

**COMPLETION REPORT FOR PROJECT:
E3-07 Kerbala WTP – Rehabilitation of Filter Units**

Summary

<p>Participating UN Organization: UNOPS</p>	<p>Cluster: E – Infrastructure Rehabilitation Cluster</p>
<p>Project No. and Project Title: E3-07 Kerbala WTP – Rehabilitation of Filter Units</p>	<p>Project Location/Region/Province: The project addresses the deteriorating condition of the filter units which purify the water supplied to residents and pilgrims visiting Kerbala .</p>
<p>Reporting Period: 1 Jan 2006 to 31 July 2006 Operationally Closed on June 2006</p>	<p>Report no: ITF/WSN/Kerb/13</p>
<p>Counterpart organizations / implementing partners: Ministry of Municipalities & Public Works Directorate of Water – Kerbala</p>	<p>Project cost: UNDG TF - US \$ 1,251,320</p>
<p>Abbreviations and acronyms: MMPW – Ministry of Municipalities and Public Works RFP – Request for Proposal ITB – Invitation to Bid LA – Local Authority TOR – Terms of Reference BOQ – Bill of Quantity DoW – Directorate of Water QIP – Quick Impact Project VTC – Vocational Training Courses MOA – Memorandum of Agreement IGP – Income Generation Project</p>	<p>Project Duration: Including any extensions through approved budget 9 months, (extended from 6 months)</p>

I. Purpose

Main objectives, outcomes and outputs expected as per approved Project/Programme/project document:

The key objective of the project is to:

1. Establish a sustainable, cost-effective and financially viable option by restoring the existing filter units at the water treatment facility to ensure a security of supply to the population of the city.
2. Improve the operational efficiency of the water treatment plant to significantly enhance the quality and quantity of water supplied to the population.
3. Ensure vulnerable groups of the city population in Hospitals, schools, homes and orphanages as well as religious establishments are protected from risks associated with the spread of water related diseases.

The expected outcomes of the project are:

1. Improvements in the health status of the population
2. Prevention of the spread of water related diseases
3. Reduction in the number of hospital cases by up to 60%
4. Security of potable water supplies to residents, vulnerable groups including pilgrims visiting Kerbala during holy/festival periods

Reference to how the program/project relates to the UN Assistance Strategy for Iraq and how it aims to support the Millennium Development Goals and Iraq national development goals)

The projects is to contribute towards improvement in the public health of the inhabitants by increasing the availability of safe drinking water in an effort to achieving the Millennium Development Goals set by the UN

- **MDG-7:** Reducing by half the proportion of people without access to safe drinking water
- **MDG-6:** Halting & reversing the incidence of malaria
- **MDG-4:** Reduction in child mortality

In relation to the Iraqi National Development Strategy, the project supports:

Goal 6: Achieve universal access to safe water and sanitation: and

Target 8: Ensure that all people have sustainable access to safe drinking water and improved sanitation.

Main international and national implementing partners involved their specific roles and responsibilities in project implementation and their interaction with the agency:

The project is being implemented by UNOPS for the Ministry of Municipalities and Public Works and the Directorate of Water in Kerbala who are the national implementing Partners, together with local consultants and contractors.

II. Resources

Total approved budget and summary of resources available to the program/project from the UNDG Iraq Trust Fund and non-Trust Fund resources where applicable:

Funds

No additional Budget required.

The total funds provided by UNDG Iraq Trust Fund was: US\$ 1,251,320.

Personnel: \$ 82,500

Contracts: \$ 1,000,000

Training: \$ 5,000

Transport: \$ 0

Supplies and commodities: \$ 0

Equipment: \$ 3,500

Travel: \$ 21,000

Miscellaneous: \$ 36,000

Security: \$ 22,960

Agency Management Support: \$ 80,360

Total Amount Committed by end December 2007: US\$ 1,134,888

Total Amount Disbursed by end December 2007: US\$ 997,758

Funds remaining: \$ 116,432

The remaining funds will be returned to UNDG ITF.

Human Resources

No	International	Location
1	Senior Programme Manager	Amman
TOTAL = 1		
No	National	Location
1	Field Coordinator	Baghdad
1	Associate Programme Officer	Amman
2	Field Engineers	Baghdad and Kerbala
1	Operations Field Coordinator	Baghdad
Total = 5		

III. Results

An assessment of the extent to which the program/project component / program /project is progressing in relation to the outcomes and the outputs expected (and identified in section

1) All outputs have been successfully achieved and completed

Output	Level of Achievement			Comments
	Fully Achieved	Partially Achieved	Not Achieved	
Improvements to the health status of the population	Fully Achieved			Attainment of the project outcomes associated with the reduction in the incidence of water borne diseases will take some time to become evident
Prevention of the spread of water related diseases	Fully Achieved			Same as above
Reduction in the number of hospital cases by up to 60%	Fully Achieved			Physical works to restore the existing sand filter units at the water treatment facility in Karbala are now complete and security of water supply for the population of the city has been guaranteed for the foreseeable future
Security of safe water supplies to vulnerable groups ;including pilgrims	Fully Achieved			The operational efficiency of the water treatment plant has been radically improved to significantly enhance the quality and quantity of water supplied to the population

Main activities undertaken and achievements:

NOTE: Do NOT duplicate material from above, other than to make a linkage.

Due to a completed stage of rehabilitation, and because of the complexity of the project, it was sought to have continuous maintenance supervision on all parts rehabilitated within the project so as to provide fast intervention when needed. UNOPS staff had continued ensuring optimum levels of operation. All steps taken were closely monitored by a committee of engineers from Kerbala Water Directorate in addition to UNOPS site engineer and UNOPS Field Coordinators.

Filters gallery rehabilitation

Completed and efforts in boosting the quality of water to its optimum levels were successfully accomplished. The old filter gallery was completely removed and replaced with new pipes, valves and gates with the new filter gallery network installed to international standards. All pipe networks were tested and proved to be of high efficiency. The walls of the filter units were painted. New electrical lighting was installed

The rehabilitation of filters

Completed after replacing all spurge pipes with new pipes in addition to a complete rehabilitation of the existing walls of the filters due to the huge number of cracks throughout each and every filter. All filters were hydrostatically tested and the crack sealing proven to be a successful process. The existing filter material was completely removed and replaced with high quality filter media according to the specification. A complete air pipe system was installed because of the extensive corrosion in the old network. The air pipes were also tested and the results were successful.

Structural modifications to stabilise failure of the filter units

Completed and several measurements were taken to ensure the success of the intervention in using the Underpinning method to completely stabilize the filter building structure

Re-commissioning of refurbished filter units and handover to authorities.

Completed and the handed over to the authorities on the on the 15th June 2006

Implementation constraints, lessons learned from addressing these and knowledge gained from assessments, evaluations and studies that have taken place during the reporting period:

Unexpected security deterioration in Kerbala was a key implementation constraint for the previous 6 months.

Key partnerships and inter-agency collaboration, impact on results:

Numerous meetings have taken place with all key implementing partners to establish the detailed requirements of the project despite the difficulties experienced

Highlights of achievements against the project planned results for cross cutting issues:

(Guidance from UNCT cross cutting theme focal points to be followed)

Security:

Unexpected security deterioration in Kerbala is a key implementation constraint for the previous 6 months.

Gender:

Opportunities were for both men and women to benefit from the project equally through the provision of improved access to water supply.

Throughout the implementation process, women were encouraged to seek employment on the project.

However there were limited opportunities to promote gender and equity on the project as women were not participating directly in construction tasks. UNOPS, on ground, promoted activities such as women (especially female heads of households) cooking food to sell to construction workers. Such a role was available to a number of women resident within the area of the water treatment plant.

It is also quite common to find female engineers in Iraqi government ministries.

Human Rights:

Nothing significant to report

Employment:

During the construction of the Karbala Water treatment plant, over 150 persons and up to 15 skilled tradesmen and 12 technicians and engineers were provided direct employment from this project in addition to future long term employment with the management and operation of the systems as well as the ability to train people and implement other projects.

Environment:

There is no known adverse environmental risk or impact from this project. There are many positive impacts particularly with conservation of water and prevention of contamination, and leakage.

On the other hand, rehabilitating the water treatment plants will bring about a marked improvement in the environment, including reduction in contamination through leaks and a consequent decline in water-related diseases

IV. Follow up actions and sustainability

Priority actions that should be supported/implemented following completion of project to build on achievements and partnerships rectify shortcomings encountered and use the lessons learned during the project with strong emphasis on achieving sustainability of the outcomes:

N/A

Indication of major adjustments in the strategies, targets or key outcomes and outputs:

N/A

Estimated Budget required:

N/A

Annex 1 Key Performance Indicators – Log Frame Matrix

Objectives	Measurable indicators	Means of verification	Outcomes
<p>Development Objective</p> <p><i>Wider problem the programme/project helped to resolve</i></p>	<p>The quantitative ways of measuring or qualitative ways of judging utilised to indicate achievement of objective</p>	<p>Methods and sources used to quantify or assess indicators</p>	<p>Key project outcome against agreed benchmarks including the JNA and NDS where possible</p>
<p>Immediate Objectives:</p> <p><i>The immediate impact on the programme/project area or target group i.e. the change or benefit achieved by the programme/project</i></p>	<p>Quantitative ways of measuring or qualitative ways of judging timed achievement of purpose</p>	<p>Methods and sources to quantify or assess indicators</p>	<p>Key outcomes against each objective</p>
<p>Outputs :</p> <p><i>The specifically deliverable result which were expected from the programme/project to attain the objectives</i></p>	<p>Quantitative ways of measuring or qualitative ways of judging timed production of outputs</p>	<p>Methods and sources to quantify or assess indicators</p>	<p>Key outcomes against projected outputs</p>

Annex 2 PROJECT COSTS

CATEGORY	UNDG ITF approved budget	Actual COST	Percentage of Approved	Budget Revision approved (give date)	Percentage of revision
1. Personnel • including staff and consultants					
2. Contracts • including companies, professional services, grants					
3. Training					
4. Transport					
5. Supplies and commodities					
6. Equipment					
7. Travel					
8. Security					
9. Miscellaneous					
10. Agency Management Support					
Total Expenditure					

Annex 3 List of contract awards by procurement method