



REQUEST FOR CEO ENDORSEMENT/APPROVAL
PROJECT TYPE: Full-sized Project
THE GEF TRUST FUND

Submission Date: 03/06/2012

PART I: PROJECT INFORMATION

GEFSEC PROJECT ID: 3991

GEF AGENCY PROJECT ID: 118090

COUNTRY(IES): Arab Republic of Egypt

PROJECT TITLE: Enhanced Water Resources Management Project

GEF AGENCY(IES): World Bank, (select), (select)

OTHER EXECUTING PARTNER(S):

GEF FOCAL AREA(S): International Waters

GEF-4 STRATEGIC PROGRAM(S): IW-SP2, IW-SP3 (see preparation guidelines section on exactly what to write)

NAME OF PARENT PROGRAM/UMBRELLA PROJECT: SUSTAINABLE MED

A. PROJECT FRAMEWORK (Expand table as necessary)

Expected Calendar (mm/dd/yy)	
Milestones	Dates
Work Program (for FSPs only)	06/24/2009
Agency Approval date	05/01/2012
Implementation Start	07/01/2012
Mid-term Evaluation (if planned)	10/01/2013
Project Closing Date	06/30/2015

Project Objective: To improve water management through piloting integrated water resources management (IWRM) in the Nile Delta and enhancing the knowledge and capacity of water sector institutions for IWRM in Egypt, contributing to pollution reduction in the Mediterranean Sea. These pilots will form the basis for scaling up investments through the Government's Integrated Water Resources Management Plan and contribute even more significantly to depollution and improved ecosystem health of the Mediterranean Sea and its biodiversity resources.

Project Components	Indicate whether Investment, TA, or STA ²	Expected Outcomes	Expected Outputs	GEF Financing ¹		Co-Financing ¹		Total (\$) c=a+ b
				(\$ a)	%	(\$ b)	%	
1. Pilot Schemes (i) Nekla/Menesi Pilot Scheme (ii) Okda/Tellin Pilot Scheme (iii) Khadrawia Pilot Scheme	Investment, TA	(i) Enhanced capacity and coordination of water agencies in implementing IWRM (ii) Enhanced awareness of stakeholders in implementing IWRM (iii) Increased water saving in irrigation (iv) Increased crop yield in improved drainage areas (v) Improved sanitation in rural villages (vi) Reduced pollution in drains in the three pilot areas	(i) IWRM training carried out and 3 pilot schemes implemented to demonstrate coordination for IWRM (ii) IWRM training for stakeholders and awareness campaign carried out (iii) Innovative technologies such as SRI, GIS based water management, continuous flow, and controlled drainage implemented (iv) Crop yield increased by 20% in improved drainage areas. (v) Centralized rural sewerage treatment systems established in 5 core villages in Nekla/Menesi pilot scheme (vi) Solid waste management carried out to reduce BOD from 216mg/l to 30mg/l in pilot areas.	2,914,000	10	25,214,000	90	28,128,000

<p>2. Capacity Building for Surface Water and Groundwater Management and Monitoring</p> <p>(i) Evaporation Losses Analysis in Lake Nasser</p> <p>(ii) Climate Change Impact Assessment in Water and Agriculture in the Nile Delta</p> <p>(iii) Surface Water Modeling Analysis in the Nile Delta</p> <p>(iv) Groundwater Modeling analysis in the Nile Delta</p> <p>(v) Surface Water Quality Monitoring Capacity Enhancement in the Nile System</p> <p>(vi) Groudwater Quality Monitoring Capacity Enhancement in the Nile System</p>	Investment, TA, STA	<p>(i) Enhanced capacity of water agencies/ institutes</p> <p>(ii) Adopted option for reduction of evaporation from Lake Nasser</p> <p>(iii) Enhanced climate change monitoring in Nile Delta</p> <p>(iv) Enhanced decision-making on IWRM based on the upgraded decision support system</p> <p>(v) Enhanced water quality monitoring network for surface and groundwater</p>	<p>(i) IWRM procedures established</p> <p>(ii) data for evaporatio losses collected, analysed, and options proposed</p> <p>(iii) Climate change monitoring database for Niel Delta established</p> <p>(iv) Required equipment and training for computer simulation modeling carried out</p> <p>(v) Monitoring system for surface and groundwater improved and training carried out</p>	3,322,000	72	1,289,000	28	4,611,000
<p>3. Project Management</p> <p>(i) Project Coordination Unit</p> <p>(ii) Result-based Monitoring and Evaluation</p> <p>(iii)IW Learn</p>	TA	<p>(i) Enhanced PCU management capacity</p> <p>(ii) Enhanced monitoring and evaluation (M&E)</p> <p>(iii) Disemination of IWRM knowledge</p>	<p>(i) PCU staff capacity enhanced</p> <p>(ii) M&E system established</p> <p>(iii) Knowledge exchanged.</p>	446,000	22	1,618,000	78	2,064,000
Total Project Costs				A6,682,000		B28,121,000		34,803,000

¹ List the \$ by project components. The percentage is the share of GEF and Co-financing respectively of the total amount for the component.

² TA = Technical Assistance; STA = Scientific & Technical Analysis.

B. SOURCES OF CONFIRMED CO-FINANCING FOR THE PROJECT (expand the table line items as necessary)

<i>Name of Co-financier (source)</i>	<i>Classification</i>	<i>Type</i>	<i>Project</i>	<i>%*</i>
Government	Nat'l Gov't	Grant	16,979,000	60
IBRD	GEF Agency	Soft Loan	11,021,000	39
Project Beneficiaries	Beneficiaries	In-Kind	121,000	1
Total Co-financing			B28,121,000	100%

* Percentage of each co-financier's contribution at CEO endorsement to total co-financing.

C. FINANCING PLAN SUMMARY FOR THE PROJECT (\$)

	<i>Project Preparation a</i>	<i>Project b</i>	<i>Total c = a + b</i>	<i>Agency Fee</i>	<i>For comparison: GEF and Co- financing at PIF</i>
GEF financing	0	A6,682,000	6,682,000	668,000	6,682,000
Co-financing	320,000	B28,121,000	28,441,000		34,300,000
Total	320,000	34,803,000	35,123,000	668,000	40,982,000

D. GEF RESOURCES REQUESTED BY AGENCY (IES), FOCAL AREA(S) AND COUNTRY (IES)¹

<i>GEF Agency</i>	<i>Focal Area</i>	<i>Country Name/ Global</i>	<i>(in \$)</i>		
			<i>Project (a)</i>	<i>Agency Fee (b)²</i>	<i>Total c=a+b</i>
World Bank	International Water	Arab Republic of Egypt	6,682,000	668,000	7,350,000
Total GEF Resources			6,682,000	668,000	7,350,000

¹ No need to provide information for this table if it is a single focal area, single country and single GEF Agency project.

² Relates to the project and any previous project preparation funding that have been provided and for which no Agency fee has been requested from Trustee.

E. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:

<i>Component</i>	<i>Estimated person weeks</i>	<i>GEF amount(\$)</i>	<i>Co-financing (\$)</i>	<i>Project total (\$)</i>
Local consultants*	817	735,000	0	735,000
International consultants*	125	375,000	0	375,000
Total	942	1,110,000	0	1,110,000

* Details to be provided in Annex C.

F. PROJECT MANAGEMENT BUDGET/COST

<i>Cost Items</i>	<i>Total Estimated person weeks</i>	<i>GEF amount (\$)</i>	<i>Co-financing (\$)</i>	<i>Project total (\$)</i>
Local consultants*	300	177,000	0	177,000
International consultants*	0	0	0	0
Office facilities, equipment, vehicles and communications*		81,000	0	81,000
Travel*		43,000	0	43,000
Others**		0	0	0
Total		301,000	0	301,000

* Details to be provided in Annex C. ** For others, it has to clearly specify what type of expenses here in a footnote.

G. DOES THE PROJECT INCLUDE A “NON-GRANT” INSTRUMENT? yes no

(If non-grant instruments are used, provide in Annex E an indicative calendar of expected reflows to your agency and to the GEF Trust Fund).

H. DESCRIBE THE BUDGETED M & E PLAN: The investment costs of M&E system are composed of the development of M&E system and related indicators, data collection, analysis and reporting. A total of 150 person-months experts/ staff input will be arranged and financed by the GEF fund and government counterpart fund for M&E work by the project coordination unit. The EWRMP would establish a Data, Metadata, and Knowledge Framework. The result-based monitoring information would be developed as a “Dynamic Information System”, in conjunction with the ongoing M&E system under the Integrated Irrigation Improvement and Management Project (IIIMP), the Integrated Sanitation and Sewerage Infrastructure Project (ISSIP), and the Second National Drainage Project (NDP2), for monitoring project outputs and evaluating and analyzing project outcomes, specifically focusing on the physical and financial progress, outputs of pilot schemes’ implementation and the demonstration impacts on IWRM and drainage water quality control measures.

PART II: PROJECT JUSTIFICATION: In addition to the following questions, please ensure that the project design incorporates key GEF operational principles, including sustainability of global environmental benefits, institutional continuity and replicability, keeping in mind that these principles will be monitored rigorously in the annual Project Implementation Review and other Review stages.

A. STATE THE ISSUE, HOW THE PROJECT SEEKS TO ADDRESS IT, AND THE EXPECTED GLOBAL ENVIRONMENTAL BENEFITS TO BE DELIVERED:

Issue 1 – Limited Availability of Renewable Water Resources: Egypt is the most downstream country of the 10 riparian countries in the Nile basin. The Nile water represents about 98% of the country’s renewable fresh water resources. The current population in Egypt is about 83 million and its annual growth rate is about 2.0%. Egypt is already a water stressed country with a per capita fresh water share less than 700 m³/year. If the current population growth continues, the per capita share is expected to drop to less than 300 m³/year in year 2050. Moreover, it is anticipated that the climate change may significantly reduce the availability of the Nile water, increase evapo-transpiration and thus increase the vulnerability of the country to water stresses.

Issue 2 – Demand Management and Water Quality Management: The pressures to achieve sustainable water management arise from water scarcity, the inequitable distribution of resources across economic sectors, social groups, or a combination of both in the most stressed conditions. Social and ecological water needs are included in all major water resource management plans, but meeting these needs is often a challenge, especially in situations where the current water use is unsustainable. Current pressures on water resources are derived from population growth, economic and social development, and technological trends. Agriculture is the largest consumer of water while urban consumption will keep growing and increased food needs will add further pressure on available resources. An adequate supply of fresh water is critical to the long term, sustained growth and development in Egypt. Historically, water resources management focused on reallocating water to when and where it was required: a supply-side approach. In recent years, it has become increasingly apparent that more focus needs to be shifted to demand management and water quality management in order to sustainably manage available water resources.

Issue 3 – Increase Need of Water Reuse for Agriculture: Egypt’s agricultural land is only about 4% of the total area of the country (about 8.5 million feddans¹), mainly consisting of the Nile Delta and the narrow valley along the Nile River. However, it is one of the world’s most intensively irrigated areas with highly diversified crop production. The agricultural sector contributes about 14% of Egypt’s GDP and provides 30% of the total employment opportunities in the country. Agriculture consumes about 85% of Egypt’s fresh water resources. Since the current irrigation water efficiency at the field level is generally low, the reuse of return flows collected by agricultural drainage networks and recovering the deep percolation losses by pumping of groundwater have become extremely important elements of water resources management in Egypt to fill in the gap between the supply and demand. Agriculture in Egypt depends entirely on irrigation due to the prevailing arid climate. The multi-purpose Aswan High Dam was constructed in 1960s to ensure year round irrigation. Barrages built across the river and its branches divert water into canals to distribute water to the farmlands and for domestic water supply. An intensive irrigation network of canals with control structures were built mainly during the early 1990s. Flood irrigation is commonly used by the farmers in the Nile Delta and Valley. The sustainability of irrigated agriculture in Egypt depends on an intensive network of drains to remove excess water and salts and defend the Nile Delta against sea water intrusion. As a result of recent water scarcity, agricultural drainage water is considered as important water resource for closing the gap between water supply and demand for irrigation in Egypt. About 5 billion m³ of agricultural drainage water is currently reused for irrigation. However, about 12 billion m³ still flow into the northern lakes and the Mediterranean Sea.

Issue 4 - Water Pollution in the Drains: While approximately 80% of the urban population is connected to public sewerage systems, only 26% of the rural population is receiving the sewerage service. Discharge of insufficiently treated waste water from some industrial zones and urban centers causes water pollution in the drains. Inadequate sewerage coverage mainly in rural areas has also led to alarming degradation of water quality in the agricultural drainage networks and groundwater aquifers. As a consequence, the polluted water in the Nile Delta poses a significant constraint on water availability and forms a serious health risk through the reuse of drainage water and pumping contaminated groundwater, in addition to polluting the Mediterranean Sea. Local governments, communities and farmers are aware of this risk and willing to participate in a project to reduce pollution in the drains in the Nile Delta.

¹ One feddan is 0.42 hectare.

How the Project Seeks to Address the Issues: The project will address the above issues through enhancement of integrated water resources management (IWRM) practice in Egypt by piloting IMRM schemes in the Nile Delta and improving the knowledge and capacity of water sector institutions for IWRM in Egypt. Specifically, the project will promote the IWRM principles and practices through (i) awareness-raising, institutional and capacity strengthening, and demonstration activities implemented in the selected pilot schemes in the Nile Delta to improve the coordination among water project management units (PMUs), Government agencies, local authorities and water user associations (WUAs); and (ii) technical assistance (TA) on targeted studies, capacity building training, and provision of equipment to strengthen the capacity and knowledge of the national institutions in water sector and to improve the national water resources monitoring networks. Under the pilot schemes, the project will integrate the three pillars of the national improvement program (Irrigation improvement, land drainage, and rural sanitation) to increase synergy of these projects. The most recent phases of these programs are the Integrated Irrigation Improvement and Management Project (IIIMP), the Second National Drainage Project (NDP2), and the Integrated Sanitation and Sewerage Infrastructure Project (ISSIP). The three projects share the overall objective of improving the living conditions of the rural communities in Egypt through improved water management in line with the principles of IWRM that promote participation of stakeholders in decision making and management.

Project Description: The project will consist of the following three components.

PART A: Pilot Schemes

Develop synergy between on-going water sector projects through demonstration activities in pilot areas, consisting of:

1. Nekla/Menesi Pilot Scheme: (i) enhancement of surface water management including by application of the “continuous flow” principle, adoption of controlled drainage techniques, and pilot-testing of the System of Rice Intensification (SRI) approach; (ii) carrying out of a feasibility study on solid waste management in the irrigation and drainage canal system of the pilot area and implementation of solid waste management practices, including preparation of an environmental impact assessment and an environment management plan of this scheme; (iii) provision of a geographical information system (GIS) and GIS computer equipment to monitor integrated water resource management, and related training, and (iv) implementation of irrigation and drainage rehabilitation, improvement and modernization works at all levels of the pilot command areas.

2. Okda/Tellin Pilot Scheme: (i) carrying out of an environmental impact assessment of the pilot scheme and development of a environmental management plan to mitigate against identified pollution sources; (ii) improvement of the capacity of key government agencies to maintain drainage systems and establishment of a district water board; (iii) carrying out of a feasibility study on solid waste management in the irrigation and drainage canal system of the pilot area and implementation of solid waste management practices; (iv) identification of small-scale, cost-effective interventions to reduce pollution in the pilot area, and related training; (v) carrying out of a public awareness campaign on waste avoidance, recycling and environmental health, (vi) provision of pollution mitigation measures including in-stream wetland, and (vii) provision of centralized sanitation systems in the pilot area.

3. Khadrawia Pilot Scheme: (i) carrying out of a stakeholder analysis to facilitate discussions between potential polluters and those affected by pollution; (ii) carrying out of an environmental impact assessment of the pilot scheme and development of a environmental management plan to mitigate against identified sources of drainage pollution; (iii) carrying out of a study to identify options for resolving drainage pollution; (iv) improvement of the capacity of key government agencies to maintain drainage systems and establish a district water board; (v) carrying out of a public awareness campaign on waste avoidance, recycling and environmental health, and (vi) provision of pollution mitigation measures including in-stream wetland.

PART B: Capacity Building for Surface Water and Groundwater Management and Monitoring

Technical assistance and capacity building activities to support efficient and effective management of surface water and ground water across sectors, consisting of:

1. Carrying out of an evaporation loss analysis in Lake Nasser.
2. Carrying out of a climate change impact assessment study in water and agriculture in the Nile delta.
3. Carrying out of a surface water modeling analysis in the Nile delta.

4. Carrying out of a groundwater modeling analysis in the Nile delta.
5. Provision of surface water monitoring equipment in strategic locations and building the capacity of relevant government staff to effectively monitor surface water.
6. Provision of groundwater monitoring equipment in strategic locations and building the capacity of relevant government staff to effectively monitor groundwater quality.

PART C: Project Management

1. Support to the PCU in Project implementation, monitoring and evaluation and management.
2. Establishment of a results-based monitoring and evaluation system.
3. Provision of a tracking tool (IW Learn) for reporting and disseminating lessons learned on integrated water management.

Global Environmental Benefits: The project will establish a basis for scaling up investments through the GOE's IWRM plan and contribute more significantly to pollution control and improved ecosystem health of the Mediterranean Sea and its biodiversity resources. It is expected that the successful operationalization of the IWRM approach and principles in pilot schemes will demonstrate the benefits of synergy of the ongoing investment projects (IIIMP, NDP2, and ISSIP) and will be replicated in the Nile Delta, which will result in increased water use efficiency and availability for reuse, and improved water quality and livelihood of the poor; which would eventually have a great impact on reducing the pollution load flowing into the Mediterranean Sea.

B. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH NATIONAL AND/OR REGIONAL PRIORITIES/PLANS: The project is in line with the National Water Resources Plan (NWRP: "Water for the Future" prepared in January 2005), which is based on IWRM approach. The NWRP addresses the main issue: how to safeguard water resources in the future under the conditions of a growing population and a more or less fixed water availability in Egypt. To address this issue, improvement of water use efficiency and water quality have been highlighted. Priority is given to measures that save water and/or prevent pollution. The project will pilot the physical and institutional measures to save water and prevent pollution in three locations representing west, central and east Delta and ensure synergies of the investments of the ongoing projects (IIIMP, ISSIP, and NDP2).

The project has been selected as a priority project of the Mediterranean Environmental Sustainable Development Program, whose objective is to enhance and accelerate the implementation of transboundary pollution reduction, improved water resources management, and biodiversity conservation measures in priority hotspots and sensitive areas of selected countries of the Mediterranean basin that would help achieve the Strategic Action Plans (SAP MED and SAP BIO). The project will be catalytic in addressing trans-boundary water concerns as Egypt demonstrates the ability to reduce land-based coastal pollution, balance competing water uses in basins, and report subsequent water related improvements. The project components have been designed to be country-driven, cost-effective, and integrated into the NWRMP and poverty-reduction strategies for Egypt.

C. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH GEF STRATEGIES AND STRATEGIC PROGRAMS: The project will be carried under the umbrella of the proposed Mediterranean Environmental Sustainable Development Program (SUSTAINABLE MED), which represents a continuation and further expansion of the Investment Fund of the GEF/IWs Mediterranean Sea Large Marine Ecosystem Strategic Partnership (Mediterranean Strategic Partnership). Key objectives of the Investment Fund regarding pollution reduction and biodiversity conservation will be maintained. In addition, SUSTAINABLE MED will deepen the work on governance, capacity building, and technical assistance. The project components are addressing mainly SP3 (balancing overuse and conflicting uses of water resources in transboundary surface and groundwater basins) and SP2 (reducing nutrient over-enrichment and oxygen depletion from land-based pollution and of coastal waters in Large Marine Ecosystems consistent with the GPA).

D. JUSTIFY THE TYPE OF FINANCING SUPPORT PROVIDED WITH THE GEF RESOURCES. The proposed GEF grant will leverage the investment of US\$28 million of counterpart funding from the Government including its investments of the ongoing projects. The IWRM approach to be introduced in the pilot schemes will be replicated in the entire Nile Delta as well as Nile Valley in order to efficiently use water and improve quality of water in drains for further reuse downstream and to reduce pollution of northern lagoons and the Mediterranean Sea. The grant will also be used to

enhance capacity of waer sector institutions for IWRM in Egypt in order to make this intervention for IWRM sustainable.

E. OUTLINE THE COORDINATION WITH OTHER RELATED INITIATIVES: Project interventions will be mainstreamed with the Government initiative to implement IWRM and Bank support for this purpose. The ongoing Bank projects (e.g. IIIMP, ISSIP, and NDP2) will be used to co-finance component 1 of this project in addition to additional Government funding in order to improve water quality in the drains in the Nile Delta using low-cost innovative technologies based on the IWRM modality. The co-financing for components 2 will be from the National Water Resoruces Center (NWRC) in addition to Government funding. Government will also provide in-kind support for component 3 by appointing its staff to the PCU and providing necessary office space for the PCU. The GEF funding will play a catalytic role in mobilizing and focusing these funds on the project activities. The three ongoign projects are strongly linked to the proposed GEF project since its activities will enhance the sustainability of these three projects. The GEF project will take part in the regional discussion of the Sustainable MED as well as fully participate in IW:Learn for GEF water projects.

F. DISCUSS THE VALUE-ADDED OF GEF INVOLVEMENT IN THE PROJECT DEMONSTRATED THROUGH INCREMENTAL REASONING : The added-value of the proposed GEF involvement is alter the “business-as-usual scenario” by helping to catalyze a paradigm shift to approaches that change the economic and social dimensions of non-sustainable water resources use, degradation, and climate change. The increasing demand for water due to continuous population increase and possible reduction in water availability due to climate change induced hydrologic variability will threaten sustainability of ongoing/planned projects. Furthermore; the high pollution loads from the drains will continue to negatively impact on biodiversity in the northern lagoons and the Mediterranean Sea. Through an IWRM approach, the project will provide a strong mechanism for more operational linkages across the concerned implementing agencies. This approach is expected to strengthen the different stakeholders’ commitments to a common water resources and environmental management agenda and will lead to a number of important incremental outcomes including but not limited to: (i) short-term agricultural productivity gains in the pilot areas, which in turn is expected to lead to a demonstration effect that will result in an up-scaling of activities; such as continuous flow, controlled drainage, GIS based water management, and system of rice intensification (SRI); (ii) the reduced risk from climate change by improving IWRM through capacity building and improvement of surface and groundwater monitoring network; and (iii) pollution reduction and biodiversity conservation through investments in improving water quality in the drains in the Nile Delta including solid waste management and composting, in-stream wetlands, rural wastewater treatment, and drainage water reuse, which will accelerate the implementation of the SAP for trans-boundary pollution reduction and biodiversity conservation in coastal gulfs of Egypt. Such outcomes are unlikely to be realized without the grant funding provided by GEF, which is expected to catalyze additional support to the proposed programmatic approach.

G. INDICATE RISKS, INCLUDING CLIMATE CHANGE RISKS, THAT MIGHT PREVENT THE PROJECT OBJECTIVE(S) FROM BEING ACHIEVED AND OUTLINE RISK MANAGEMENT MEASURES:

No.	RISKS	MITIGATION
1	Unregulated reuse of treated wastewater and drainage water could lead to public health risks.	A preventative health program specifically targeted to farmers and water distributors will begin during preparation to mitigate the risk of infectious diseases that may be caught through the utilization of drainage water.
2	The hydrologic variability due to climate change could affect water availability and thus negatively impacting investments.	The interventions proposed by the project are adopting measures that increase water use efficiency (through continuous flow, controlled drainage, and SRI) and availability (through improvement of water quality) and increase resiliency to hydrologic variability (through improved monitoring network and accurate prediction of water scarcity using a computer-based decision support system).
3	Weak collaboration between different implementing agencies	While most of the sub-components will be implemented using existing PMUs, there is possibility of weak coordination among different PMUs. To avoid this, the project coordination unit has been established within the Plannign Secotr of the MWRI. In addition, it is expected that the project’s capacity building activities will attract the interest of the various agencies and provide incentives to collaborate each other during project implementation.

H. EXPLAIN HOW COST-EFFECTIVENESS IS REFLECTED IN THE PROJECT DESIGN: The project’s programmatic approach of linking ongoing national activities and setting a longer term vision to ensure sustainability is in line with the SUSTAINABLE MED Program and the GEF IW-SP3 strategic priorities and provides an excellent opportunity for their implementation. A strategic approach is a more cost-effective vehicle than a series of individual projects. The project will save substantial costs that would have been required to set up and run new activities involving water resource management interventions. Most of the activities will be implemented using existing PMUs, thus ensuring proper capacity of most of the implementation teams and most of the additional costs required for training new teams. Furthermore, being submitted under the Sustainable MED Program, the project will benefit from the catalytic role the partnership is intended to play in leveraging additional investments for reversing degradation caused by the impacts of pollution to the Mediterranean Sea and ensuring sustainable use of the scarce water resources. The choice of the proposed programmatic approach is a response to the need for integration between different implementing agencies for more efficient water management. By supporting on-going initiatives, there will be a reduction in transaction costs for the Government, the Bank, and GEF to implement activities as economies of scale will be harnessed and results and knowledge disseminated. Finally, the project will be implemented by a Project Coordination Unit (PCU) established within the MWRI, which has strong institutional and technical capacity, and long familiarity with the Bank’s procedures and requirements.

PART III: INSTITUTIONAL COORDINATION AND SUPPORT

A. INSTITUTIONAL ARRANGEMENT:

A project coordination unit (PCU) established under the Planning Sector (PS) of the Ministry of Water Resources and Irrigation (MWRI) will be responsible for implementation of the EWRMP and its various components. The PCU will be headed by a Project Director, and consist of an irrigation engineer, a procurement specialist, a monitoring and evaluation (M&E) specialist and an integrated water resources management (IWRM) specialist, a financial management (FM) team and supported by two local consultants (a social development specialist and a FM specialist).²

The Head of the PS will chair the Project Steering Committee (PSC) with participation of the representatives of Groundwater Sector (GWS) and Irrigation Improvement Sector (IIS) of the MWRI, National Water Resources Center (NWRC), High Aswan Dam Authority (HADA), Project Management Unit (PMU) of Integrated Irrigation Improvement and Management Project (IIIMP), Holding Company for Water and Wastewater (HCWW) for Integrated Sanitation and Sewerage Infrastructure Project (ISSIP) under Ministry of Housing, Utilities and Urban Development (MHUUD), Egyptian Public Authority for Drainage Projects (EPADP) for Second national Drainage Project (NDP2), Ministry of Agriculture and Land Reclamation (MALR), Egyptian Environmental Affairs Authority (EEAA) under State Ministry of Environment (SME), Ministry of International Cooperation (MIC), Ministry of Trade and Industry (MTI), and governorates of the three pilot schemes. The PCU will use the financial management system established by the IIIMP with a provision of the license fee. The PCU will be supported by Central Directorate for Irrigation Advisory Service (CDIAS) in community development activities under Component 1.

B. PROJECT IMPLEMENTATION ARRANGEMENT:

The EWRMP will provide necessary support for PCU activities in terms of per diem of the PCU staff, fuel to travel to the pilot sites, recruitment of local consultants, and required cost for stakeholders meetings. Activities to be carried out by the research institutes under Component 2 will be supervised by the National Water Resources Center (NWRC), which will report to the PCU.

The PCU will be responsible for ensuring effective project implementation coordination and specifically:

- (i) Monitoring and coordinating activities of the agencies responsible for implementation of the pilots schemes and research activities;
- (ii) Ensuring active participation of beneficiaries and WUAs, BCWUAs, IWMDs, DWBs, and local government agencies;
- (iii) Liaising with the other MWRI sectors, other Ministries concerned and donor agencies concerned;
- (iv) Procuring services and equipment in accordance with the World Bank’s procurement guidelines;
- (v) Preparing annual work plans and budgets;

² The local consultant (financial management specialist) will be trained by the experienced financial management staff of the IIIMP in the beginning of the project implementation.

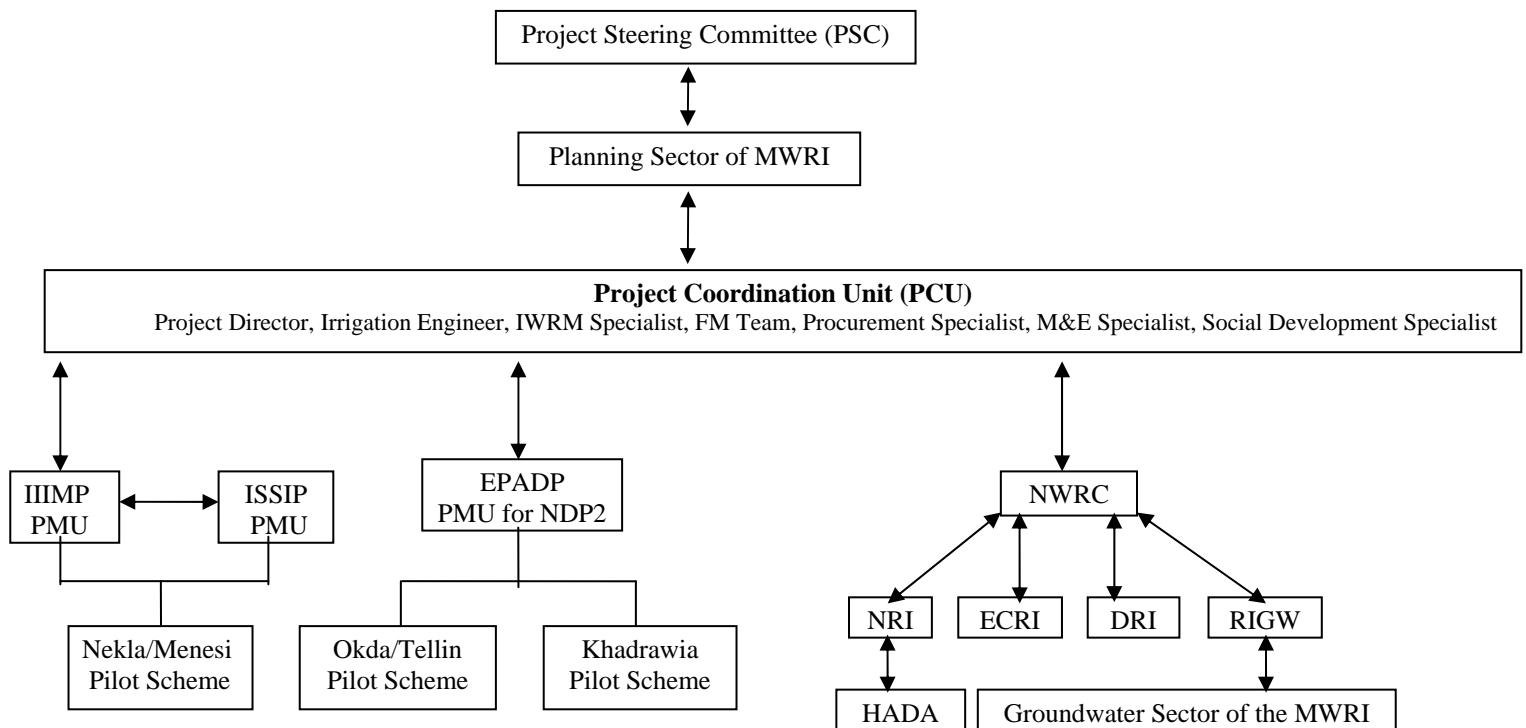
- (vi) Preparing semi-annual progress reports to the PSC and the Bank;
- (vii) Accounting for project expenditures, which are to be audited annually;
- (viii) Monitoring and evaluating project activities;
- (ix) Organizing the PSC meetings and reporting to the PSC on the progress of the EWRMP and any issues to be resolved by the PSC;
- (x) Disseminating innovative technology and successful water saving experience under the pilot schemes overseas; and
- (xi) Securing the committed co-financing to the EWRMP from the Government.

The PSC will be responsible for advising, overseeing, and monitoring the implementation of the EWRMP and resolve any inter-ministerial issues. The PSC will:

- (i) Be chaired by the Head of the Planning Sector of the MWRI;
- (ii) Joined by the representatives of HCWW, NWRC, HADA, GWS, EPADP, IIS, EEAA, MALR, MTI, and governorates of the 3 pilot areas;
- (iii) Monitoring and coordinating activities of the agencies responsible for implementation of the pilots schemes and research activities;
- (iv) Provide strategic coordination and monitor progress of the EWRMP;
- (v) Meet quarterly to provide strategic direction for the project implementation and assess the EWRMP's progress against planned outputs; and
- (vi) Ensure necessary inter-agency coordination by the participating agencies.

The relationship between the core agencies are schematized below.

Project Implementation Arrangements



Note: MWRI – Ministry of Water Resources and Irrigation; IIIMP – Integrated Irrigation Improvement and Management Project; PMU – Project Management Unit; ISSIP – Integrated Sanitation and Sewerage Infrastructure Project; EPADP – Egyptian Authority for Drainage Projects; NDP2 – Second National Drainage Project; NWRC – National Water Resources Center; NRI – Nile Research Institute; ECRI – Environmental and Climate Change Research Institute; DRI – Drainage Research Institute; RIGW – Research Institute for Groundwater; HADA – High Aswan Dam Authority

At the pilot scheme level, Branch Canal Water User Associations (BCWUAs), together with District Water Boards (DWBs) will have a leading role in the pilot activities for improving local SWM and other participation in the integrated management of water quality and quantity and, particularly in Nekla/Menesi scheme, implementing integrated irrigation and drainage management with appropriate cropping patterns. The EWRMP will provide support through training, study tours, public awareness campaigns, and facilitation of local efforts. Irrigation advisory service staff of the Integrated Water Management Districts (IWMDs) would have primary responsibility for supporting activities at the local level. They will receive guidance, training, and other support from the Water Resources Directorate level, the Central Directorate for Irrigation Advisory Service (CDIAS) and the relevant units in the associated projects, particularly IIIIMP institutional specialists, the Rural Services Unit if the ISSIP and the Environmental Management Unit (EMU) of the EPADP.

Capacity of WUA leaders as well as local government agencies and their staff will be developed, particularly in relation to implementing integrated water resources management (IWRM), participatory approaches to achieving regulatory compliance, understanding and applying laws and regulations, using formal and informal institutions for redress and problem-solving, and improving availability of water quality information in decision-making. The EWRMP will make use of specialized national and international expertise where necessary, through individual consultants, firms or other organizations. In particular, it appears that the EWRMP may work with the Food and Agriculture Organization (FAO) of the United Nations for technical assistance (TA) in relation to producing organic fertilizer, and also for demonstration of System of Rice Intensification (SRI) for rice irrigation and cultivation³ that can increase water productivity (reducing non-beneficial evapo-transpiration and non-recoverable losses to saline aquifers) and enable increased benefits and cropping patterns compatible with improved irrigation infrastructure and water distribution methods, particularly continuous flow and volumetric water distribution at the branch canal level.

BCWUAs will work together with local government units in developing the institutional arrangements for management of solid wastes. The particular form for these will be determined during the project implementation and may involve a combination of arrangements that can draw on the organizational capabilities of BCWUAs, legal powers of local units, and possibly using the legal structure of Community Development Associations (CDAs). These local efforts will be supported by the MWRI working together with agencies, including Governorates, Administrative Districts, Egyptian Environmental Affairs Authority (EEAA), Ministry of Local Development, Ministry of Housing and Urban Development, and the Holding Company for Water and Wastewater (HCWW), coordinated through the PSC.

Community participation in SWM could come either (i) through more decentralized SWM done directly by a community organization, such as the BCWUAs or a CDA, or (ii) through community cooperation with a more centralized and externally-managed enterprise, such as clustered SWM done similarly to the clustered wastewater treatment being developed by the HCWW under the ISSIP. Stakeholders in both Nekla/Menesi and Okda/Tellin pilot schemes expressed a willingness to move ahead on their own, if some support is available. In a later discussion, local leaders in Nekla/Menesi pilot scheme confirmed that they would be open to either option, as long as they would still have a major role in decisions and implementation.

The EWRMP will incorporate methods and necessary funding to apply a socially inclusive approach to (i) assessing problems, (ii) considering alternatives, (iii) preparing and agreeing on plans, and (iv) implementing improvements in irrigation, drainage and water pollution reduction by improving SWM. This will build on the current inclusion of women in BCWUAs as representatives of domestic water users, and provide specific training and support for their involvement.

PART IV: EXPLAIN THE ALIGNMENT OF PROJECT DESIGN WITH THE ORIGINAL PIF:

Components	Major Changes since PIF	Reasons for Adjustment
Component 1	(i) "Water quality monitoring networks strengthening and improved decision making for management of the Nile Delta drains" has been moved to Component 2. (ii) "Strengthened capacity and improved monitoring of Lake Nasser hydrology" has been moved to Component 2. (iii) "Reduce losses from spill flows of Lake	(i) Component 2 has been designed to address technical issues of IWRM with full support of the National Water Resources Center. (ii) The same with (i). (iii) The Government has already been carrying out its own study on this. (iv) The same with (i).

³ Introduction of System of Rice Intensification (SRI) will be considered as a means to reduce water consumption of rice.

	Nasser" has been removed. (iv) "Increased resilience to the hydrologic variability due to climate change" has been moved to Component 2. (v) "Pilot investment for irrigation using treated wastewater" has been removed. (vi) "Pilot testing of innovative IWRM means such as SRI, GIS based water management, continuous flow for irrigation, and controlled drainage" has been added. (vii) Investments of irrigation and drainage improvement by IIIMP are added. (viii) Investments of sewerage treatment systems in 5 villages by ISSIP are added. (ix) Investments of drainage improvement by NDP2 are added. (x) "Pilot testing of solid waste management in drains" has been added.	(v) The Government's priority is to improve water quality in the drains in the Delta since farmers are already reusing the water from the drains where treated waste water has been returned to in the Nile Delta. (vi) This has been added to improve IWRM at the field level to conserve water and improve water quality. (vii) This has been added as cofinanced activities for the EWRMP. (viii) The same as (vii). (ix) The same as (vii) (x) This has been added in response to strong demand of the stakeholders to improve water quality in the drains in the Nile Delta.
Component 2	(i) "Reduced pressure on groundwater through investments" has been removed. (ii) "Reduced pollution loads to open water bodies" is moved to Component 1.	(i) Since the West Delta Project has been cancelled, there is no ongoing project to support this activity. (ii) All pilot schemes under Component 1 will carry out this.
Component 3	(i) Result-based monitoring and evaluation is added.	(i) This has been added in line with the new Bank policy.

Although the project goal (reduction of pollution loads in the Nile Delta and the Mediterranean Sea) is the same with the original PIF, the project objectives and design have been improved after a series of stakeholder consultations during project preparation. Stakeholders particularly requested to focus on improvement of water quality in the drains in the Nile Delta in order to facilitate reuse of drainage water downstream, reduce contamination of the groundwater aquifers and improve environment in and around the drains. Therefore, the project has included solid waste management as well as water quality improvement measures (such as in-stream wet land) as the major activities of the pilot schemes. The project objectives have been modified to be measurable with clear monitoring indicators (7 major indicators supported by 17 intermediate indicators).

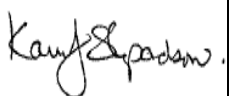
The project components 1 and 2 have been modified in line with the implementation arrangements which is based on "pilot schemes" to be implemented by the PMUs of IIIMP, ISSP, and NDP2 and "capacity building" programs to be implemented by the NWRC's institutions since the original project components 1 and 2 in the PIF were divided by the themes (surface water and groundwater), which was found difficult to implement on the ground during project preparation .

A new component 1 will focus on water quality improvement in the drains in the Nile Delta through IWRM in the three selected pilot areas (located in east, central, and west Delta) and demonstrate innovative water management technology such as system for rice intensification (SRI), GIS based water management, "continuous flow" irrigation, "controlled drainage" as well as solid waste management for cleaning drains in the Nile Delta.

A new component 2 will focus on the capacity building of water management institutes (NRI, ECRI, DRI, and RIGW) of the NWRC under the MWRI in IWRM in terms of quality and quantity of water resources in the Nile Valley and Delta.

As a result of the above modifications by reflecting the demand of stakeholders, the quality of the project proposal has been significantly improved to attain the project goal through enhancement of IWRM in the Nile Valley and Delta.

PART V: AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF policies and procedures and meets the GEF criteria for CEO Endorsement.					
Agency Coordinator, Agency name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
Karin Shepardson, The World Bank		03/16/2012	Song Li	202-473-3488	Sli@WorldBank.org

ANNEX A: PROJECT RESULTS FRAMEWORK

Global Environmental Objectives

PDO Statement

The project development objectives (PDOs) are to improve water management through piloting integrated water resources management (IWRM) in the Nile Delta and enhancing the knowledge and capacity of water sector institutions for IWRM in Egypt, contributing to pollution reduction in the Mediterranean Sea. These pilots will form the basis for scaling up investments through the Government's Integrated Water Resources Management Plan and contribute even more significantly to depollution and improved ecosystem health of the Mediterranean Sea and its biodiversity resources. Specifically, the project will promote the IWRM principles and practices through (i) awareness-raising, institutional and capacity strengthening, and demonstration activities implemented in the selected pilot schemes in the Nile Delta to improve the coordination among water project management units (PMUs), Government agencies, local authorities and water user associations (WUAs); and (ii) technical assistance (TA) on targeted studies, capacity building training, and provision of equipment to strengthen the capacity and knowledge of the national institutions in water sector and to improve the national water resources monitoring networks.

The global objective of this project is to establish the basis for scaling up investments through the GOE's IWRM plan and contribute more significantly to pollution control and improved ecosystem health of the Mediterranean Sea and its biodiversity resources. It is expected that the successful operationalization of the IWRM approach and principles in pilot schemes will demonstrate the benefits of synergy of the ongoing investment projects (IIIMP, NDP2, and ISSIP) and will be replicated in the Nile Delta, which will result in increased water use efficiency and availability for reuse, and improved water quality and livelihood of the poor; which would eventually have a great impact on reducing the pollution load flowing into the Mediterranean Sea (the objective of Sustainable MED).

Indicator Name	Core	Unit of Measure	Baseline	Cumulative Target Values					Frequency	Data Source/ Methodology	Responsibility for Data Collection
				YR1	YR2	YR3	YR4	End Target			
Increased IWRM awareness and effective roles of local WUAs, Farmers and stakeholders	<input type="checkbox"/>	Number	0.00	33.00	73.00	97.00	97.00	97.00	Semi-annual progress reports and Annual M&E report	data in project MES system with field survey and analysis	Legal/institutional procedures and regulations related to protection of GW quality
Increased monitoring stations and water samplings	<input type="checkbox"/>	Number	358.00	365.00	399.00	404.00	404.00	404.00	Semi-Annual progress reports and Annual M&E report	Data in project MES system with field survey and analysis	PS/MWRI/NWRC/DRI/RIGW
Demonstration activities developed and implemented in the pilot areas	<input type="checkbox"/>	feddan	0	31290	61050	93200	93200	93,200	Semi-annual progress reports and Annual M&E report	Data in project MES system with field survey and analysis	PS/MWRI/IIIMP/EPADP
Government documents issued for IWRM policies/procedures/implementation	<input type="checkbox"/>	Number	0.00					8.00	Semi-annual progress reports and Annual M&E report	Data in project MES system with field survey and analysis	PS/MWRI/IIIMP/WUA/ISSIP/EPADP
Increased percentage of reliability of water supply	<input type="checkbox"/>	Percentage	55.00					85.00	Semi-annual progress reports and Annual M&E report	Data in project MES system with field survey and analysis	PS/MWRI/IIIMP/WUA/EPADP

Water saving Volume used per feddan	<input type="checkbox"/>	M ³ /feddan /year	11,000					9,500	Semi-annual progress reports and Annual M&E report	Data in project MES system with field survey and analysis	PS/MWRI/IIIMP/ WUA/ISSIP/ EPADP
Technical and institutional capacity building training	<input type="checkbox"/>	persons/ days	3					3,167/3,269	Semi-annual progress reports and Annual M&E report	Data in project MES system with field survey and analysis	PS/MWRI/IIIMP/ WUA/ISSIP/ EPADP/NWRC/ DRI/NIGW/ECRI/ NRI

Intermediate Results Indicators

Indicator Name	Core	Unit of Measure	Baseline	Cumulative Target Values					Frequency	Data Source/ Methodology	Responsibility for Data Collection	
				YR1	YR2	YR3	YR4	End Target				
Branch Canal Improvement by IIIMP	<input type="checkbox"/>	feddan	0	5000	11000	11000	11000	11000	Semi-annual progress reports and Annual M&E report	Data in project MES system with field survey and analysis	PS/MWRI/IIIMP/ WUA	
Tertiary Canal Improvement by IIIMP	<input type="checkbox"/>	feddan	0	4000	7000	7000	7000	7000	Semi-annual progress reports and Annual M&E report	Data in project MES system with field survey and analysis	PS/MWRI/IIIMP/ WUA	
Drainage Improvement by IIIMP and NDP2	<input type="checkbox"/>	feddan	0	24000	46500	67500	67500	67500	Semi-annual progress reports and Annual M&E report	Data in project MES system with field survey and analysis	PS/MWRI/IIIMP/ EPADP/WUA	
Connections of waste water pipes by ISSIP	<input type="checkbox"/>	household	0	0	2100	2100	2100	2100	Semi-annual progress reports and Annual M&E report	Data in project MES system with field survey and analysis	PS/IIIMP/ISSIP	
Volumetric water supply measured in no. of branch and mesqa canal	<input type="checkbox"/>	Number	0.00	60.00	180.00	256.00	256.00	256.00	Semi-annual progress reports and Annual M&E report	Data in project MES system with field survey and analysis	PS/IIIMP/WUA/ EPADP	
Formulation of groundwater development strategy and action plan completed and submitted to MWRI	<input type="checkbox"/>	Text	No.						Yes.	Groundwater modelling study report, and annual M&E and technical progress report.	Field survey water, measurement surface and groundwater assessment geo-statistics assessment and stakeholder and policy consultation	PS/RIGW/GWS
Establishment of climate change information database	<input type="checkbox"/>	Text	No.						Yes.	Annual M&E and progress report and CC technical report	Data in project MES database with field survey and analysis results	PS/NWRC/ECRI
Surface water quality monitoring report	<input type="checkbox"/>	Number	0.00						3.00	Annual M&E and progress report, and	Field survey, water measurement, salinity measurement, GW	GWS/RIGW/PS

									specific surface and groundwater monitoring study report.	quality monitoring results, geo-statistics assessment, and stakeholder and policy consultation.	
SRI adopted area	<input type="checkbox"/>	feddan	0	40	300	500	500	500	Semi-annual progress reports and Annual M&E report	Data in project MES system with field survey and analysis	PS/IIIMP/WUA/EPADP
Solid waste management (collected volume)	<input type="checkbox"/>	ton	0	0	1800	2500	5,000	5,000	Semi-annual progress reports and Annual M&E report	Data in project MES system with field survey and analysis	PS/IIIMP/ISSIP/EPADP/BCWUAs
Dissolved Oxygen DO	<input type="checkbox"/>	1mg/litter	1.0					4.0	Semi-annual progress reports and Annual M&E report	Data in project MES system with field survey and analysis	PS/MWRI/IIIMP/EPADP/ISSIP
BOD	<input type="checkbox"/>	mg/letter	216					30	Semi-annual progress reports and Annual M&E report	Data in project MES system with field	PS/WUA/NDP2
The water saved by the application of evaporation losses reduction methods	<input type="checkbox"/>	Number	0.00					1.00	Data in project MES database with field survey and analysis results.	Annual M&E report and technical progress report.	PS/MWRC/NRI
Consultation/coordination/dissemination workshops conducted by PCU in the field and international conference.	<input type="checkbox"/>	Number	0.00					4.00	Data in project MES system with field survey and analysis	Annual M&E report and technical progress report.	PS/MWRI/
Increased new real time monitoring stations	<input type="checkbox"/>	Number	7.00	7.00	12.00	12.00		12.00	Annual M&E and progress report, and specific surface and groundwater monitoring study report.	Field survey, water measurement, salinity measurement, GW quality monitoring results, geo-statistics assessment, and stakeholder and policy consultation	GWS/RIGW/PS
Increased sampling parameters for groundwater quality monitoring	<input type="checkbox"/>	Number	3500.00	3600.00	4100.00	4100.00		4100.00	Annual M&E and progress report, and specific surface and groundwater monitoring study report.	Field survey, water measurement, salinity measurement, GW quality monitoring results, geo-statistics assessment, and stakeholder and policy consultation.	GWS/RIGW/PS
Number of government documents issued for IWRM policies, procedures, measures and	<input type="checkbox"/>	Number	0.00	5.00	8.00	8.00		8.00	Annual M&E and Semi-annual progress report.	M&E database and field survey and analysis.	Planning Sector of MWRI.

activities through policy briefs, government reports, implementation/replication plans.											
Stakeholder analysis and policy formulation completed	<input type="checkbox"/>	Text	No.					Yes.	Annual M&E and Semi-annual progress report.	M&E database and field survey and analysis.	PS/EPADP/MWRI
Sustainable water resources management study report completed and submitted	<input type="checkbox"/>	Text	No.					Yes.	Semi-annual progress reports and Annual M&E report.	Data in project MES system.	PS/MWRI/NWRC/DRI
M&E system and database established and implemented effectively in the project areas.	<input type="checkbox"/>	Text	No.					Yes.	Semi-annual progress reports and Annual M&E report.	Data in project MES system.	PS/MWRI
Legal/institutional procedures and regulations related to protection of GW quality established	<input type="checkbox"/>	Text	No.					Yes.	Semi-annual progress reports and Annual M&E report.	Data in project MES system.	PS/MWRI/NWRC/RIGW/GWS

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF)

THE COUNCIL SUPPORTED THIS PROJECT WITHOUT A NEED FOR FURTHER COMMENTS ON JUNE 24, 2009.

THE FOLLOWING ARE THE RESPONSES TO COMMENTS OF STAP HELD ON MAY 22, 2009:

(I) MORE DETAILED INFORMATION ON “HOW CLIMATE CHANGE RISK IS TO BE SPECIFICALLY ADDRESSED UNDER THIS PROJECT” HAS BEEN PROVIDED IN “CLIMATE CHANGE IMPACT ASSESSMENT STUDY IN WATER AND AGRICULTURE IN THE NILE DELTA” UNDER COMPONENT 2.

(II) IN LINE WITH THE RECOMMENDATION OF THE STAP, THE PROJECT HAS BEEN DESIGNED PAYING ATTENTION TO THE POLICY AND OUTREACH LINKAGES LEADING TO EFFECTIVE UPTAKE AND IMPLEMENTATION OF THE RESULTS OF THE ASSESSMENT STUDIES (COMPONENT 2), DEMONSTRATION (PILOT) SCHEMES (COMPONENT 1), AND REGIONAL TECHNICAL WORKSHOPS (COMPONENT 3).

(III) TTL OF THIS PROEJCT IS A MEMBER OF THE GEF COFUNDED NILE BASIN INITIATIVE (NBI) AND THE EASTERN NILE WB PROJECT. ALL THE INFORMATION OF THIS PROEJCT HAS BEEN PROVIDED TO THE NBI TEAM TO AVOID ANY OVERLAPPING ACTIVITIES AND TO MAXIMIZE SYNERGY OF INTERVENTIONS IN EGYPT.

ANNEX C: CONSULTANTS TO BE HIRED FOR THE PROJECT USING GEF RESOURCES

<i>Position Titles</i>	<i>\$/ person week*</i>	<i>Estimated person weeks**</i>	<i>Tasks to be performed</i>
For Project Management			
Local			
Financial Management Specialist	500	144	Carry out financial management of the project.
Social Development Specialist	625	144	Carry out community and WUA mobilization in 3 pilot schemes.
Monitoring and Evaluation Specialist	1,250	12	Carry out monitoring and evaluation of the project activities.
Justification for Travel, if any: Local trips from Cairo to pilot sites.			
For Technical Assistance			
Local			
Continuous Flow Specialist	1,250	72	Establish irrigation procedures under a continuous flow regime to save water.
Controlled Drainage Specialist	1,250	40	Establish controlled drainage procedures for rice cultivation to save water.
SRI Specialist	1,250	72	Introduce system for rice intensification (SRI) in Nekla/Menesi pilot scheme.
GIS Specialist	1,250	84	Introduce GIS for IWRM at the Branch WUA level in Nekla/menesi pilot scheme.
Composting Specialist	625	72	Introduce composting technique to reuse the solid waste for agriculture Nekla/Menesi pilot scheme.
Social Development Specialist	500	72	Organize BWUAs to participate in the project activities in Nekla/Menesi pilot scheme.
Laboratory Analyst	1,250	20	Carry out water quality analysis to monitor the project impacts in Nekla/Menesi pilot scheme.
Environmental Specialist	750	36	Carry out environmental impact assessment and environmental monitoring and provide technical advice on mitigation measures in Okda/Tellin pilot scheme.
Social Development Specialist	500	8	Carry out social assessment as part of the EIA for Okda/Tellin pilot scheme.
Public Awareness Specialist	500	8	Carry out awareness campaign in Okda/Tellin pilot scheme.
Regulation Compliance Specialist	1,200	75	Carry out training for compliance and enforcement of regulations in Khadrawia pilot scheme.
Composting Specialist	625	72	Introduce composting technique to reuse the solid waste for agriculture in Okda/Tellin pilot scheme.
Social Development Specialist	500	72	Organize BWUAs to participate in the project activities in Okda/Tellin pilot scheme.
Social Scientist	1,250	16	Carry out stakeholders analysis in Khadrawia pilot scheme.

Laboratory Analyst	500	8	Carry out water quality analysis to monitor the project impacts in Khadrawia pilot scheme.
Environmental Specialist	750	32	Carry out environmental impact assessment and environmental monitoring and provide technical advice on mitigation measures in Khadrawia pilot scheme.
Social Development Specialist	500	18	Carry out social assessment as part of the EIA for Khadrawia pilot scheme.
Public Awareness Specialist	500	22	Carry out awareness campaign in Khadrawia pilot scheme.
Data Analyst	1,500	4	Collect and analyze hydrological data of Lake Nasser.
Hydrological Simulation Model Specialist	1,000	1	Carry out a hydrological simulation modeling training using new data collected.
Remote Sensing Specialist	1,000	2	Carry out remote sensing data application training for management of Lake Nasser.
Environmental/Social Specialist	1,000	4	Carry out an environmental and social impact analysis in Lake Nasser
Computer Model Training Specialist	1,000	7	Carry out training of SIWARE (computer simulation model).
International			
IWRM Legal Specialist	3,000	24	Study and advice on the issues relating to IWRM in the pilot schemes.
SRI Specialist	3,000	10	Carry out SRI training and demonstration in Nekla/Menesi pilot scheme.
Solid Waste Management Specialist	3,000	24	Carry out training for SWM in both Nekla/ Menesi and Okda/Tellin pilot schemes.
Composting Specialist	3,000	48	Carry out training for composting in both Nekla/ Menesi and Okda/Tellin pilot schemes.
Environmental Economist	3,000	8	Carry out cost benefit analysis of mitigation options in Khadrawia pilot scheme.
Surface Water Modeling Specialist	3,000	3	Carry out training of surface water modeling.
GIS Specialist	3,000	1	Carry out GIS training.
Groundwater Modeling Specialist	3,000	3	Carry out training for groundwater modeling.
Groundwater Quality Monitoring Specialist	3,000	2	Assessment of the GW quality monitoring network
Geo-statistical Specialist	3,000	2	Geo-statistical Assessment of GW quality
Justification for Travel, if any: Field visits for data collection from Cairo to pilot schemes in the Nile Delta.			
Justification for Office facilities, equipment, vehicles and communications: Consumables and utilities for project coordination unit office (office will be provided by the Government) and petrol for cars (cars will be provided by the Government) to visit pilot schemes.			

* Provide dollar rate per person week. ** Total person weeks needed to carry out the tasks.

ANNEX D: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS

A. EXPLAIN IF THE PPG OBJECTIVE HAS BEEN ACHIEVED THROUGH THE PPG ACTIVITIES UNDERTAKEN.

B. DESCRIBE FINDINGS THAT MIGHT AFFECT THE PROJECT DESIGN OR ANY CONCERNS ON PROJECT IMPLEMENTATION, IF ANY:

C. PROVIDE DETAILED FUNDING AMOUNT OF THE PPG ACTIVITIES AND THEIR IMPLEMENTATION STATUS IN THE TABLE BELOW:

<i>Project Preparation Activities Approved</i>	<i>Implementation Status</i>	<i>GEF Amount (\$)</i>				<i>Co-financing (\$)</i>
		<i>Amount Approved</i>	<i>Amount Spent To date</i>	<i>Amount Committed</i>	<i>Uncommitted Amount*</i>	
	(Select)					
	(Select)					
	(Select)					
	(Select)					
	(Select)					
	(Select)					
	(Select)					
Total						

* Any uncommitted amounts should be returned to the GEF Trust Fund. This is not a physical transfer of money, but achieved through reporting and netting out from disbursement request to Trustee. Please indicate expected date of refund transaction to Trustee.

ANNEX E: CALENDAR OF EXPECTED REFLOWS

Provide a calendar of expected reflows to the GEF Trust Fund or to your Agency (and/or revolving fund that will be set up)