



**World Health  
Organization**

**ITF  
ANNUAL PROGRAMME<sup>1</sup> NARRATIVE PROGRESS REPORT  
OPERATIONALLY CLOSED  
REPORTING PERIOD: 1 JANUARY – 31 DECEMBER 2009**

<p><b>Submitted by:</b> WR Iraq <a href="mailto:wriraq@irq.emro.who.int">wriraq@irq.emro.who.int</a> WORLD HEALTH ORGANIZATION(WHO)</p>	<p><b>Country and Thematic Area<sup>2</sup></b> <i>Water and Sanitation</i></p>
<p><b>Programme No: E3-11</b> <b>MDTF Office Atlas No: 66877</b> <b>Programme Title: Water Quality Control and Surveillance in Iraq Programme Phase II</b></p>	<p><b>Participating Organization(s):</b> <b>WHO, UNICEF</b></p>
<p><b>Implementing Partners:</b> <i>National counterparts (government, private, NGOs &amp; others)</i></p> <ul style="list-style-type: none"> <li>• Ministry of Environment ( MOEnv );</li> <li>• Ministry of Municipalities and Public Works ( MMPW );</li> <li>• Mayoralty of Baghdad ( MOB ).</li> </ul>	<p><b>Programme Budget (from the Fund):</b> <i>For Joint Programme provide breakdown by UN Organization</i> WHO : US\$ 2,700, 895 UNICEF : US\$ 1, 596,748</p>
<p><b>Programme Duration (in months):</b> <u>Start date<sup>3</sup>: 22 Dec 2006</u> <u>End date: 31 Dec 2009</u></p> <ul style="list-style-type: none"> <li>• <i>Original end date 22 Dec 2007</i></li> <li>• <i>Operational Closure Date<sup>4</sup>, 31 Dec 2009</i></li> </ul> <p><u>Budget Revisions/Extensions:</u> <i>List budget revisions and extensions, with approval dates, if applicable</i></p> <p>1<sup>st</sup> Revision: 22 Dec 2007 – 22 Jun 2008 (6 months) 2<sup>nd</sup> Revision: 22 Jun 2008 – 31 Dec 2008 (12 months) 3<sup>rd</sup> Revision: 31 Dec 2008 – 30 Jun 2009 (18 months) 4<sup>th</sup> Revision: 30 Jun 2009 – 31 Dec 2009 (24 months)</p>	

<sup>1</sup> The term “programme” is used for programmes, joint programmes and projects.

<sup>2</sup> E.g. Priority Area for the Peacebuilding Fund; Thematic Window for the Millennium Development Goals Fund (MDG-F); etc.

<sup>3</sup> The start date is the date of the first transfer of funds from the MDTF Office as Administrative Agent.

<sup>4</sup> All activities for which a Participating Organization is responsible under an approved MDTF programme have been completed. Agencies to advise the MDTF Office.

## NARRATIVE REPORT

### I. Purpose

The project outcomes are to:

1. Strengthen the capacity of Ministry of Environment, Ministry of Municipalities and Mayoralty of Baghdad at central, governorate and district levels in terms of planning, implementation and monitoring, main concentration will be improving technical and managerial capacities of laboratories and the staff responsible for water and waste water quality control.
2. Empower the Ministry of Environment, Ministry of Municipalities and Mayoralty of Baghdad to ensure the provision of potable water and the enforcement of the rules and regulation related to the protection of the water resources from pollution. .
3. Raise public awareness among communities for the protection and preservation of water resources.

The main outputs are:

- 1.1 Water quality surveillance system supported, where a comprehensive water quality program is implemented through out the country.
- 1.2 Technical and managerial capacity of about 1120 professionals dealing with water quality monitoring enhanced.
- 2.1 Sustainable water quality laboratories affiliated to the Ministry of Environment and at water and waste water treatment plants under the umbrella of the, Ministry of Municipalities and Mayoralty of Baghdad , fully furnished and equipped with essential equipment for water testing.
- 2.2 Laboratory Information Management System strengthened for the entire water quality laboratories network as a tool for efficient monitoring and decision making.
- 3.1 Four hygiene awareness campaign related to water born diseases targeting high risky are implemented.

*Explain how the Programme relates to the Strategic (UN) Planning Framework guiding the operations of the Fund.*

The Programme relates to the UN Assistance Strategy within “Rehabilitate and develop the country’s social, economic, financial, physical and institutional infrastructure to ensure sustainable livelihoods and durable solutions to displaced populations in the country”, and contributes to the following Millennium Development Goals (MDGs):

- Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation ( MDG7);
- Reduce by two thirds the mortality rate among children under five (MDG4).

Furthermore, it relates to the National Development Strategy, through Goal 6 which is to “Achieve universal access to safe drinking water and sanitation” and to Target 8 in the Strategy which is to “Ensure that all people have sustainable access to safe drinking water and improved sanitation.”

The project also contributes to section 4.4.1.5 of **ICI Benchmarks (as per the Joint Monitoring Matrix 2008)** “Reduce population without access to safe drinking water to 10% in Urban areas“ (Baseline: UNDP Unmet Basic Needs Survey – 40.4% population without access to safe drinking water of which 20% in Urban and 60.4% in Rural); in addition to that, it also contributes to the following WATSAN Sector Outcomes

1. Increase sustainable access to safe water for urban and rural populations in 10 governorates, especially for the vulnerable.
2. Increase sustainable access to improved sanitation for urban and rural populations, especially for the vulnerable.
3. Capacities for effective management of WatSan enhanced.

## **II. Resources**

### *Financial Resources:*

Other funding resources which are being used in the implementation of the project, covered by agency core operations fund and therefore not reflected in the budget includes:

- Costs for logistics and administrative facilities of WHO/UNICEF such as videoconferencing, which particularly in the context of the security situation in Iraq, have been key to coordination and interaction with the MOEv, MOMPW and MOB.
- Technical support and backstopping received from the regional and headquarters offices outside the agency management support framework;
- Additional work hours put in by MOEv, MOMPW, MOB, UNICEF and WHO personnel who are not funded by the project, but never the less to some extent are involved in the project implementation, monitoring, evaluation and reporting.

### *Budget revisions*

As part of the original proposal, equipment and reagents have been procured and delivered to the various governorate laboratories. This has greatly improved their water testing capabilities. There have been savings to the tune of \$ 113,000 resulting mainly from savings in freight charges after final settlement of all Purchase Orders. Savings to the tune of nearly \$ 32,000 has also resulted from the line item related to "Supplies & Commodities".

UNICEF intends to support the following activities requested by the government using the above savings. These activities fall within the purview of the original proposal and aims to further strengthen the monitoring and surveillance capabilities.

A- Sewerage authority in its letter 1603 dated 19/2/2009 has requested UNICEF to support the extension of the existing sewerage laboratory building to accommodate the increased functions of the laboratory in testing and quality control. This work is estimated to cost \$ 120,000.

B- Develop Laboratory Information Management System (LIMS) for the Ministry of Municipalities (MoM) in KRG. This will strengthen the monitoring and reporting capabilities of laboratories in KRG. By completing this module, LIMS shall be available for use nation wide. The work is estimated to cost \$ 20,000.

However, unforeseen cost (Freight of Chemicals and Lab equipment) which was procured lately is paid by UNICEF. Hence, activity B above will be implemented by using other fund source.

### *Good practices and constraints in the mechanics of the financial process*

In relation to the transfer of funds from UNDG ITF to the both WHO and UNICEF Headquarters, the process was smooth and there was no any delay, similarly with in the organizations financial system no constraints was noticed

### *Human Resources:*

*National Staff:* Three national officers' full time and one project assistant part time, who are responsible for the operation and implementation of the project components in coordination with the counterparts, also they are monitoring the progress of implementation versus work plan. They are almost in daily contact with the focal points from the MOEv, MMPW and MOB by different means of communication in addition to the regular meeting on the ground.

*International Staff:* One International staff member; who is responsible for the whole management of the project, and he is in regular contact with both the national staff and their counterparts through different means of connectivity such as e-mail, phone, video conferencing and meeting in Amman, in addition to missions to Iraq to monitor the implementation on the ground.

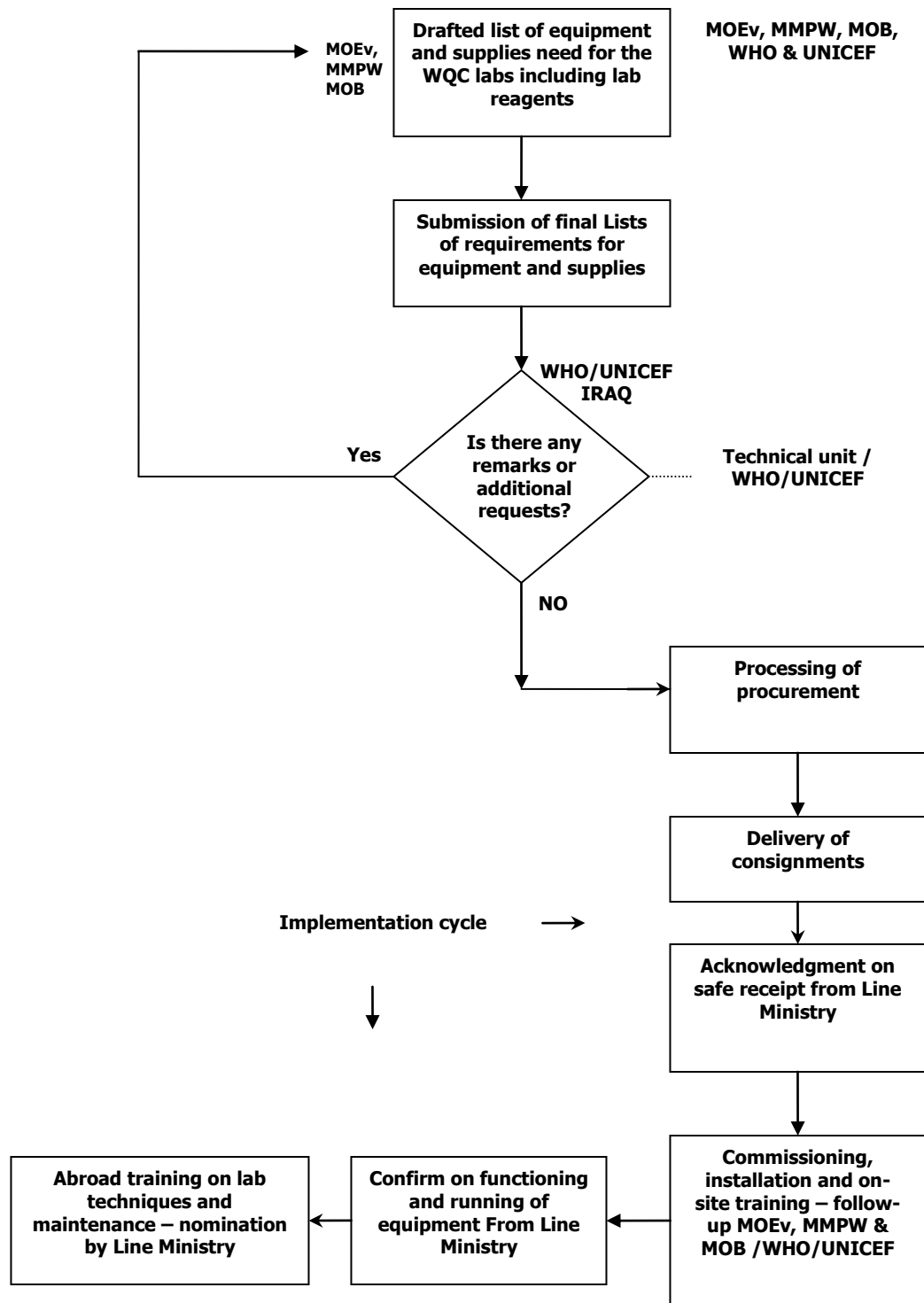
### **III. Implementation and Monitoring Arrangements**

The delivery mechanism adopted is as follow:

- WHO/UNICEF in consultation with their counterparts prepared the technical specifications for the necessary water analysis equipment and supplies.
- WHO/UNICEF in consultation with MOEv, MMPW and MOB technical staff assessed the chemicals and other laboratory reagents needed for water quality analysis.
- The procurement was carried out through the procurement section at either WHO/UNICEF country, regional and Headquarters offices as shown in the below diagram.
- WHO/UNICEF in consultation with the counterparts, facilitate the implementation of training of trainers programs outside Iraq where the participants become trainers for the technical staff.
- WHO in consultation with their counterparts, design and support the implementation of hygiene awareness programs for the community leaders.
- UNICEF in consultation with counterparts, design and support the implementation of the internal (inside Iraq) and external (overseas) training programmes.
- In terms of the rehabilitation works, WHO in coordination with MOEv prepared all the drawings, bill of quantities and the bidding documents. MOEv announced the tender in an Iraqi local newspaper, after receiving offers from local contractors the offers went through multiple committees (Bid opening, analysis and review committee), then were doublechecked by WHO at the field level and at WHO temporary office in Amman to ensure that all processes went through according to both WHO and MOEv rules and regulations. During the commencement of the work, both WHO and MOEv engineer, supervise and monitor the work, and a weekly report supported by photos is received from WHO engineer who conducts daily monitoring on the progress of work.
- UNICEF applies a similar mechanism for rehabilitation where BOQs are jointly prepared with the government, while the announcement and bidding takes place by UNICEF in Amman. Work is jointly supervised by the government and UNICEF.

*Details on the procurement procedures utilized and variances in standard procedures.*

The diagram below illustrates the steps followed by both agencies to procure and deliver the requested laboratory equipment and supplies inside Iraq, this approach was used in many of WHO/UNICEF projects and it is considered one of the success stories in terms of implementation approaches.



*Details on the monitoring system and lessons learned.*

WHO and UNICEF focal points (national staff and hired engineers and facilitators) inside Iraq follow-up the implementation of the project components and monitor the progress of all the activities on the ground and prepare a visit report in addition to the weekly and monthly reports which are supported by photos from the filed. WHO and UNICEF offices in Amman receive feed back on regular basis from Iraq for analysis and decision making. In addition, there is a task force committee composed of MOEv, MMPW, MOB, WHO and UNICEF, the committee is

chaired by Deputy Minister of Environment and meets on a monthly basis to discuss and follow up the implementation progress of the project components and find solutions for any obstacles facing the progress of the work plan.

*Assessments, evaluations or studies undertaken:*

WHO/UNICEF in consultation with MOEv, MMPW and MOB technical staff assessed the chemicals and other laboratory reagents needed for water quality analysis. Similar assessments were undertaken to the laboratories identified for rehabilitation. Bills of quantities were jointly prepared by WHO/UNICEF staff and representatives from the relevant government authority. The structure and parameters for the Laboratory Information Management System were developed in close consultation with the three Authorities. In addition to that WHO supported MOEv, MMPW, MOB in implementing a comprehensive sanitary inspection for water resources in five governorates namely (Baghdad, Ninawa, Erbil, Basra and Nasirya).

**IV. Results**

During the reporting period, the project outcomes are almost progressing according to the plan of action agreed upon between all key partners (MMPW, MOEv, MOB, WHO and UNICEF) during the technical meeting which was held in Amman on 28-29 Jan 2007 and the outcomes expected in the project proposal. However, delays have occurred in the implementation of LIMS. due to the following reasons:

- Delays by the Authorities in formulating their needs and articulating their requirements in terms of type, parameters, layout and frequency of reports generated by the system;
- Frequent changes in the Authorities’ requirements leading to repeated re-work. This was further delayed by the protracted review and provision of comments by the Authorities to the Contractor;
- Lengthy programming process requiring the Contractor to transfer the comments received either on structural layout or statistical calculations of report format to programming language;
- Varying levels of staff skills and differing needs for LIMS structure among the three Authorities;
- Contractor’s inability to manage multiple Authorities with their differing needs simultaneously

*Report on the key outputs achieved;*

The key implementation activities illustrated in the table below, derived from the Project Proposal, have been used to guide the implementation of the programme.

	<b>Key implementation activity</b>	<b>Status</b>
1	Rehabilitating some of the existing water & wastewater quality control laboratories	<ul style="list-style-type: none"> <li>• The extension of the MOEnv Central Water Quality Control Laboratory in Hay Al-Andalus/Baghdad has been 100% completed.</li> </ul>





- The Rehabilitation work of three sewage labs in Najaf, Ninawa and Diwaniya governorates is 100% completed.



- Construction/expansion of Central Sewerage Lab building of the General Directorate of Sewerage/MMPW, the work is in progress.

2 Procurement of 8 mobile laboratories for MoEnv, MMPW and MoB

- Technical specifications for the mobile laboratories including the equipment have been finalized in coordination with the technical staff from MOEnv, MMPW and MOB.
- The procurement process has been finalized by WHO Regional Office.
- The mobile labs have been handed over to MOEnv, MMPW, MOB and started functioning on the filed.

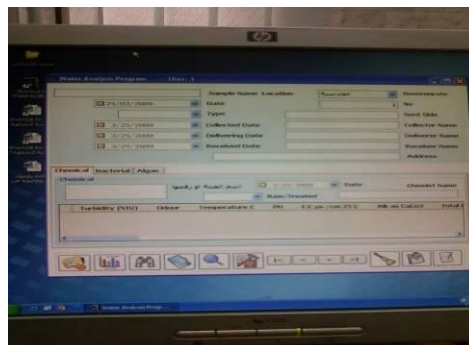
		 <p data-bbox="680 428 1284 457">The mobile laboratories delivered to End-users</p>
3	<p data-bbox="212 520 490 730">Equipment, lab. supplies and reagents for Ministry of Environment Water quality control laboratories</p>	<ul data-bbox="558 529 1409 953" style="list-style-type: none"> <li>• Technical specifications for the equipment and laboratory supplies including the laboratory reagents have been finalized in coordination with the technical staff from MOEnv, MMPW and MOB.</li> <li>• The procurement process has been finalized by WHO/UNICEF Regional &amp; Head Quarter Offices.</li> <li>• All supplies have been received by the end users such as the laboratory reagents, glassware and part of the equipment.</li> <li>• Sanitary inspection for drinking water resources have been completed for five governorates ( Erbil, Baghdad, Basra, Ninawa &amp; Thi Qar ).</li> </ul>  <p data-bbox="704 1356 1253 1386">Sanitary technicians testing drinking water</p>
4	<p data-bbox="212 1432 519 1680">Development of human capacity among laboratory managers, technicians and sanitarian professionals through training and workshops</p>	<ul data-bbox="558 1440 1409 1856" style="list-style-type: none"> <li>• 10 decision makers from MOEv, MMPW and KRG participated in a technical meeting in Amman with the participation of both WHO and UNICEF to discuss and set a plan of action for the implementation of project components.</li> <li>• 84 technicians trained outside Iraq as trainers on sophisticated laboratory equipment such as Gas Chromatography and Mini API through 8 training sessions, the mentioned figure represents 100% of the planned activity.</li> <li>• 890 lab technicians trained inside Iraq on different lab techniques by those trainers who received training outside Iraq. The number of trainees represents 120% of the planned activity.</li> </ul>

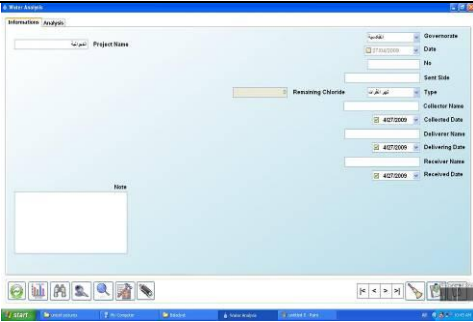





Lab. Technicians participated in TOTs outside Iraq

5	<p>Establish Laboratory Information Management System (LIMS)</p>	<ul style="list-style-type: none"> <li>• Two technical meetings conducted in Baghdad in participation with all key partners (MOEv, MMPW, MOB, UNICEF and WHO) discussing the essential needs for LIMS (Hardware &amp; Software) and to identify the parameters to be included in the software.</li> <li>• Bidding process to select specialized company was completed.</li> <li>• Offers from 4 competent companies have been received and analyzed.</li> <li>• The contract to develop LIMS software was awarded.</li> <li>• Each authority (MoEnv, MMPW, MoB) has formulated a technical committee to set a framework, define the outlines of the software, identify the parameters to be tested, set the report layout and supervise the development of the software. UNICEF and the contractor are part of these committees. The committees were frequently met to evaluate the product at development stage and ensure the software meet the requirement.</li> <li>• LIMS software was developed to fit the needs of each individual authority, based on the different requirements. The software was installed at the central laboratories in the three authorities in addition to the governorate laboratory of MMPW and MoEnv at the 15 governorates. In addition to the central lab of MoB, the software has been installed at the water laboratory in eight water treatment plants in Baghdad City.</li> <li>• Training of laboratory staff on LIMS: 61 governorate lab staff from the MMPW and MoEnv has been trained in the use of LIMS at the MMPW training centers in Kirkuk, Najaf and Basra. For MoB, 19 lab staff trained.</li> </ul>
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6	<p>Implement a hygiene education campaign, with special attention to the high risk areas in terms of water born diseases</p>	<ul style="list-style-type: none"> <li>• A hygiene education campaigns targeting community leaders and school teachers in 8 governorates namely ( Baghdad, Najaf, Kut, Basra, Dewanya, Erbil, Thi-Qar and Missan ) have been completed; where 4000 school teachers and community leaders participated in the campaigns, the said figure represent 100% of the planned activity.</li> <li>• Awareness material such as leaflets, booklets and posters are under preparation.</li> </ul>  <p>Removing of the wastes in Said Sadeq by students participation</p> <p>School children cleaning the environment in Suliemaniya City</p>

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

Lengthy Government procedures and frequency of changing steering committees this has timely affected the implementation and supervision of work. This has also led to many changes in the development of LIMS software structure.

Security, the site of the constructed Central Sewerage lab building is located within high security premises which need special access. The approval for the access took long time to be granted to the contractor which negatively affected the mobilization of materials to the site.

*Key partnerships and collaborations*

The main national partners involved in the implementation are the MOEv, MMPW, MOB and local contractors. The role of the local authorities is to coordinate with WHO and UNICEF to set the specifications for the needed equipment and supplies, and to implement the training activities inside the country and to ensure the enforcement of rules and regulations related to the water quality control. In addition, they are required to implement the water quality monitoring program to ensure that the water delivered to the end users is tested and its within the Iraqi National Standard for Drinking Water. The local contractors are responsible for the

rehabilitaion of the MOEv Central Water Quality Control Laboratory and the wastewater quality control labs according to the specification set by MOEv and MMPWE and both WHO and UNICEF. The rehabilitation work is supervised by both WHO/UNICEF site engineers on the site who usually monitor the implementation progress and document the progress through daily, weekly and monthly reports supported by photographs.

Both WHO and UNICEF focal points were in almost daily contact with line ministries (MOEv, MMPW and MOB), in addition to adhoc visits to the water quality control laboratories to monitor and provide technical advice to ministries staff. Monthly meetings were conducted to update them on the implementation status of the project components. In addition, one meeting was conducted in Amman between WHO/UNICEF and high official delegations from the line ministries to set the work plan for the implementation of the project components.

The good coordination and continuous cooperation between all key players (MOEv, MMPW, MOB, WHO and UNICEF) has led to smooth implementation of the major activities which as a consequence will have positive impact on the performance and functionality of the water quality monitoring system and will lead to more precise diagnosis of the pollution sources and will help the decision makers to choose the best available solutions.

#### *Other highlights and cross-cutting issues*

In general, the project affects many cross cutting issues. In terms of the environment, the project is targeting the protection of water resources from pollution through good diagnosis mechanisms. As a result it will have a positive impact on the environment. In terms of gender, the project will benefit all water consumers (men, women and children) and with regards capacity building there was a conscious gender balance. The training conducted by WHO/UNICEF there was more than 40% women participation. In relation to human rights, one of the primary goals of WHO and its Member States is that “all people, whatever their stage of development and their social and economic conditions, have the right to have access to an adequate supply of safe drinking water”. In terms of employment creation, the rehabilitation works and local procurement and transport of goods creates approximately 1600 job opportunities. In terms of public participation, the hygiene campaign was based purely on public participation and targeted school children, housewives and community leaders.

#### **V. Future Work Plan (if applicable)**

The project was operationally completed on 31<sup>st</sup> December 2009.

#### **VI. Abbreviations and Acronyms**

ICI	International Compact with Iraq
LIMS	Laboratory Information Management System
MDG	Millennium Development Goals
MOEnv:	Ministry of Environment
MMPW:	Ministry of Municipalities and Public Works
MOB:	Mayoralty of Baghdad
UNICEF:	United Nations Children's Fund
WHO:	World Health Organization