asmara, July 06
ERITREA	AutoCad	1-week	16	
ERITREA	Strengthening Basic Computer Skills	1-week	12	
ERITREA	Hydromet training	3-days	2	June 2008
ETHIOPIA	GIS & Remote Sensing Training	110 hours	5	Dec 05 - Jan 06
ETHIOPIA	Nile DST	5 days	8	24 -28 Sep 07
KENYA	MS Access, for Kisumu staff	1-week	5	Dec 2005
KENYA	Hydromet training	6 days	18	July 2007
KENYA	Nile DST			
RWANDA	Macro Media training	3-weeks	5	Dec 2005
RWANDA	ADCP refresher	1-week	2	Jan 2006

	workshop			
RWANDA	MS Access and ArcView	2 days	1	Oct-07
RWANDA	Hydromet training	1-week	13	Sep-08
SUDAN	GIS & Remote Sensing Training	2-weeks	15	Oct – Nov 2005
SUDAN	Negotiation Skills Training	6 days	12	Mar-06
SUDAN	ADCP training / testing	4 days	5	Sep-07
SUDAN	Nile DST training	5 days	13	11-15 November 2007
SUDAN	Nile DST training Juba			
TANZANIA	MS Access training	1-week	10	Jul 2005
TANZANIA	Visual Basic training	1-week		
TANZANIA	Hydromet training	6 days	7	13-18 Nov 2006
TANZANIA	Nile DST	1-week	8	24-28 Sep 2007
UGANDA	National GIS workshop	6 days	7	Jan 2006
UGANDA	Macromedia Flash	5 days	3	Apr-07
UGANDA	Macromedia Flash	5 days	3	Aug – Dec 07
UGANDA	Nile DST	5-days	13	1 - 5 Oct 07
UGANDA	Management and Accounting Skills	2-weeks	1	10 - 21 Sep 07
NILE SEC	Nile Google training	1 day	3	May-07
		TOTAL:	562	

Workshops (not included in the training)

Name	Venue	Date	Nr Part	Objective
F4T 1	Cairo	Nov 2006	25	First scenario workshop
F4T 2	Entebbe	Feb 2007	25	Second scenario workshop
PSC 3	Cairo	Apr 2007	25	1 day scenario event before PSC3
F4T 3	Entebbe	May 2007	30	Examining scenario stories
LNCV	Como	July 2007	30	examining agri water variable in the Nile Basin
FS 1	Entebbe	Oct 2007	20	Initiation workshop of farming system analysis
FS 2	Cairo	Mar 2008	15	presentation & analysis of farming system work (EGY, ERI, ETH, SUD)
FS 3	Entebbe	Mar 2008	15	presentation & analysis of farming system work (DRC, KEN, RWA, TAN, UGA)
F4T 3	Cairo	Jul 2008	7	taking stock of F4T and soliciting advise on how to continue

Annexure E: Hydrometric Equipment for Nile Basin Countries

Country	Automatic Weather Stations	Automatic Water Level Recorder	ADCP	Status/Remarks
Burundi	3			Installed
D.R. Congo	1			
Egypt				
Ethiopia			1	Operational
Eritrea				
Kenya	1	1		Vandalized
Rwanda		1	1	uninstalled
Sudan				
Tanzania	2		1	Uninstalled
Uganda	3	4		1 installed, 2 in store

Annexure F: Concept Note on project follow-up (Source: FAO Nile project)

## RECOMMENDED FOLLOW-UP TO FAO NILE

### CONCEPT NOTE FOR SUBMISSION TO NILE TAC

October 2008

#### 1. Setting the Scene

Within the context of high demographic growth rates and increasing pressure on land and water resources, food security is a critical concern for policy makers in the Nile Basin. The region has dominant rural populations, many of whom are engaged in agricultural activities. A high proportion of the rural population in the upstream riparians depends on rainfed subsistence farming for their livelihood. Because of their poverty, they are effectively cut off from access to international food markets.

With dominant rural populations, rural development is of crucial importance when discussing the Nile issue. The state of the rural economy – which affects demographic trends - is a principal determinant of the shape of the future water demand function. Improving agricultural productivity is key to rural development. The benefits of industrialization, growth in the service sector, exploitation of natural resources, or tourism typically bypass rural areas. Constraints to increase agricultural productivity include biophysical, social, and economic factors.

Agriculture uses over 80% of the renewable water resources in the basin and is the main component of the water demand function, emphasizing the close link between agricultural and water resources development.

Climate change over the next decades may have a significant effect on agricultural production. However, the low levels of convergence of climate models across the diverse agro-climatic zones of the Nile basin do not allow the anticipated impacts on rain fed and irrigated agriculture to be projected with any certainty. But even on a ‘no regrets’ basis, practical adaptation and mitigation strategies are required to minimize the potential negative impact and ensure adequate food supply. A scenario approach has proven effective in formulating adaptive policy responses that explicitly acknowledge the inherent uncertainties of the future.

Joint action to mitigate economic constraints in agricultural production, for instance regarding agricultural trade or to establish profitable farm gate prices, could provide potential areas for Nile cooperation. Crucially, these are not directly related to river flow and therefore could offer alternative pathways for negotiated solutions.

#### 2. FAO Nile

The Government of Italy is supporting project “Information Products for Nile Basin Water Resources Management” – often referred to as FAO Nile. It is carried out under the umbrella of the Nile Basin Initiative (NBI). The project is implemented by the ten Nile riparians with technical and operational assistance from FAO. The current project budget amounts to US\$ 5.175 million, bringing the total contribution of the Government of Italy to the Nile process since 1996 to over US\$ 16 million. The project comes to a close on 31 December 2008.

The project is intended to strengthen the ability of the governments of the ten riparian states to take informed decisions with regard to water resources policy and management in the Nile basin.

It covers a broad scope, ranging from hydro-meteorological monitoring, GIS database development, preparing a poster series, the Nile Decision Support Tool (Nile DST), to negotiation skills training. So far the capacity building component has implemented 60 training events with a total of 562 trainees. Furthermore, in the last two years the project has made a significant attempt to provide Nile Basin decision makers with a better understanding of the relation between water and agriculture at Nile basin scale. This particular output includes the following components:

1. Compilation of an agricultural production database for the 10 Nile riparians. It includes statistics on yield, acreage, and production for the major crops at district level. This component also developed a basin-wide geo-referenced irrigation layer.
2. Calculation of agricultural water use and water productivity for the major crops at district level.
3. A survey on agricultural productivity in the Nile basin following a farming system approach. It has collected agricultural production statistics and identified major farming systems. However, this information is not available for all countries. The analysis is further identifying the main constraints (biophysical, social, and economic) to increase agricultural productivity and realistic means to mitigate these constraints.
4. “Food for Thought” (F4T) scenario exercise to determine a plausible range of demand for agricultural produce for the horizon year 2030. It was developed through a highly participatory process and has evolved into a tool for a systematic and multi-stakeholder analysis of the complex rural development issue in the Nile basin.

Although agriculture is the main theme here, the respective water ministries function as the project’s focal point institutions. This is not an incongruity. The water ministries are the main players in the NBI and require sound understanding of the linkage between water and agriculture – at basin scale. This baseline information has been developed by the current project in response to the demands from all 10 countries through their Project Steering Committee. But teasing out the water variable in terms of rural livelihoods and agricultural production across the basin as a whole is only the first step in the overall natural resource negotiation process within the basin and the regional economies.

### 3. Recommended Follow-up

With regard to the agricultural water component, FAO Nile has concentrated on preparing products: databases, data layers, scenario set, and analysis. Some of the components (will) have been completed (1 and 2) by December 2008. Others require further work (3), or have shown potential far beyond their original objective (4). It is important to note that data products which are not internalized and used in a decision process do not constitute effective information.

Therefore we recommend three areas for follow-up. These are: 1) deepening the farming system survey, 2) using the F4T scenario set to support systematic and participatory policy development regarding food security, regional agricultural trade, rural development, and related issues, and 3) identifying agricultural development options in the Nile basin through a

multi-stakeholder process. The above elements build directly on the work and experience of FAO Nile.

### Extension of Farming System Survey

Rural development is at the basis of poverty alleviation and improving livelihoods for a large proportion of the population in the Nile basin. With agriculture the dominant economic sector here, it will require growth in agricultural productivity across the board. But in spite of decades of development efforts, this has proven elusive in many areas in the Nile region. In an attempt to get a handle on the difficulties involved, FAO Nile has applied a system approach. Through a farming system survey, it aimed at identifying the full spectrum of constraints in the agricultural production process. Apart from biophysical constraints, we also looked at social and economical factors. Teams of national consultants carried out survey work. To date, six out of 10 Nile riparians have submitted reports on their findings, while some others should be expected shortly. The reports submitted vary in the quality of information provided. This reflects differences in quality and/or accessibility of agricultural data among the riparians.

Data provided is being analyzed with the principal aim to estimate feasible gains in agricultural productivity.

Although good progress is made and relevant insights have been gained, this activity would require follow-up to capture its full potential:

1. continue data collection efforts to complete missing data and enrich information base;
2. synthesize findings and develop communication material targeting different audiences ranging from decision/policy makers, to implementers and scientists;
3. design and implement a process to internalize these findings.

The importance of the latter activity is highlighted. In order to engage in fruitful strategic conversations on policy measures and options, decision makers need to effectively internalize the information provided. This is a difficult but essential task that should not be taken lightly. It will require a well designed process and sufficient time at hand.

### Supporting Policy Process with F4T Scenario Thinking

FAO Nile, in collaboration with GWP Eastern Africa, initiated an interactive process – called Food for Thought (F4T) – in which a core group of some 25 participants from all Nile countries engaged in a joint scenario building exercise. Originally intended to determine a plausible future range of the main water consumer in the basin – demand for agricultural produce - it evolved into a systematic and multi-stakeholder analysis of a broad set of development issues related to demography, rural-urban migration, and conditions in rural areas in the Nile countries.

Scenario thinking aims to engage decision makers in systematic thinking through implications and options for the future. By asking the ‘what if’ question from multiple perspectives, we obtain a set of options for the future per scenario, but also – collectively – across all our scenarios. It will give a feel for robust options, risky options, ‘tickets to ride’, what to avoid, what to do together, timing etc.

F4T was well received. Over time confidence grew that the group's scenarios – as a set - were both highly plausible and highly relevant. It provided fresh insights regarding the dynamics and underlying structure of the subject matter, notably rural development.

The exercise has reached its halfway point. Critical questions in the next phase include: 1) how can we effectively disseminate the scenario set, 2) how can we promote fruitful scenario based strategic dialogue beyond the group that was involved so far, and 3) how can we ensure that our proceeds of today effectively help create 'better futures' for all.

A one-day advisory meeting with 8 key stakeholders was organized to address the above issues. It advised the following:

1. Form a group of national F4T champions who will disseminate F4T and the insights obtained to a broader audience with particular focus on key stakeholders;
2. Train the above group in facilitating scenario workshops, both to inform new audiences about F4T and to engage in F4T based scenario thinking;
3. Produce very good communication tools for disseminating the scenario set beyond the core group; this should include a video; the aim is to facilitate engagement and F4T based strategic dialogue;
4. Engage Nile Basin decision makers in a scenario-informed thinking process; in a workshop setup, use "Food for Thought" as backdrop to examine threats, opportunities, and the policy implications related to "A decade of high global food prices", "Biofuel prospects in the Nile Basin", "Climate change adaptation mechanisms" and other relevant subjects.

The core value of F4T lies in engaging decision makers in a strategic dialogue that will stretch their mental models, open up new ways of thinking, create joint points of departure for the Nile negotiations, and better prepare for future developments. If not continued, the impact of F4T will remain limited with its potential largely untapped.

#### Review Basin Wide Agricultural Development Options (on the basis of new information)

FAO Nile will have established a baseline on the status of the agricultural water variable. To this effect, it has integrated the results of its hydrological and agricultural components. These components were designed to serve as building blocks and provide commonly shared data, information, and insights. A logical follow-up was to explore basin-wide agricultural development options in a multi-stakeholder process which would synthesize information on:

- the dynamic state of agriculture in the Nile basin;
- an assessment of realistic prospects for productivity increase;
- a plausible range of future demand for agricultural produce, and
- natural resource limits and potentials and how these will condition agricultural development within the basin.

Database development, however, took far more time than anticipated with some national teams encountering steep challenges to locate, collect, and organize agricultural statistics. In fact, database development is still ongoing.

Further, thinking on how to implement this component changed over time. Originally intended as a desk study, consensus emerged to engage into a multi-stakeholder process after the successful experience with F4T. Combining and synthesizing information from the individual building blocks – at Nile basin scale - concerns a complex process that requires an



approach that is systematic and participatory. It should also ensure that participants internalize the information provided and insights derived. This requires a very different setup than originally foreseen, with different levels of facilitation, funding, and time availability.

Hence the third recommended follow-up activity is to:

- design and implement a multi-stakeholder process – that involves representatives from all Nile countries – to explore basin-wide agricultural development options using the products developed by FAO Nile and other sources; this process should facilitate open-interaction among participants, create shared insights, and provide legitimacy for the results obtained; the importance of process design is emphasized.
- Continue to feed the process with updated information and analysis ‘on demand’ as the dialogue between riparian countries evolves.

## Annex G: Questionnaire filled by Consultants

### **PROJECT EVALUATION QUESTIONNAIRE FOR COMPLETION BY ALL EVALUATION MISSIONS**

The questionnaire has been designed to summarise the basic findings of each project evaluation. It covers all the key aspects to be reviewed by the evaluation mission and may be used by the mission as a checklist while evaluating the project. The completed questionnaire serves to build up the data bank on evaluation reports which is used for providing feedback from evaluation in improving project selection design and management, i.e. internal reports, sector and sub-sector reviews of field projects, reports to Governing Bodies and other ad hoc searches on the characteristics of the Field Programme.

**Each evaluation mission is requested to respond to all points of the questionnaire.** The questionnaire should be completed in the field (simultaneously with drafting of the report) and returned to the Evaluation Service (PBEE) together with the mission's draft report.

<b>I. BACKGROUND INFORMATION</b>			
Project Title: FAO Nile: Information Products for Nile Basin Water Resources Management (PROJECT GCP/INT/945/ITA)		Project Phase (I, II etc.): Phase I but phase III of FAO/ITA support	Symbol:
Project Start Date: December, 2004		Project Completion Date (expected/actual):31-12-2008	
Total Donor Budget (US\$): USD 5 million		Budget FAO Component (US\$):	
Type of Execution	National	FAO	Other agency (specify):
Mission dates in the country(s):		From: 2nd	To:28 <sup>th</sup> November, 2008
Type of evaluation	Mid-term	<b>Final/terminal</b> ✓	Ex-post
<b>Mission Composition</b>	<b>Name</b>	<b>Title or Discipline*</b>	<b>Mission Leader in Current Mission</b>
Donor Representative			Yes/No
Host Government Representative			Yes/No
FAO Representative	George Sarpong Patrick Kahangire	Legal/Negotiations Inter WR	Yes/No
Other Participants			Yes/No
<b>Mission Arrangements</b> one box for each aspect of the mission arrangements			
1. Briefing	Poor	Satisfactory	<b>Very comprehensive</b>
2. Debriefing	Poor	Satisfactory	<b>Very comprehensive</b>
3. Clarity of mission terms of reference (mandate)	Unclear	Reasonably clear	<b>Very clear</b>
4. Duration of mission in relation to terms of reference	Too short	<b>Adequate</b>	Too long

\*Title for staff, discipline for consultants

<b>II. PROJECT RELEVANCE (Appropriateness - At the time the project was initiated)</b> * Use a value scale of 1 to 5	<b>Score (1-5)*</b>
1. Did the project address a genuine development problem? (1=not at all 2=hardly 3=yes, somewhat 4=yes to an important problem 5= yes, to a major problem)	5
2. If answer to question 1 is 3, 4 or 5: How well did the project provide a cost-effective response to that development problem? (1=not at all 2=barely appropriate 3=satisfactory 4=highly appropriate 5=the most appropriate possible)	4
3. Did the project form part of a coherent national programme? (1=not at all 2=only slightly 3=linked 4=well integrated 5=totally integrated)	2
4. Were there reasonable expectations that adequate national resources could be committed to the project? (1=not at all 2=only slight 3=reasonable 4=very little doubt 5=absolutely certain)	3
5. Was it realistic to expect project outputs to continue to be used once the project was completed and adequate resources to be committed for meaningful follow-up? (1=no or very little expectation 2= slight expectation 3=some expectations 4=very reasonable expectations 5=very strong expectations)	4
<b>6. OVERALL ASSESSMENT OF PROJECT RELEVANCE (Appropriateness)</b> (1=very poor 2= rather unsatisfactory 3=satisfactory 4=good 5=excellent/highly relevant)	4

<b>III. PROJECT DESIGN</b> (The assessment should be based on the latest official PRODOC or its substantive revision)  *Assess the key elements of the project using the following (0-5) value scale: 0 = Not mentioned in the project document (PRODOC) 1= Poor 2= Weak/Less than Satisfactory 3= Average/Satisfactory/Adequate 4= Good/More than Satisfactory 5 = Excellent.	<b>Score (0-5)*</b>			
1. Clarity of immediate objectives, including specification of targets				4
2. Specification of beneficiaries				3
3. Specification of outputs and output targets				3
4. Specification of inputs: - donor  - national				4
				3
5. Validity of means >ends relationship between inputs, outputs and objectives				4
6. Implementation arrangements and managerial structure	Clarity of definition	4	Appropriateness	4
7. Workplan including timing of inputs, activities and outputs	Clarity	3	Realism	3
8. Realism of identified prerequisites and risks for project success				4
9. Adequacy of partnerships with other related institutions and organizations				4

10. For achievement of project objectives, the realism of:			
- Project duration (time horizon)	Too short	About right	Unnecessarily long
- Project resources	Too few	About right	Too many
11. OVERALL ASSESSMENT OF PROJECT DESIGN (score 1-5)			4

<b>IV. PROJECT IMPLEMENTATION</b>		<b>Not included in the Prodoc or not due to be provided by time of evaluation</b>	<b>Score (1-5)*</b>
* Assess project implementation on the following (1-5) value scale: 1 = very poor 2 = Less than Satisfactory 3 = Average/Satisfactory 4 = above average/good 5 = Excellent.			
<b><u>Donor Inputs:</u></b>			4
1. Budgetary disbursements			
2. Project personnel including consultants			3
3. Equipment and supplies			4
4. Fellowships/study tours and other formal training			3
5. Other (specify)			
<b><u>National Inputs</u></b>		Not included	
6. Budgetary disbursements			
7. Personnel			3
8. Equipment and physical infrastructure			3
9. Other (specify) national level coordination		Not specified	
<b><u>Internal Management</u></b>			3
10. Project workplanning, monitoring and reporting			
11. Coordination and relation with other organizations/departments			3
12. Flexible management response to problems and/or changed circumstances			4
13. National project director	Was the national project director:	Part time	Full time
Note: There were no national project Directors	Did the national project director have in practice the main responsibility for project management?	Yes	No
	Assessment of the effectiveness of the national project director (score 1-5)		3
14. Overall assessment of internal project management (score 1-5)			4
<b><u>External Support/Inputs to Management and Implementation</u></b>			4
15. Technical support by FAO			
16. Administrative support by FAO			3
17. Management support/Decision-making by: - donor(s)			4
- government(s)			3
18. External management committee and tripartite (donor-recipient) meetings			4
19. Assessment of evaluation and review processes			3
20. OVERALL ASSESSMENT OF PROJECT IMPLEMENTATION (Score 1-5)			4

<b>V. PROJECT OUTPUTS</b> The assessment of the outputs produced should be made with respect to the planned targets and <b>reasonable expectations of productivity</b> . *Assess the outputs of the project using the following (1-5) value scale 1= Very poor, 2= Less than satisfactory, 3= Average/Satisfactory, 4= Good, 5= Excellent	<b>Score (1-5)*</b>
1. Quantity	4
2. Quality	4
3. Use made, or expected to be made, of outputs	3
4. OVERALL ASSESSMENT OF OUTPUTS ACHIEVED	3-4

<b>VI. COST-EFFECTIVENESS OF THE PROJECT</b>		<b>Score (1-5)*</b>	
1. Given your knowledge of similar projects, how cost-effective was this project (1= Very poor, 2= Less than satisfactory, 3= Average/Satisfactory, 4= Good, 5= Excellent)		4	
2. If answer to question 1 is 1 or 2, how could the project be or have been more cost-effective?			
3. Were there substantial cost over-runs (extension of budget) to complete the project? <b>COMMENT: OVERALL BUDGET NO OVERUNNS BUT MANAGEMENT COST INCREASED AND LESS WAS AVAILED TO OUTPUTS</b>		Yes	<b>No</b>
4. Tick any of the following which had a particularly negative effect on cost-effectiveness:  <b>Comment: Not easy to apportion causes on procedures</b>	FAO procedures	Donor procedures	Government procedures

<b>VII. SUSTAINABLE EFFECTS AND IMPACT (in relation to project objectives)</b>  Sustainable effects and impact mean the extent to which the project outputs/results continue to be applied and used effectively, and can be expected to make a continued contribution to the welfare of ultimate end-beneficiaries and/or the maintenance/preservation of the physical natural environment.	<b>Planned as objective in the project document.</b> Tick at least one box	<b>Sustainable Effects and Impact</b> (Expected at time of Evaluation – Use scale of 1-5 where 1= none or negligible 2= slight 3= some 4= considerable 5= very substantial)
1. Sustainable effects and impact on the following areas: - Policy/planning/legislative improvements - National Institutional capacity (including staff skills) - Uptake/use of technical improvements - Replication/expansion of pilot activities - Follow-up Investment - Other (specify)		  3 4 4 3 2
2. Can the project be expected to have sustainable effects and impact on the following categories of ultimate end-beneficiaries (categories are not mutually exclusive):		Score 1-3 (1= Negative impact; 2= No impact; 3= Positive impact)
- Farmers/fisherfolk/pastoralists/livestock-keepers		2
- The rural poor		2
- The urban poor		2
- Women		2
- Private sector (other than farmers/fisherfolk etc.)		3
- The natural environment		3
- Other (specify)		
3. How well did the process of implementation followed by the project facilitate national ownership of results?  <p style="text-align: center;">3</p>		Score 1-5 (1= Very poor; 2= Less than satisfactory; 3= Average/satisfactory; 4= Good; 5= Excellent)
4. OVERALL ASSESSMENT OF SUSTAINABILITY OF PROJECT EFFECTS AND IMPACT (value 1-5)		3



**VIII. PROJECT FEATURES WHERE THERE IS GREATEST NEED FOR IMPROVEMENT**

These questions are intended to help identify those aspects of projects where there is most room for improvement

1. What do you consider to have been the aspect of this project where there was greatest room for improvement if sustainable effects and impact were to be more cost effectively achieved? (tick one box only)

- Project Selection (i.e. the concept and immediate objectives of the project)

- Project Design

- Project Implementation and Management

X

- Project Supervision and Adjustment (revision)

2. Which of the following factors are most likely to limit the sustainability of the project effects and impact? Tick a maximum of two as this question is intended to identify the areas which need most attention in future projects

- Weaknesses in national institutions

X

- Non-economic attractiveness/viability of the outputs developed by the project

- Technical weaknesses in project outputs/recommendations

- Lack of attention to natural resource sustainability

- Lack of social/political realism in project outputs/recommendations

- Insufficient involvement/participation by beneficiaries

- Insufficient national financial resources to follow-up on the project

X

- Insufficient national manpower resources to follow-up on the project

- Lack of national priority/commitment to this type of development

- Other (specify):

**VIII Comments:** (to be provided at your discretion to complement the evaluation presented in the report and clarify any points which are unclear above):

The following were additional shortcomings on project planning and implementation:

- ◆ PSC meetings of once a year created a big gap in project scheduling and monitoring
- ◆ PSC and NPCs are technical/experts but it appears they did not make much technical and professional input into the project outputs design and verification and ensuring national level acceptance, ownership and dissemination of products
- ◆ A lot of project implementation functions were concentrated at the project headquarters and the once-a-year PSC meetings minimized involvement of countries /NPCs follow-up
- ◆ National contributions should have included financial inputs to promote project internalization at Country level

## Annex H: Summary of questionnaire responses by Countries

	BUR	DRC	EGY	ERI	ETH	KEN	RWA	SUD	TAN	UGA	REMARKS
<b>SECTION II. PROJECT RELEVANCE</b>											
<b>Q. 1</b>	Did the project address a genuine development problem?										
	5		4		3	4	4	4	5	5	1=not at all 2=hardly 3=yes, somewhat 4=yes to an important problem 5=yes, to a major problem
<b>Q. 2</b>	If answer to question 1 is 3, 4 or 5: How well did the project provide a cost-effective response to that development problem?										
	4		4		3	4	3	3	4	4	1=not at all 2=barely appropriate 3=satisfactory 4=highly appropriate 5=the most appropriate possible
<b>Q. 3</b>	Did the project form part of a coherent national programme?										
	3		5		2	4	4	3	4	3	1=not at all 2=only slightly 3=linked 4=well integrated 5=totally integrated
<b>Q. 4</b>	Were there reasonable expectations that adequate national resources could be committed to the project?										
	3		5		2	1	3	5	5	3	1=not at all 2=only slight 3=reasonable 4=very little doubt 5=absolutely certain
<b>Q. 5</b>	Was it realistic to expect project outputs to continue to be used once the project was completed and adequate resources to be committed for meaningful follow-up?										
	4		4		5	3	5	4	5	5	1=no or very little expectation 2= slight expectation 3=some expectations 4=very reasonable expectations 5=very strong expectations
<b>Q. 6</b>	OVERALL ASSESSMENT OF PROJECT RELEVANCE (Appropriateness)										
	4		5		4	4	5	5	5	4	1=very poor 2= rather unsatisfactory 3=satisfactory 4=good 5=excellent/highly relevant
	BUR	DRC	EGY	ERI	ETH	KEN	RWA	SUD	TAN	UGA	
<b>SECTION III. PROJECT DESIGN</b>											

Q. 1	Clarity of immediate objectives, including specification of targets									
	3		5		3	5	4	4	5	5
Q. 2	Specification of beneficiaries									
	3		4		3	4	3	5	5	3
Q. 3	Specification of outputs and output targets									
	4		5		4	5	3	3	5	4
Q. 4	Specification of inputs:									
	- Donor									
	4		5		4	5	4	5	5	4
	- National									
	4		5		4	5	3	3	4	4
Q. 5	Validity of means >ends relationship between inputs, outputs and objectives									
	3		4		3			3	4	4
Q. 6	Implementation arrangements and managerial structure									
	- Clarity of definition									
	4		5		4	5	3	5		4
	- Appropriateness									
	4		5		4	5	3	4	5	3
Q. 7	Workplan including timing of inputs, activities and outputs									
	- Clarity									
	3		5		4	5	3	4		3
	- Realism									
	4		4		4	4	3	3	5	3
Q. 8	Realism of identified prerequisites and risks for project success									
	3		4			4	3	3	5	3
Q. 9	Adequacy of partnerships with other related institutions and organizations									

**REMARKS**

0 = Not mentioned in the project document (PRODOC)

1= Poor

2= Weak/Less than Satisfactory

3= Average/Satisfactory/Adequate

4= Good/More than Satisfactory

5 = Excellent.

TS – Too Short

AR – About Right

UL – Unnecessarily Long

TF – Too Few

TM – Too Many

	4		5		4	4	3	5	4	4
Q. 10	For achievement of project objectives, the realism of:									
	- Project duration (time horizon)									
	AR		TS		AR	TS	AR	TS	AR	TS
	- Project resources									
	AR		AR		AR	AR	AR	AR	AR	TF
Q. 11	OVERALL ASSESSMENT OF PROJECT DESIGN									
	4		5		4	4	3	3	5	4

**KEY:** 1 = very poor 2 = Less than Satisfactory 3 = Average/Satisfactory 4 = above average/good 5 = Excellent

	BUR	DRC	EGY	ERI	ETH	KEN	RWA	SUD	TAN	UGA
<b>SECTION IV. PROJECT IMPLEMENTATION</b>										
Donor Inputs										
Q. 1	Budgetary disbursements									
	4		5		4	5	3	5	5	N/A
Q. 2	Project personnel including consultants									
	3		5		4	5	3	4	5	N/A
Q. 3	Equipment and supplies									
	5		4		4	5	4	4	5	5
Q. 4	Fellowships/study tours and other formal training									
	4		3		3	5	4	4	5	4
Q. 5	Other (specify)									
	4								5	
National Inputs										
Q. 6	Budgetary disbursements									
	2		5		3	None	2	3	5	3
Q. 7	Personnel									
	3		5		3	4	3	4	5	3
Q. 8	Equipment and physical infrastructure									
	3		4		4	5	3	5	5	4
Q. 9	Other (specify)									
	4								5	
Internal Management										
Q. 10	Project work planning, monitoring and reporting									
	3		5		2	5	4	5	5	4
Q. 11	Coordination and relation with other organizations/departments									
	5		4		2	4	3	4	4	4
Q. 12	Flexible management response to problems and/or changed circumstances									

	3		5		3		2	4	4	4
Q. 13	National project director									
	Was the national project director: Part Time or Full Time?									
			PT		PT		PT	PT		PT
	Did the national project director have in practice the main responsibility for project management?									
			Yes			Yes/No	Yes	Yes		No
	Assessment of the effectiveness of the national project director									
			4		3	4	4	3	4	
Q. 14	Overall assessment of internal project management									
	4		5		3	4	3	4	5	4
Q. 15	<u>External Support/Inputs to Management and Implementation</u>									
	Technical support by FAO									
	3		4		4	5	3	5	5	4
Q. 16	Administrative support by FAO									
	3		4		4	5	3	4	5	4
Q. 17	Management support/Decision-making by: - donor(s)									
	3		5		4		3	5	5	3
	- government(s)									
	3		5		3	4	3	4	5	3
Q. 18	External management committee and tripartite (donor-recipient) meetings									
	4		5		4	5	4	4	5	4
Q. 19	Assessment of evaluation and review processes									
	4		5		4	5	3	3	5	N/A
Q. 20	OVERALL ASSESSMENT OF PROJECT IMPLEMENTATION									
	3		5		3 - 4	4	3	4	5	4



	BUR	DRC	EGY	ERI	ETH	KEN	RWA	SUD	TAN	UGA
<b>SECTION V. PROJECT OUTPUTS</b>										
The assessment of the outputs produced should be made with respect to the planned targets and <b>reasonable expectations of productivity</b>										
Q. 1	Quantity									
	3		5		4	4	3	3	4	4
Q. 2	Quality									
	4		4		4	5	3	4	4	4
Q. 3	Use made, or expected to be made, of outputs									
	4		5		4	4	3	3	4	4
Q. 4	OVERALL ASSESSMENT OF OUTPUTS ACHIEVED									
	4		5		4	4	3	3	4	4

**KEY:** 1= Very poor, 2= Less than satisfactory, 3= Average/Satisfactory, 4= Good, 5= Excellent

	BUR	DRC	EGY	ERI	ETH	KEN	RWA	SUD	TAN	UGA
<b>SECTION VI. COST-EFFECTIVENESS OF THE PROJECT</b>										
Q. 1	Given your knowledge of similar projects, how cost-effective was this project?									
	4		4		4	5	3	4	4	4
Q. 2	If answer to question 1 is 1 or 2, how could the project be or have been more cost-effective?									
Q. 3	Were there substantial cost over-runs (extension of budget) to complete the project?									
						No	No	Yes	No	No
Q. 4	Tick any of the following which had a particularly negative effect on cost-effectiveness:									
	FAO/GOVT				FAO	N/A	FAO	Govt.		FAO/Donor

**KEY:** 1= Very poor, 2= Less than satisfactory, 3= Average/Satisfactory, 4= Good, 5= Excellent

	BUR	DRC	EGY	ERI	ETH	KEN	RWA	SUD	TAN	UGA	
<b>SECTION VII. SUSTAINABLE EFFECTS AND IMPACT</b>											
Q. 1 Sustainable effects and impact on the following areas:											
<b>KEY: 1= none or negligible 2= slight 3= some 4= considerable 5= very substantial</b>											
a.	- Policy/planning/legislative improvements										
	3		√ 4		√ 3	3		√ 4			
b.	- National Institutional capacity (including staff skills)										
	√ 5		√ 5		√ 4	5			√ 5		
c.	- Uptake/use of technical improvements										
	√ 4		√ 5		√ 4	4	√ 3		√ 5		
d.	- Replication/expansion of pilot activities										
	3				√ 3	4		√ 3	√ 5	√ 4	
e.	- Follow-up Investment										
	3					3					
f.	- Other (specify)										
Q. 2	Can the project be expected to have sustainable effects and impact on the following categories of ultimate end-beneficiaries?										
<b>KEY: 1= Negative impact; 2= No impact; 3= Positive impact</b>											
a.	- Farmers/fisherfolk/pastoralists/livestock-keepers										
	3		3		3	2	3	3	3	3	
b.	- The rural poor										
	3		2			2		3	3	3	
c.	- The urban poor										
	2		2		2	2				3	
d.	- Women										
	3		2			2			3	3	
e.	- Private sector (other than farmers/fisherfolk etc.)										
	2		3		2	2			3	3	

f.	- The natural environment										
	3		3		3	2	3		3	3	
g.	- Other (specify) <b>Decision makers, government</b>										
			3								
Q. 3	How well did the process of implementation followed by the project facilitate national ownership of results? <b>KEY: 1= Very poor; 2= Less than satisfactory; 3= Average/satisfactory; 4= Good; 5= Excellent</b>										
			5		3	4			4		
Q. 4	<b>OVERALL ASSESSMENT OF SUSTAINABILITY OF PROJECT EFFECTS AND IMPACT</b>										
	4		4		3-4	4	3	4	4	4	

	BUR	DRC	EGY	ERI	ETH	KEN	RWA	SUD	TAN	UGA
<b>SECTION VIII.</b>										
<b>PROJECT FEATURES WHERE THERE IS GREAT NEED FOR IMPROVEMENT</b>										
Q. 1	What do you consider to have been the aspect of this project where there was greatest room for improvement if sustainable effects and impact were to be <u>more</u> cost effectively achieved? (tick one box only)									
a.	- Project Selection (i.e. the concept and immediate objectives of the project)									
b.	- Project Design									
c.	- Project Implementation and Management									
d.	- Project Supervision and Adjustment (revision)									
Q. 2	Which of the following factors are <u>most</u> likely to limit the sustainability of the project effects and impact? Tick a maximum of two as this question is intended to identify the areas which need most attention in future projects									
a.	- Weaknesses in national institutions									
b.	- Non-economic attractiveness/viability of the outputs developed by the project									
c.	- Technical weaknesses in project outputs/recommendations									
d.	- Lack of attention to natural resource sustainability									
e.	- Lack of social/political realism in project outputs/recommendations									
f.	- Insufficient involvement/participation by beneficiaries									
g.	- Insufficient national financial resources to follow-up on the project									
h.	- Insufficient national manpower resources to follow-up on the project									
i.	- Lack of national priority/commitment to this type of development									
j.	- Other (specify):									

## SECTION VIII. COMMENTS

### ETHIOPIA:

1. **On Project Relevance:** to ensure the relevance of the project and its integrity to the national plans, monitoring and follow up need to be strengthened.
2. **On Project implementation:** For outsourced activities such as consultancy service at national level, a kind of regulatory mechanism/accountability should be put in place to allow national institutions have a control on the deliverable outputs.
3. **On project outputs:** Technically, the outputs of the project have no problem with respect to quality and quantity. However, when it comes to the issue of transfer of products; it requires *a period of transition* that will enable national institutions smoothly takeover the activities so as to ensure sustainability of the project.

#### Finally:

- National institutions should be capacitated through specialised training that will enable capturing the high level technical elements of the project outputs. Needs assessment might be required?
- The integrity of NBI project components (at national level) needs much more attention when it comes to the aspect of coordination.

### KENYA:

Our country underwent a terrible time during the postelection violence. This caused the burning of the stores where the equipment were stored. This means that the data gathering was affected and we cannot continue to download the field data.

### EGYPT:

The overall project evaluation is excellent, however the activities duration is too short and there is an essential need to extend the project for an extra year in order to complete the activities of the third phase and totally achieves its targets.

### SUDAN:

The weakness in our national institutions in following the process of these studies and the implementation of their results is the major problem facing our countries, the financial constrains is adding more to the problem of making use the outcomes.

