



**IRFFI/UNDG IRAQ TRUST FUND (UNDG ITF)  
ANNUAL PROGRAMME NARRATIVE PROGRESS REPORT  
REPORTING PERIOD: 01 JANUARY – 31 DECEMBER 2010**

***Submitted by:***

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***Country and Thematic Area:***

Iraq  
Old Cluster: (AFSSOT)  
Agriculture, Food Security, Environment and  
Natural Resources Management  
New Sector: Agriculture and Food Security

***Programme No:*** A5-26

***Programme Title:*** Improvement of Water Supply  
and Irrigation Provisions through the Rehabilitation  
of Abu Sabkha Pumping Station

***Participating Organization(s):***

FAO – Food and Agriculture Organization of the  
United Nations

***Implementing Partners:***

- Ministry of Water Resources (MoWR)

***Programme Budget (from the Fund):***

**UNDG** fund US\$ 3,004,979

Plus

**MoWR** fund (in kind) US\$ 1,000,000

***Programme Duration (in months):*** 18 months

**Start date:** 09/12/2008

**Original End date:** 30/07/2010

**Revised End Date:** 30/04/2011

1<sup>st</sup> Extension: 30 Apr 2011

## **I. PURPOSE**

### Outcomes:

1. Damaged pump station infrastructure rehabilitated/old equipment replaced.
2. 36,550 donums of agricultural land brought back into production with 8,000 families benefitting.
3. Technical capacity of MoWR staff greatly enhanced including technology transfer.
4. Water Users' Associations (WUA) establishment feasibility study completed.

### Outputs:

- 1.1 A detailed assessment of Abu Sabkha pumping station completed and technical requirements determined.
- 1.2 Tender for equipment procurement approved and contract award for manufacturing and supply of mechanical and electrical equipment.
- 1.3 Factory inspection of equipment undertaken.
- 1.4 Equipment delivery and installation in place completed with staff training accomplished, in preparation to restore Abu Sabkha pumping station to operate within efficiency norms which relates to capacity requirements for 4 spiral pumps each with a capacity of 1.47 m<sup>3</sup>/sec.
  
- 2.1 Supply of water re-established to the irrigation command area.
  
- 3.1 MoWR staff trained by the supplier on operation and maintenance of the pumping station equipment.
- 3.2 MoWR staff capacity building on technical specifications and procurement procedures enhanced.
  
- 4.1 Tasks and TOR for WUA laid down.
- 4.2 Budget Feasibility study completed.
- 4.3 Security Feasibility study completed.

### **- Joint UN Assistance Strategy for Iraq**

The project addresses the following issues in the Joint UN Assistance Strategy for Iraq:

- Improved utilization of the water for increased production and improved productivity.
- Increased crop and livestock production.
- Short and long term employment opportunities created through the infrastructure rehabilitation component.
- Rural technical institutions strengthened.
- Local communities play an active role in the identification of plans for rehabilitation of economic and productive rural infrastructure.
- Capacity building at both rural and local levels.

- **The MDG's**

The MDGI "Eradication extreme hunger and poverty (the proportion of people who suffer from hunger halved between 1990 and 2015)" will be addressed by increasing the cropping area and yield within the irrigation schemes which will be supplied with water under the project.

- **International Compact with Iraq (ICI) bench marks/indicators**

Section 4.6 Agriculture and Water Management Strategy:

Goals: 4.6 to support the development of the agriculture sector to achieve food security, generate employment, diversify the economy and preserve the countryside. Create an enabling environment for a market oriented agriculture sector.

- **Benchmark #3**

Undertake specific measures to develop an integrated land and water development policy:

- Over 2008-2010, produce Regional Land and Water Usage Plans indicating options for increasing efficiency of water use in agriculture and closing the demand-supply gap.

- **Benchmark #4**

Improve institutional and regularity underpinnings of public agriculture:

- Over 2008-2010, strengthen the technical and management capacities of agricultural organizations.

- **Benchmark #5**

Carry out investment plans:

- By 2008-2010, develop financing plans and mechanisms including public and private resources.
- Rehabilitate damaged physical infrastructures.
- Improve delivery of public agricultural services.

## **II. RESOURCES**

### **Financial Resources**

*Provide information on other funding resources available to this project:*

The implementing partner, MoWR, have committed USD 1 million for the installation, testing and commissioning of the pumping station, plus provision of operator training.

*Good practices and constraints in the mechanics of the financial process, times to get transfers, identification of potential bottlenecks, need for better coordination, etc.*

The project commenced 9<sup>th</sup> December 2008 with a first tranche payment of USD 365,437, and the balance of the project funds, USD 2,648,542 was not received until 22 October 2009. This late payment of the second tranche of the project funds (88% of project funds) hindered FAO's ability to commit to purchase orders for the PS equipment until 10 months into the project start.

## **Human Resources**

**National Staff:** One National Project Coordinator. Other management and administrative staff are co-shared with other UNDG ITF projects.

**International staff:** One Project Manager on a part time is co-shared with other water resources projects; while other management and administrative staff are co-shared with other UNDG ITF projects.

### **III. IMPLEMENTATION & MONITORING ARRANGEMENTS**

The project is being implemented by FAO in close collaboration with the MoWR. Ad hoc meetings with the representative of the MoWR were conducted on as need basis to solve problems, discuss important issues such as specifications of equipments... etc. Project Steering Committee has been set up and the MoWR chair person has been nominated. The committee is composed of Ministry representative, Directorate of Operation and Maintenance of Irrigation Projects/ MoWR, FAO Program Manager, FAO OIC Baghdad, and the National Project Coordinator (NPC).

In terms of management arrangements, the following is in place:

1. FAO has technically assessed the pumping station requirements and arranged for procurement of the needed equipment.
2. Prior to delivery of equipment at site, FAO will arrange the LoE from the custom authorities and follow the delivery of the equipment and unloading at the site.
3. FAO will arrange for the final handover to the MoWR.
4. MoWR will arrange and supervise the installation of delivered equipment.
5. The supplier will conduct training activities at his manufacturing facilities for selected MoWR site engineers.

FAO has recruited, on full time basis, all needed project staff, that includes the NPC (National Project Coordinator in Iraq) and the FAO International Program Manager, both of whom are experienced engineers who coordinated the previous pumping station rehabilitations for FAO under project No UNDG/IRQ/403. The International Program Manager in coordination with the NPC will: (i) prepare work plans and monitor their implementation; (ii) identify potential partners; (iii) prepare technical specifications for goods and items to be procured, and; (iv) fully cooperate with the MoWR so as to ensure integration of the project within MoWR programmes. The NPC in coordination with the farming community will ensure that representatives from project beneficiaries are informed and consulted on all project matters having a direct impact on their livelihood as agreed upon with the MoWR representatives. Generally as a principle, international project staff is based in Amman while national project staff are located in Iraq. FAO is looking into the possibility of movement of international staff to Baghdad dependent on the security situation.

As FAO's previous programmes in water resources development and irrigation in Iraq have allowed local technical staff to update their technical know-how and to obtain considerable experience in project execution, the implementation of the present project will, as much as possible, be delegated to locally contracted technical staff.

FAO will have the overall responsibility for the implementation of the project and the appropriate use of funds provided by the Donor. The Special Emergency Programme Services (TCES) in FAO/Rome will provide the operational backstopping of the project and shall coordinate on technical matters needed for the project with AGST division at FAO/Rome.

In consultation with MoWR, FAO will determine all decisions regarding project activities, recruitment of staff, agreements with suppliers and contractors, will provide technical assistance to the Steering Committee, supervise the project and ensure smooth liaison with the donor. This also includes project Monitoring and Evaluation (M&E) and scheduled reporting. There will be regular co-ordination meetings with MoWR, TCES, NPC and the International Program Manager to discuss the project implementation and solve any problems that might arise.

***The procurement procedures utilized:***

FAO standard procurement procedures will apply. In August 2004, FAO in a written agreement with its key counterpart ministries opted for strong involvement of the ministries in the procurement process. This involvement includes the following elements which are being applied to date:

- Identification of inputs or services required undertaken jointly by FAO and the relevant Iraqi line ministry;
- Preparation of detailed specifications, BoQ, drawings, delivery time and destination under taken by FAO and the Iraqi line Ministry and endorsed by the latter;
- List of local potential suppliers/contractors provided and endorsed by the Iraqi line ministry to be included by FAO in its invitations to bid;
- Tenders launched by FAO inviting local and international potential suppliers;
- Technical review of the offers received and preparation of recommendation carried out jointly by FAO/Iraqi line ministry and endorsed by the latter; and
- Purchase Orders or Contracts issued by FAO.

***The monitoring system:***

In line with FAO policies and procedures, monitoring will be done at all crucial stages of implementation of the project based on measurable indicators and means of verification identified in the project document logical framework. Periodic project progress reports, at least once every six months as well as on annual basis, will be sent to FAO Rome and the Government by the project management. These reports will be transmitted to the Sector as required. The progress reports will assess in a concise manner, the extent to which the Project's scheduled activities have been carried out, its outputs produced, the progress towards achievement of the Immediate Objectives and related Development Objectives.

More specifically the monitoring by FAO will include:

1. Initial feasibility study that includes the baseline collection of the current cropping area and practices, plus pumping station survey.
2. Detail the Bills of Quantity based on the technical survey to determine equipment requirements.

3. Monitoring of the on-going project activities will be through the compilation of weekly reports by the Resident Engineer (RE) and the Contractor which will include photographic evidence.
4. After the pumping station has been rehabilitated, the evaluation will include the updating of the baseline data to accurately determine the impact of the project on the farming community, with the number of beneficiaries from irrigation water delivery identified.
5. As needed, meetings of the Project Steering /Technical Committee to review the overall progress of the project.

Reporting will be done as per the set standard requirements detailed below:

- a) Annual narrative progress reports, to be provided no later than one month after the end of the applicable reporting period;
- b) Semi-annual financial reports as of 30 June and 31 December each year with respect to the funds disbursed to it from the UNDG ITF Account, will be provided no later than four months after the end of the applicable reporting period;
- (c) A final narrative report and a financial report, after the completion of the Project and including the final year of the Project, will be provided no later than 30 April of the year following the financial closing of the Project;
- (d) A final certified financial statement will be provided no later than 30 June of the year following the financial closing of the Project.

Further to the above, FAO Iraq Office is hiring a CTA/Project Manager for the project to work on full time basis. He will be assisted by the FAO OIC Baghdad, National Project Coordinator and other national staff during the implementation of the project. The FAO staff in Iraq will be monitoring daily activities/ problems, while the CTA/Project Manager is involved in solving issues of technical, administrative and financial nature.

***Assessments, evaluations or studies undertaken:***

This project is considered as a continuation of the project “Improvement of Water Supply and Drainage Provisions through the Rehabilitation of Pumping Stations”, C5 – 02 (USD 25,158,544 million), under which eight pumping stations were completely or partially rehabilitated during 2004 -2008 to restore them back to full capacity. FAO together with the MoWR gained valuable experience during the course of the implementation of this project in terms of identifying the needs, design criteria, installation, operation and maintenance of pumping stations.

Further experience was also gained by FAO through the execution of another project (OSRO/IRQ/404/UDG) “Rehabilitation of Community Irrigation” in Babylon Governorate. In this project for Drain 22 and the surrounding irrigation project in Mussaiab, the pumping station was completely replaced, including all the civil construction works of the pump house and intake/base structure undertaken, in addition to the installation of the pumps and electrical motors, testing and final commissioning.

FAO also gained extensive experience in Iraq in assisting the water resources sector during the period of economic sanctions, under the “Oil for Food Programme” (UNSCR 986). Out of the total pumping stations existing in Iraq, approximately 181 pumping stations under the control of the MoWR, were served in a customized menu driven database programme.

1. A detailed survey of actions required for the rehabilitation of the approximately 125 pumping stations earmarked as priorities on the basis of their importance for the supply of water for human consumption, as well as for irrigation to strategically important agricultural areas.
2. Rehabilitation of pumping stations earmarked as priorities, through the local or international procurement of mechanical and electrical equipment and spare parts and their installation.
3. MoWR technical staffs, including governorate staff in charge of pumping stations, were trained in condition assessment and repair of pumping stations, and technical and administrative staff trained on contractual matters for major international procurement/service contracts.
4. Training of senior engineers and administrative staff.
5. Key technical staff trained on GIS-linked database-management.

FAO can effectively utilize its experience not only in rehabilitating the selected irrigation infrastructure but also, applying lessons from previous assistance, by building beneficiary-user and institutional capacity for sustaining the maintenance of rehabilitated infrastructure and efficient utilization of water resources. This could be achieved through user training and formation of Water User Associations (WUA) and by the use of trained trainers that have undergone WUA training overseas.

#### **IV. RESULTS**

##### ***Programme progress in relation to planned outcomes and outputs;***

There was no significant variance in relation to planned outcomes and outputs during the reporting period. However, there was a delay of about 9 months in the implementation because of the various parties involved in clearing the specifications of the pumps. This delay did not impact the outcomes and outputs of the project.

##### ***The key outputs achieved in the reporting period including # and nature of the activities (inputs), % of completion and beneficiaries:***

As the project's first two outcomes listed below are dependent on the successful rehabilitation of the Abu Sabkha pumping station and its restoration to full capacity, and as the project have another 4 months of operation, then the first two outcomes below will not be realized until the completion of the project. At the time of completion, FAO will conduct a full assessment and impact study, and during the next few months will address all capacity development issues as in the last two outcomes listed below:

1. Damaged pump station infrastructure rehabilitated/replaced (30%).
2. 36,550 donums of land brought back into production with assistance to 8,000 farming families (0%).
3. Technical capacity of MoWR staff enhanced including technology transfer (50%).
4. Water Users' Associations (WUA) establishment feasibility study completed (10%).

The programme progress during the reporting period is as follows:

1.1 Procurement activities for the PS mechanical and electrical equipment (100%).

- The bid results for the PS mechanical and electrical equipment was received (100%).
- The bids were reviewed by MoWR and the independent AGST evaluation team (100%).
- Comments and clarification requests were received from both teams and sent to the supplier (100%).
- Clarifications were received from the supplier (100%).
- Both the MoWR and the independent AGST evaluation team issued their technical clearances (100%).

1.2 Procurement actions for the 1000 KVA generator (100%).

- Technical clearance of the 1000KVA generator specifications (100%).
- Tender issued (100%).
- AGST clearance of tender bids (100%).
- MoWR clearance of tender bids (100%).
- Purchase order issued (100%).
- 1000KVA generator received at site (100%).

The other project outputs listed for the project concerning the inspections, installation and capacity building are dependent on the arrival at site of the mechanical and electrical pumping equipment and will be undertaken in the next phase of the project and reported on in the subsequent 6 monthly period reports.

***Delays in programme implementation, the nature of the constraints, actions taken to mitigate future delays and lessons learned in the process:***

The project implementation faced some delay due to delay in transferring the committed funds (approximately 9 months) on one part, and delays resulting from obtaining approval of the three related parties on the specifications of the equipments namely MoWR, CC an independent consultant and FAO.

***The key partnerships and collaborations, and explain how such relationships impact on the achievement of results:***

For this project FAO cooperated closely with the Iraqi Ministry of Water Resource (MoWR). The MoWR's initial role was to select the project sites for rehabilitation and provide, where possible, the basic survey reports and technical dossiers for the works to be done. Later on, in collaboration with the MoWR, FAO ensured timely recruitment of project personnel including the Project National Coordinator (NPC) to coordinate project activities from Baghdad in collaboration with the MoWR counterparts.

Furthermore, the GoI, through its line ministries in the concerned governorate, has been fully involved in FAO's procurement process, and will be responsible for the supervision of the installation of the mechanical and electrical equipment at the pumping station; hence, the responsibilities of the project implementation are thus co-shared with the MoWR.

As explained elsewhere in this document, the other international partner involved in this project is the original manufacturing company (OEM) from whom the equipment will be ordered and who will also contribute to the project by providing important technical trainings for the MoWR staff engineers and operators.

***Other highlights and cross-cutting issues pertinent to the results being reported on:***

- Security

As with previous pumping station rehabilitation works that FAO has undertaken, full insurance to FAO standards up to the point of delivery and handover is the responsibility of the supplier, and is fully researched by FAO. Site security is the responsibility of GOI and to date they have been very effective with no serious incidents.

- Gender equality

Women will receive irrigation infrastructure rehabilitation upon completion of the project while transforming traditional farmer organizations into Water User Associations. Women's participation will be ensured and women will be encouraged to be active members of the management team.

- Human rights,

The project will ensure water security to all people within the irrigation project area. FAO does not discriminate within the beneficiary group as all will be addressed equally. This project is an infrastructure development project, and it addresses agriculture services.

- Employment generation

Short term job opportunities will be created through employing the unskilled and skilled labour in irrigation infrastructure rehabilitation, and the increased delivery of water will lead to the cultivation of abandoned lands resulting in the creation of long term employment job opportunities in the rural sector, improving their income and livelihood. Regular access to water may also encourage schools and medical facilities to be established in the area.

- Key environmental issues

In addition to other benefits expected by the rural labourers and working farmers, the project will improve the environment by enabling the recuperation of abandoned lands due to water logging and salinity. The emphasis will be given to improving the efficiency of water use to help avoid problems of salinity and water logging associated with excessive water use and inadequate provision for drainage. Provision of water to the irrigation area by rehabilitating the pumping station will help combat desertification and minimize the dust storms that occur almost daily due to the drought. The motors of the pumping station are electrical, therefore no fuel or lubricants are used, and noise is limited.

## **V. FUTURE WORK PLAN**

*The projected activities and expenditures for the following reporting period (01 January-31 December 2010), using the lessons learned during the previous reporting period:*

The technical and commercial evaluations have been satisfactorily completed for the supply of the designated mechanical and electrical equipment for the PS. With the single source procurement formalities been finalized, a purchase order has been issued to the OEM for manufacture of the equipment and FAO was monitoring the manufacturing process to ensure the manufacturing schedule is on time (date of issuing PO is 31/March/2010 while the expected arrival date of inputs is February 2011).

After the main mechanical and electrical components have been manufactured, they will be witness tested at the OEM's factory by independent engineers to ensure all the major components conform to the specifications detailed in the tender document.

At approximately the same time as the witness testing, the training for the MoWR operators and maintenance personnel will be carried out at the supplier's factory.

A final pre-export inspection will be made to ensure the correct quantities and that the packaging is to standard for large bulky equipment to be freighted without damage occurring to the vital components.

Organize the training of the mechanical and electrical engineers at supplier's factory site in Prague, Czech Republic.

Establish ToR for conducting feasibility study for a Water Users Association in consultation with MoWR and rural farming communities.

*Indicate any major adjustments in strategies, targets or key outcomes and outputs planned:*

There are no major adjustments in strategies, targets or key outcomes and outputs as per the original project document and the project is progressing as planned. Nevertheless, it is to be noted that in consultation with FAO, the MoWR have taken steps in 15 governorates out of 18 (the 3 in the KRG) plus two irrigation projects namely Al Ishaky and Mesopotamia to establish pilot area/project for application of the WUA. Apparently they are way ahead in doing so and during the past period they trained 10 engineers in each governorate to carry on this task. They also prepared posters and TV spots for this purpose and establish what they call office of water extension in each governorate for awareness. The director of Water Resources in each governorate was nominated as the chief of the WUA team. As from 2011 on, this project was transferred to the MoWR and became part of their plans for this year. They are now waiting the enacting of the laws by the Parliament.

## **VI. PERFORMANCE INDICATORS**

	<b>Performance Indicators</b>	<b>Indicator Baselines</b>	<b>Planned Indicator Targets</b>	<b>Achieved Indicator Targets</b>	<b>Means of Verification</b>	<b>Comments (if any)</b>
<b>IP Outcome 1:</b> Damaged pump station infrastructure rehabilitated/replaced						
<b>IP Output 1.1:</b> A detailed assessment of Abu Sabkha pumping station completed and technical requirements determined.	Technical specifications	Technical specification data drawn	Technical specifications approved and in place	100%	MoWR and field surveys	
<b>IP Output 1.2:</b> Tender approved and completion of contract awards for manufacturing and supply of mechanical and electrical equipment.	PO/ contract for equipment supply	BoQ from detailed pumping station surveys	PO/ contract for equipment supply in place	100%	Detailed survey as above	
<b>IP Output 1.3:</b> Factory inspection of equipment completed.	Inspection result	Factory inspection report	Inspection result completed	100%	Inspection Report	
<b>IP Output 1.4:</b> Delivery, training, and installation of equipment to restore Abu Sabkha pumping station to operate within efficiency norms which relates to capacity requirements for 4 spiral pumps each with a capacity of 1.47 m <sup>3</sup> /sec.	Coordinate manufacture, inspection, delivery, installation and commissioning to confirm pumping operations are within a capacity of 1.47 m <sup>3</sup> /sec for the 4 pumps	Enhance food security and rural incomes, plus generate rural employment	Supply irrigation water to 36,550 donums of agricultural areas farmed by approximately 8,000 farming families	50%	Completion and handover reports, plus final evaluation	After installation of equipment at the pumping station is completed
<b>IP Outcome 2:</b> 36,550 donums of agricultural land will be brought back into production and assisting 8,000 farming families to improve their livelihoods						
<b>IP Output 2.1:</b> Supply of water re-established to the irrigation command area.	Rehabilitate the pumping station to supply 1.47 m <sup>3</sup> /sec for the 4 pumps to the irrigation area and make water available for the	MoWR Pumping station data base indicates that the pumping station is currently non-functional	Supply irrigation water to 36,550 donums of agricultural areas farmed by approximately 8,000 farming	0%	Water available for the total command area	After installation of equipment at the pumping station is completed

	total command area		families			
<b>IP Outcome 3: Technical capacity of MoWR staff enhanced including technology transfer</b>						
<u>IP Output 3.1:</u> MoWR staff trained on pumping station operations by supplier and contractor.	Arrange contractual obligations of the supplier and organize the trainees travel and accommodation	Training Program and Results	MoWR engineers, operators and maintenance staff trained	0%	Pumping stations operational to full capacity	After installation of equipment at the pumping station is completed
<u>IP Output 3.2:</u> MoWR staff capacity building on procurement and technical specifications.	Arrange pumping station inspection with MoWR engineers to identify the mechanical and electrical equipment that requires replacement	No previous training on screw type pumps	Complete tender specifications and BoQ	100%	Tender issued and evaluation completed	
<b>IP Outcome 4: Water Users' Associations (WUA) establishment feasibility study completed</b>						
<u>IP Output 4.1:</u> Tasks and TOR for WUA	Establish ToR for conducting feasibility study in consultation with MoWR and rural farming communities	Number of TOR and staff established for WUA	TOR of WUA staff	10%	Acceptance of roles and responsibilities as outlined in TOR	In consultation with FAO, the MoWR have taken steps in 15 governorates to establish pilot area/project for application of the WUA.
<u>IP Output 4.2:</u> Budget Feasibility Study completed	Budget feasibility framework established	Budget feasibility study organized	Budget Feasibility Study Report	7%	Acceptance Report of budget requirements for WUA establishment	They are way ahead in doing so. They

<p><u>IP Output 4.3:</u> Security Feasibility Study completed</p>	<p>Security feasibility framework established</p>	<p>Security feasibility study organized</p>	<p>Security Feasibility Report</p>	<p>10%</p>	<p>Acceptance Report of security requirements for WUA establishment</p>	<p>trained 10 engineers in each governorate to carry on this task. They also prepared</p>
<p><u>IP Output 4.4:</u> Feasibility results shared with stakeholders</p>	<p>FAO will hold a conference to share the results from the feasibility study</p>	<p>Conference organized</p>	<p>The number of participants from MoWR, MoA, private sector, civil society organizations</p>	<p>0%</p>	<p>Successful conference</p>	<p>posters and TV spots for this purpose and establish what they call office of water extension in each governorate for awareness. The director of Water Resources in each governorate was nominated as the chief of the WUA team. As from 2011 on, this project was transferred to the MoWR and became part of their plans for this year. They are now awaiting the in acting of the laws by the Parliament.</p>

## VII. ABBREVIATIONS and ACRONYMS

FAO	:	Food and Agriculture Organization of the United Nations
MoWR	:	Ministry of Water Resources
PS	:	Pumping Station
WUA	:	Water Users' Associations
CIF	:	Cost Insurance and Freight
MoA	:	Ministry of Agriculture
RE	:	Resident Engineer
BoQ	:	Bill of quantities
CTA	:	Chief Technical Advisor
OEM	:	Original Equipment Manufacturer
NPC	:	National Project Coordinator
PSC	:	Project Steering Committee