EXTERNAL EVALUATION REPORT

Emergency Water Supply to un-served/underserved/
Vulnerable Areas in Baghdad and the IDPs
E3-09

Submitted to
United Nations Children’s Fund (UNICEF)

Presented by:
Stars Orbit Consultants and Management Development

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According to the National Development Strategy for Iraq, 2005-2007; up to 1991 water and sanitation systems in Iraq were operating efficiently. Safe potable water was accessible to 95% of urban and 75% of rural inhabitants. 218 conventional water treatment plants were operating in the country and 1,191 compact water treatment plants were also in operation. Sanitation services covered 75% of urban communities and 50% of rural ones.

Recent studies show that many water and sewage treatment plants were provided at an “acceptable” level. Of the 177 water treatment plants only 34 were classified as “good.” Sewage collection and treatment service in Baghdad is provided to only 80% of the population and only 9% of urban populations outside of Baghdad, while rural areas in the north of Iraq do not have piped sewage systems.

Sanitation is thus becoming a serious environmental and health problem. Deteriorating sewer pipes are contaminating the potable water network and underground water, further adding to the health and environmental problems. It is estimated that 50% of wastewater generated in Iraq is being discharged into the rivers and waterways. Baghdad contributes as much as 75% of that discharge.

The Government is committed to restoring the standards that existed before 2003 and expanding access in a sustainable way. Emergency activities include water tinkering, especially to the southern cities. Water quality monitoring has been established throughout the country. Procurement for water treatment chemicals and garbage collection is being provided.

The Water and Sanitation Rehabilitation work undertaken by other Agencies and UNICEF in the sector fill-in only partial needs leaving behind Water and Sanitation facilities in a number of cities, especially Baghdad crippled and ill-maintained. The lack of adequate budget with the Government affects its ability to undertake rehabilitation and new projects as well as its capacity to run basic Water and Sanitation operations. This has led to a situation, where a large number of water supply facilities including water networks, booster stations and water treatment in Baghdad are still in a state of disrepair. Hospitals, often overwhelmed by the victims of violence and internally displaced persons are particularly vulnerable to disruptions in water supply.

The developmental goal of the project was to strengthen the government’s capacity to protect public health by averting water borne disease outbreaks during critical water shortages and emergencies by enhancing access to safe water to the affected population during critical shortages and emergencies in Baghdad. The project was funded under the UNDG-ITF at USD 1,058,652 and the original project duration was 8 months starting 1 June 2006 but was implemented and finalized in 7 months and ended on February 2007.

UNICEF’s main implementation partners were the Mayoralty of Baghdad, Ministry of Municipality and Public Works and United Nations Country Team (UNCT). Other forged partners included families who had been supported through employment of their family members involved in water tankering operation.

A total of 180,000 people living in the most deprived areas within Baghdad benefited from the emergency water supply distribution. In addition, government staff benefited from the capacity development programme, which was implemented as an integral part of the project.
The project was in line with the priorities identified in the National Development Strategy for Iraq, 2007-2010 with regard to meeting the most urgent rehabilitation needs, training and capacity building. In addition, the project is expected to make a significant contribution towards attaining the Millennium Development Goals by reducing child mortality from communicable diseases and contribution to environmental sustainability.

The project under evaluation addressed the inadequacies in the water supply infrastructure in selected deprived areas in Baghdad, the project also contributed to strengthen capacities of Water Authority staff in the proper management of water tankering operations to realize the full beneficial impact on the population. Approximately 150,000 people received potable water through emergency water supply distribution to deprived areas in Baghdad. Six hospitals dealing with the victims of daily incidences of violence and bombing in Baghdad have also benefited from the daily distribution also IDPs in Anbar (7000 in Akashat and 4250 in Kbaisa) have been served with UNICEF water trucking during 2006 and (2800 in Kubaisa/ Anbar and 3000 in Singar/Ninevah) have been served in 2007, while emergency water supply operations played a major role in providing the needed potable water to Baghdad main hospitals during water cut-off resulting from the frequent bombing of Al-Karkh WTP pipeline and power station in addition to residential areas, schools and primary health centers. The water tankering operations provided the needed relief to areas affected by chronic shortages until the services therein would be resumed.

The project was in-line with the priorities identified in the National Development Strategy (NDS), 2005-2007 with regard to improving quality of life of the Iraqi people with special emphasis on water and sanitation. Also the project contributed towards attaining the MDG goals in particular to Goal # 4 = Reduce Child Mortality, Goal # 7 = Ensure Environmental Sustainability and Goal # 8 = Develop Global Partnership for Development.

The security situation and frequent closure of roads delayed the process of distribution. Other reasons such as fuel shortage and unstable electrical power system all affected the conduct of trips adversely.

**Recommendation**

1. A better documentation system should be put in place to insure the availability of current and history records for water test at the water filling points.
2. Iraq is a resource-rich country both in terms of material and human resources. Consistent with the priorities identified in the National Development Strategy, The GoI should develop plans and allocate adequate funds under the development budgets of the next few years in order to implement projects to address the water distributing to all its rural and urban areas to insure that high quality water be available for all communities.
3. Technical assistance should be sought from UNICEF for enhancing the process of institutional capacity building of water authorities, staff of public health laboratories and other national institutions involved in provision of basic water and sanitation services in the country.
4. An effective system for regular chemical and bacteriological testing, of water should be carried out by trained staff at quality control laboratories in order to ensure that the quality of drinking water.
5. Many of the beneficiaries interviewed had braced UNICEF’s support in 2006-2007 of potable water distribution and are now emphasizing the importance of their continuous support. Since the finalization of the project irregularities in water distribution and malpractice of the use of tankers (filled with different liquids other than water) have led the situation in deprived areas to deteriorate.

4
3. General Introduction

Iraq used to have a well-developed infrastructure in the various sectors of water, sewerage, sanitation and electricity. However, there was a certain amount of misdistribution of public facilities and services as most of the developmental activities targeted central parts of the country with northern and southern districts receiving less attention. This left several areas in North and South either un-served or under-served.

Over the last three decades, the Iraq suffered from the adverse consequences of three devastating wars, which left behind major damage to the economy and country’s basic infrastructure of public facilities. This situation was compounded by 13 years of economic sanctions, which were perhaps, the toughest and most comprehensive sanctions in human history. Power shortages, lack of spare parts and migration of qualified personnel lead to the breakdown of modern facilities including water and sewerage systems.

A UNICEF sponsored survey in 2000 noted that almost half the children under 5 years suffered from diarrhea diseases due to lack of clean water, not only because of environmental degradation but also because there was a ban on importing chemicals for disinfection of water for domestic use.

The post 2003 war era added wound to the injury and brought about unprecedented waves of violence, insecurity, large-scale destruction, encroachment on public facilities and looting of equipment, all these factors conspired to bring Iraq’s infrastructure of water, sewerage, electricity and other basic facilities to a level that only compares with that of least-developed countries.

Launched in May 2007, The International Convention with Iraq, and the Joint Monitoring Matrix, which represents an integral part of the convention, provided an opportunity for the wide international community to demonstrate its strong commitment to assist the government of Iraq moving to recovery and development through financial and technical assistance, capacity development, investment and other forms of support.

It was against this background and in line with the priorities identified in the National Development Strategy, 2007-2010 for Iraq that UNICEF had embarked on implementation of the project for improving access to potable water and water distribution as well as tackling unemployment in Baghdad.

UNICEF has a long history of humanitarian and developmental work in the Region including Iraq and had implemented several similar projects in other districts with the aim of rehabilitating and expanding water and sewerage systems with special focus on disadvantaged areas of the country.

4. Project Under Evaluation Description

The Water and Sanitation Rehabilitation work undertaken by other Agencies and UNICEF in the sector fill-in only partial needs leaving behind Water and Sanitation facilities in a number of cities, especially Baghdad crippled and ill-maintained. The lack of adequate budget with the Government affects its ability to undertake rehabilitation and new projects as well as its capacity to run basic Water and Sanitation operations. This has led to a situation, where a large number of water supply facilities including water networks, booster stations and water treatment in Baghdad are still in a state of disrepair. Hospitals, often overwhelmed by the victims of violence and internally displaced persons are particularly vulnerable to disruptions in water supply.
Thus, UNICEF had recognized the need of residents in the poorer neighborhoods of Baghdad City which do not enjoy services where contamination is a serious public health hazards. In summer, potential for water borne disease outbreaks is grave making water tinkering operations even more crucial. Water tinkering operations were estimated to be needed until the first quarter of 2007 by which time services were expected to resume. Given the necessarily situation to keep the tinkering operations ongoing in Baghdad, UNICEF has approached the cluster to avail the needed funds in line with the cluster mandate to increase the percentage of people with access to safe water. Through the Emergency Water Supply Project, UNICEF aims to support the tinkering operations based on the request of the Government. This is seen to enable UNICEF to respond to areas affected by military conflicts and/or emergencies.

The project under evaluation aims to support ongoing emergency water supply operations in more than ten un-served and underserved residential areas of Baghdad City where water distribution network is either absent or the water is contaminated with sewage water. This is seen necessary to provide water to about 180,000 people and avert possible outbreak of water borne diseases in the most deprived areas within the City. Six hospitals dealing with the victims of daily incidences of violence and bombing in Baghdad have benefited from the daily distribution, while emergency water supply operations played a major role in providing the needed potable water to Baghdad main hospitals during water cut-offs. The water tinkering in Baghdad as well as other water tinkering targeting IDPs in Anbar (7000 in Akashat and 4250 in Kbaisa) and (2800 in Kubaisa/ Anbar and 3000 in Singar/Ninevah) operations provided the needed relief to areas affected by chronic shortages until the services therein would be resumed. Indirect beneficiaries include the families who had been supported through employment of their family members involved in water tinkering operations. The actual water delivery started in August 2006 and completed in February 2007. In this period 329,490 cubic meters of water were delivered benefiting approximately 150,000 beneficiaries.

The activities implemented under this project were:

1. Testing of water at filling points.
2. Trucking water.
3. Distribution of water.
4. Training of government staff in managing water tinkering operations.
5. Monitoring and evaluation

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<tr>
<th>Outcome</th>
<th>Output</th>
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<tr>
<td>1. To provide access to safe water to the affected population during critical shortages and emergencies</td>
<td>1.1. Adequate safe water available at affected locations</td>
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<td></td>
<td>1.2. Strengthened capacity of Government staff in managing water tinkering operations</td>
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The original duration of the project under evaluation was 8 months starting from 1 June 2006; however the project was concluded in less time and with an overall duration of 7 months starting from August 2006 to February 2007. The original budget of this project was USD 1,058,652.
5. Evaluation Purpose and Scope

The evaluation mainly examined the project outcomes and results achieved during the project implementation timeframe, the evaluation also provided a third party view on how the project achieved its objectives and the relevance of the funding mechanism through the ITF and to provide lessons learned from the project to guide future activity. The evaluation team focused on both capacity development, operational and development effectiveness. And the results will be used by UNICEF, ITF partners and the Government of Iraq.

The evaluation focused its analysis and findings on the components of the preparation and implementation process. The evaluation intended to assess the logical framework attributable to the implementation of the project, accordingly the team members focused primarily on examining and analyzing the documentations that were provided by UNICEF and other stakeholders as well as other documents collected from field visits. The evaluation thus examined the implementation progress and the project outcomes to identify if the project met its objectives, indicators, activities and outputs (both intended and actual) as well as other relevant information. The evaluation team reviewed the project documents in depth, and scripted questionnaires targeting stakeholders, government officials, beneficiaries. As such, some of the questionnaires were intentionally scripted to pose open-ended questions, thereby allowing for the increased exchange of information between the evaluation team and stakeholders.

6. Evaluation Methodology

The evaluation addressed the Organization for Economic Cooperation and Development –Development Assistance Committee (OECD-DAC) evaluation criteria including relevance, effectiveness, efficiency, and sustainability. In addition, the evaluation also looked at the contribution of the project towards partnership building within UN, GOI and civil society. Specifically, the evaluation was guided by the following key objectives:

1. To assess and showcase the achieved progress and results against stipulated project objectives and outputs for improved access to safe water to the affected population in the outskirts of Baghdad City and IDPs during critical shortages and emergencies.
2. To assess the efficiency and effectiveness of the interventions included in the project in addressing the underlying problem and see if the project has been option to respond to the particular issue/s.
3. To assess the relevance of project components;
4. To understand the extent to which this project has contributed to forging partnership with at different levels including with GOI the Government of Iraq, Civil Society and UN/donors;
5. To appreciate the management arrangements in place by the GOI and/or the beneficiary communities towards the sustainability of various project-initiated services and benefits.
6. To assess the management arrangements (Including procurement procedures .coordinating, monitoring) in place by GOI and/or the beneficiaries towards the sustainability of various programs/ project initiated services and benefits.
7. To assess the opportunities created for employment, especially during implementation;
8. To generate lessons on good practices based on assessment from the aforementioned evaluation objectives and to provide recommendations to GOI, UNICEF and other key stakeholders on how to maximize the results from similar initiatives in comparable situations.

A. Evaluation methodology:
The evaluation process comprised of the following:

**Desk review**
The evaluation team reviewed the project document, progress reports with focus on UNDG ITF and other documentary materials generated during project implementation to extract information, identify key trends and issues, develop key questions and criteria for analysis, and compile relevant data during the preparatory phase of the evaluation. The team also reviewed relevant national strategies to see the links between the project objectives and national priorities.

**Data collection and analysis**
In consultation with UNICEF, related governmental departments the evaluation team identified all stakeholders to be included in the evaluation exercise. Once stakeholders were identified, the evaluation team devised participatory approaches for collecting first-hand information. These included interviews, focus group discussions, observations, end-user feedback survey through questionnaires, etc.

**Field visits to target districts**
Field visits and meetings were held with partner institutions. To the extent possible, beneficiary populations in Baghdad were engaged in the evaluation process to get their feedback and reflection on project benefits.
- Focus group discussions were held with the beneficiaries; Questionnaires were used for beneficiaries from the different capacity building activities.
- Questionnaires were used for beneficiaries from the different capacity building activities.

**Evaluation Guidelines**
In preparation of the evaluation report due consideration was given to the UNEG evaluation guidelines and the UNDG-ITF guidelines on Development Effectiveness and Operational Effectiveness.

Moreover, the evaluation provided a brief description on the following:

- Key implementing agencies;
- Intended outcome(s) and output(s);
- Underlying logic of project design;
- Key assumptions that guided the design and implementation strategies;
- Any major divergences in the design and/or implementation strategy.
- Monitoring arrangements
- Lessons learned.

**Pre-evaluation meetings:**
Prior to the start of the evaluation convention, many meetings took place with the purpose of ensuring the effective coordination between UNICEF and the evaluation team. These meetings laid the groundwork for the evaluation of the project, the main objectives of this meeting were:

- Launch the evaluation convention.
- Ensure the support of the MoE in support of the evaluation convention.
- To agree on the Terms of References for the Independent Evaluation including the evaluation purpose, scope, objectives, methodology and management arrangements.
- Agree on the data collecting methods to be used during the field evaluation.
- To agree on the evaluation sample and geographical coverage.
- To agree on the implementation timetable.
A. Evaluation Field Activities:

A detailed evaluation methodology, approach and programme of work were agreed upon between UNICEF and the evaluation team before the start of the evaluation. The evaluation team met in Amman for orientation, briefing and initial interviews with UNICEF staff in Amman followed by similar discussions/briefings by UNICEF focal points based in Baghdad and the national counterparts.

As the evaluation team started the field work, staff of UNICEF Iraq Office and focal points, facilitated the mission of the team, be it through in-depth interviews or by providing supporting documents on the progress of the various components of the project.

One evaluation team was assigned to implement this project in Baghdad, comprised of one expert field evaluator and one field assistant. The evaluation team collected information and reported to the field coordinator who is based also in Baghdad. Several interviews were made with government staff, UNICEF focal points and beneficiaries.

These activities were coordinated through meetings and interviews with number of the UNICEF focal points and government staff.

B. Limitations:

There were no limitations affecting completion of this evaluation.

7. Evaluation Findings

A. Achievements and Results:

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<th>Original Outputs</th>
<th>Planned/Achieved Outputs</th>
<th>Actual Results</th>
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<tr>
<td>Testing of water at filling points</td>
<td>Achieved, using Delagua Kits at filling points and random samples from trucks.</td>
<td>The visited filling points and reports overlooked show a constant quality of water until now. This is a result of efficient water testing mechanism put in place by this project and still operational</td>
</tr>
<tr>
<td>Trucking water</td>
<td>Achieved, all dispatched trucks are registered in the daily monitoring sheet.</td>
<td>All Truckers were registered on a daily monitoring sheet that included destinations, time of departure and truck number.</td>
</tr>
<tr>
<td>Original Outputs</td>
<td>Planned/Achieved Outputs</td>
<td>Actual Results</td>
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<td>Distribution of water</td>
<td>Achieved, monitors worked closely with community leaders.</td>
<td>According to evaluation activities and interviews; community leaders played a positive role in identifying the most areas in need. Also the distribution of water was very effective in addressing the most needed communities and locations.</td>
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<td>Training of Government staff in managing water tankering operations</td>
<td>Partially achieved. Government staff was involved in monitoring of quality and quantity of distributed water, identification/selection of filling points, water sampling for testing, monitoring equity in water distribution, linkages with the community representatives and reporting. However, initially planned on-the-job training could not be implemented due to highly insecure environment in Baghdad, where water tankering operations were carried out.</td>
<td>There was no training component for government staff on managing water tankering operation, never the less the evaluation results showed that by empowering government staff day-to-day testing and their supervision of water to insure constant quality, their experience and knowledge were improved. Furthermore, by tackling un-employment UNICEF has enhanced capacity building of the local community and raised health awareness among truckers and those involved.</td>
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<tr>
<td>Monitoring and evaluation</td>
<td>Achieved, UNICEF’s monitor submitted daily reports related to log at the filling points, water quality in addition to visiting the end use locations.</td>
<td>Monitoring and evaluation of the above process was eminent to the continuous distribution and quality of water.</td>
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**Testing of water**, through kits provided by UNICEF random samples from trucks and reports water was of constant high quality.

**Trucking water**, all dispatched trucks have been registered in the daily monitoring sheet.

**Distribution of water**, through the employed UNICEF monitors and close coordination with community leaders areas in need were identified.

**Training**, government staff was involved in the day-to-day work supervision of water testing and distribution, but on the job training did not take place.

**Monitoring and evaluation**, through constant site visits of UNICEF monitors to the filling points and daily reports submitted, distribution of safe water was persistent.

The planed outputs aimed to support areas in Baghdad that are in need of safe water by testing, trucking and distribution of safe water. Furthermore, the monitoring and evaluation of the emergency water distribution process led to the success of this project and constant flow of water to hospitals and deprived
areas in need. The evaluation results achieved through interviewing stakeholders, beneficiaries and reviewing project documents shows that this was achieved.

B. Relevance:

The project was responsive to the outcomes of testing of water filling points, trucking water, distribution of water and monitoring & evaluation of water distribution for deprived areas in Baghdad; partially responsive to training of government staff as on the job training could not be conducted to the unstable security situation.

However, the project under evaluation was overall consistent with the planned outcomes and followed the designed recommendations of the project preparation activities and outcomes.

Further to the above, it is important to mention that the project corresponded to the current country strategy, which aims to re-build the infrastructure of Iraq a country that has been overwhelmed by two major wars and more than a decade of sanctions that have resulted in a serious deterioration of essential human requirements like sanitation and sewage. It further pointed out that the Project included concurrent community development to promote local employment and community empowerment.

C. Efficiency and Effectiveness:

According to evaluators’ visits in Baghdad; potable water reached the targeted areas in Baghdad and are listed below:

- Al-Kindi Hospital
- Al-Kerameh Hospital
- Emam Ali Hospital
- Jumleh Asbeiye H Hospital
- Sheikh Dari Hospital
- Ibn Baladi Hospital
- Al-Humeidieh area
- Sabe’ Qusor area
- Diyala Bridge area
- Abu Ghaib
- IDPs in Anbar (7000 in Akashat and 4250 in Kbaisa).
- 2800 UDPs in Kubaisa/ Anbar and 3000 in Singar/Ninevah

All testing equipment received was in accordance with the Bill of Quantities and are in good condition.

After reviewing the project documents and conducting field evaluation, it is safe to conclude that the project was efficiently implemented and was effective as the envisioned outcomes were achieved. The physical targets indicate that the objectives were generally met in Baghdad and have contributed to regular quantities of safe water distribution.
D. **Partnerships**

The main project partners were: UNICEF, Mayorality of Baghdad, Ministry of Municipality and Public Works and United Nations Country Team (UNCT). Other forged partners included families who were supported through employment of their family members involved in water tankering operation.

Through the evaluation field visits; it has been noted that UNICEF has empowered the water authorities in Baghdad by closely involving them in the assessment of the needs, preparation of bills of quantities and the day-to-day supervision of work implementation.

Due to the security limitations the evaluation team noted that new partnerships were accomplished with local community leaders, who facilitated access of project personnel to the targeted sites and secured the cooperation of the local population.

E. **Sustainability**

Safe water testing, trucking and then distribution to deprived areas in Baghdad is now the responsibility of the government who also have oversight responsibility for ensuring that the water distribution remains functional to those in need.

However, the future sustainability of the project will remain dependent on proper and regular maintenance and testing, allocation of the necessary funds towards the running costs and maintaining a core staff that are adequately capacitated to ensure the constant distribution of water.

It has been noted that UNICEF transferred knowledge indirectly to government staff in Baghdad, but could not conduct on the job training due to the security situation.

The major limitation that affected the constant safe water distribution was the security situation. Curfews, road closure, traffic jams all disrupted the regular delivery of water. One of the on-site employees was assassinated at the filling point in Al-Sabe’ Quxor.

F. **Operational development**

Alignment and Harmonization

After reviewing the project documents, including the Joint Needs Assessment studies, the International Compact for Iraq and Millennium Development Goals. It clearly shows that in-depth review was undertaken prior to implementation. During implementation, meetings between UNICEF and related department were held. There was additional ongoing communication between UNICEF and the government focal points.

This project drew on the Joint Needs Assessment, and was designed and reviewed by experienced engineers in its earlier stages. Moreover, Sewerage and water directorates benefited under this project have an engineering and maintenance department that supported the project in all its implementation stages whose work is highly relevant to the work of the project.
Management of Development Results

Mayoralty of Baghdad, Ministry of Municipality and Public Works and United Nations Country Team (UNCT) were involved in the project implementation during all stages. The level of engagement from the GoI was direct and effective.

Restrictions on visa for the Iraqi staff imposed by the Jordanian Authorities until May 2008 negatively affected the timely conduct of a number of training activities in Amman.

National Ownership

It appears to the evaluator, based on the field data and desk review that the government ownership was effective through the participation in the joint needs assessment studies, project implementation and maintenance plan.

Overall Contribution to the ICI, NDS and MDG:

The project under evaluation was in-line with the following priorities identified in the National Development Strategy (NDS), 2005-2007:

a) Provide financial and technical support to water, sewage, and solid waste sectors to achieve pre-2003 levels by the end of this year, including: increasing access to potable water by urban areas by 15% and that of rural areas by 20%; reducing water losses by 10%; raising sanitation coverage by 10% in urban areas; developing city master plans for water and sanitation service in the major cities; building capacity and enhancing management systems.

b) Improve water quality and upgrade the water distribution networks.

c) Develop short- and long-term plans to train executives and supervisory staff for the water and sewerage projects, and to establish high level training centers for this purpose.

d) Provide adequate crude water resources for all regions of Iraq.

The project will also contribute to achieving progress towards the Millennium Development Goals (MDG) in particular the following goals:

- Goal # 4 = Reduce Child Mortality, by contributing to control water-borne diseases and communicable diseases transmitted through environmental channels.
- Goal # 7 = Ensure Environmental Sustainability, by rehabilitation and improvement of solid waste management, water and sanitation systems.
- Goal # 8 = Develop Global Partnership for Development, by maintaining close partnership between the UN organizations and the Government of Iraq.

As well as the project was in line with ICI Benchmarks (as per the Joint Monitoring Matrix 2008):

4.4.1.5. Improve access to water and sanitation by one third
4.4.1.5.2. Undertake specific measures to ensure universal access to services (WatSan, housing, etc.)

Contribution to Partnership:

Based on the evaluation field interviews and desk review, the water authorities MoB and MMPW in Baghdad were closely involved in assessment of the needs, preparation of bills of quantities and the day-to-day supervision of work implementation.
Programme Contribution on Cross-Cutting Issues:

The project under evaluation achieved planned results, and in some cases exceeded them (e.g. Training).
- The project addressed marginalized and vulnerable people in un-served/underserved locations in target governorates.
- Access to safe water and improved sanitation benefitted men, women, boys and girls equally. Overall, the percentage of women participating in the various WatSan training programmes was 26%. Though this is less than the 50% envisaged, it is a positive step considering that the number of women involved in some areas like Operation and Maintenance is limited, and some were less inclined to travel.
- Security situation in target location was stable and all areas were accessible.
- A total of 14,000 person-days of employment had been generated for local residents as skilled and unskilled labor mostly benefitting men and boys.

8. Lessons learned

- Due to the unstable security situation in Baghdad; on the job training could not be conducted. Government staff was involved in the monitoring of quality and quantity of distributed water, identification/selection of filling points, water sampling for testing and monitoring equity in water distribution.

- The technical and financial assistance from UNICEF was of vital importance for implementing the planned activities of the project. Implementation of activities in the target governorate was monitored by UNICEF facilitators in Iraq in close coordination with concerned staff in Amman office. The facilitators provided regular reports on work progress and constraints, supported by photos.

- Due to conservative health awareness among the truckers, a limited number of truckers were employed for tanking and distribution of water due to the filling of other liquids (i.e. fuels) instead of the use of only water.

- High employment turn-over in the government has led to loss of previous water sampling reports and proper documentation system for the water test results.

9. Recommendations for UNICEF and GOI

1. A better documentation system should be put in place to insure the availability of current and history records for water test at the water filling points.

2. Iraq is a resource-rich country both in terms of material and human resources. Consistent with the priorities identified in the National Development Strategy, The GoI should develop plans and allocate adequate funds under the development budgets of the next few years in order to implement projects to address the water distributing to all its rural and urban areas to insure that high quality water be available for all communities.

3. Technical assistance should be sought from UNICEF for enhancing the process of institutional capacity building of water authorities, staff of public health laboratories and other national institutions involved in provision of basic water and sanitation services in the country.
4. An effective system for regular chemical and bacteriological testing, of water should be carried out by trained staff at quality control laboratories in order to ensure that the quality of drinking water.

5. Many of the beneficiaries interviewed had braced UNICEF’s support in 2006-2007 of potable water distribution and are now emphasizing the importance of their continuous support. Since the finalization of the project irregularities in water distribution and malpractice of the use of tankers (filled with different liquids other than water) have led the situation in deprived areas to deteriorate.
1. INTRODUCTION AND CONTEXT

Twenty five years ago, Iraq was considered one of the most developed countries in the Middle East and was ranked among the top countries in term of human well-being indicators. Iraq was also classified by the World Bank as an upper-middle-income country. However, since then, Iraq has been the only Middle Eastern country whose living standard has not improved. Years of political oppression, war and instability have significantly undermined the social well-being. Iraq is currently ranked lower than some of the poorest countries in the world in areas like secondary-school enrolment and child immunization.

Access to safe water and sanitary services had declined well below the 1991 levels. Many waterborne diseases, such as diarrhoea, hepatitis, typhoid, malaria and other parasitical diseases, which once had been under control, reappeared in recent years. Around 70 per cent of childhood diseases are linked to consumption of unsafe water. Poor sanitary conditions and open dumping of garbage contribute to water contamination and lead to insect and rodent infestation.

Water

Most households in Iraq receive their drinking water through pipes. Around 78 per cent of all households in Iraq have drinking water piped directly into their dwelling. However, there is a large variance among regions and between rural and urban areas. On average, 88 per cent of all urban households have piped water as their main source of drinking water. The percentage ranges from 99 and 98 per cent of urban households in Baghdad and the centre respectively to 77 and 75 per cent in the south and north respectively. Other main source of drinking water for urban households is tanker-trucks in the south (19 per cent) and water piped to the yard or compound in the north (19 per cent).

Different drinking water sources exist among rural households. Only 43 per cent of rural households have their drinking water piped into their dwellings; 13 per cent rely on tanker-trucks; and one in every four rural households obtain their drinking water from unsafe natural sources such as rivers, lakes and streams. In southern parts of Iraq, 41 per cent of rural households have unprotected natural sources as their main source of drinking water. In Baghdad, 16 per cent of rural households get their drinking water from natural sources, whereas 12 per cent rely on public taps. In the centre, tanker-trucks, unsafe natural sources, and other sources comprise the alternative to piped drinking water with 12 per cent of rural households relying on one of these as their main source. The two most common sources of drinking water among rural households in the north are piped water to dwellings and unsafe natural sources.

The ILSC of 2004 reported that 33 per cent of all Iraqi households have an unstable supply of drinking water. Three governorates have significantly higher rates of unstable supply of drinking water. In the southern governorates of Al-Muthanna and Kerbala, 54 and 48 per cent of all households suffer from an unstable drinking water supply respectively. In the central governorate of Diala, 47 per cent of households have an unstable supply.
Across the country, 54 per cent of households have access to a safe and stable supply of drinking water; 29 per cent have drinking water from safe sources but with an unstable supply; and 17 per cent of all households (722,000 Iraqis) have neither safe nor stable drinking water. The south has the lowest percentage of households with safe water with as many as 33 per cent of households have neither safe nor stable sources. In the central region 16 per cent of households are without safe sources of stable supply. In other words, in seven governorates less than half of households have access to safe and stable drinking water. Five, including Basrah, Al-Muthanna, Babil, Kerbala, Al-Qadisiya are located in the southern parts of the country and two in the central regions including Slaahuddin and Diala. In Basrah Governorate, three in every four households suffer from unsafe drinking water.

Only 33 per cent of the rural population has access to safe and stable drinking water compared to 60 per cent in urban areas. Only 8 per cent of urban households have unsafe sources and unstable supply of drinking water compared to 48 per cent of rural households. Situation in terms of access to safe drinking water is particularly alarming for rural areas in the southern governorates of Basrah, Thi-Qar, Al-Qadisiya, Wasit, and Babil. More than 40 per cent of rural households in the four governorates of Thi-Qar, Al-Qadisiya, Wasit, and Babil get their drinking water from unprotected natural sources. In Basrah, the alarming situation is caused by the very high reliance on tank-trucks for the delivery of drinking water in both urban and rural areas. Around 85 and 71 per cent of rural and urban households respectively rely on tank-trucks for their drinking water supply.

The physical damaged and lack of maintenance incurred during the war and economical sanctions have in deterioration in basic public services. The proportion of Iraqi’s population that have access to improved sources of water increased from 83.3 in 2000 to 84.2 in 2000. This leaves 15.8 of Iraqis without access to clean drinking water. This is vital as polluted water is a source of dysentery and diarrhoea, the latter being the leading cause of child mortality in Iraq.

**Situation in Baghdad City**

The WatSan Rehabilitation work undertaken by other Agencies and UNICEF in the sector fill-in only partial needs leaving behind WatSan facilities in a number of cities, especially Baghdad crippled and ill-maintained. The lack of adequate budget with the Government affects its ability to undertake rehabilitation and new projects as well as its capacity to run basic WatSan operations. This has led to a situation, where a large number of water supply facilities including water networks, booster stations and water treatment in Baghdad are still in a state of disrepair. Hospitals, often overwhelmed by the victims of violence and internally displaced persons are particularly vulnerable to disruptions in water supply.

Thus, UNICEF has recognized the need of residents in the poorer neighbourhoods of Baghdad City which do not enjoy services where contamination is a serious public health hazards. In summer, potential for water borne disease outbreaks is grave making water tinkering operations even more crucial. Water tinkering operations were estimated to be needed until the first quarter of 2007 by which time services were expected to resume. Given the necessarily situation to keep the tinkering operations ongoing in Baghdad, UNICEF has approached the cluster to avail the needed funds in line with the cluster mandate to increase the percentage of people with access to safe water. Through the Emergency Water Supply Project, UNICEF aims to support the tinkering operations based on the request of the Government. This is seen to enable UNICEF to respond to areas affected by military conflicts and/or emergencies.

**General Project Overview**

The “Emergency Water Supply to un-served/ underserved / vulnerable areas in Baghdad and the IDPs (E3-‘09)” Project aims to support ongoing emergency water supply operations in more than ten un-served and under served residential areas of Baghdad City where water distribution network is either absent or the water is contaminated with sewage water. This is seen necessary to provide water to about 180,000 people and avert possible outbreak of water borne diseases in the most deprived areas within the City. Six
hospitals dealing with the victims of daily incidences of violence and bombing in Baghdad have benefited from the daily distribution, while emergency water supply operations played a major role in providing the needed potable water to Baghdad main hospitals during water cut-offs. The water tinkering operations provided the needed relief to areas affected by chronic shortages until the services therein would be resumed. Indirect beneficiaries include the families who will be supported through employment of their family members involved in water tinkering operations. The actual water delivery started in August 2006 and completed in February 2007. In this period 329,490 cubic meters of water were delivered benefiting approximately 150,000 beneficiaries.

**Development Goal:**
The development goal for the project is to strengthen Government’s capacity to safeguard public health by averting water borne disease outbreaks during critical water shortages and emergencies.

The expected Outcomes and Outputs of the project are illustrated in the following table:

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. To provide access to safe water to the affected population during critical shortages and emergencies</td>
<td>1.1. Adequate safe water available at affected locations</td>
</tr>
<tr>
<td></td>
<td>1.2. Strengthened capacity of Government staff in managing water tinkering operations</td>
</tr>
</tbody>
</table>

Kindly refer to *Annex I* for the Logical Framework

**Target Population**
The Project targets approximately 180,000 people living in the most deprived areas within Baghdad City. Emergency water supply operations aim to provide the needed potable water to Baghdad main hospitals, residential areas, schools and primary health centres.

**Budget:**

<table>
<thead>
<tr>
<th>Project Number</th>
<th>Original Budget (US$)</th>
<th>Revised Budget (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>E3-13a</td>
<td>1,058,652</td>
<td>1,058,652</td>
</tr>
</tbody>
</table>

**Timelines & Extensions:**

<table>
<thead>
<tr>
<th>Project Number</th>
<th>Original duration</th>
<th>Overall duration</th>
<th>Project extensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>E3-13a</td>
<td>1 June 2006 – 31 January 2007 (8 months)</td>
<td>August 2006 – February 2007 (7 months)</td>
<td>NA</td>
</tr>
</tbody>
</table>

**Key Stakeholders:**
- UNICEF
- Mayoralty of Baghdad (MoB)
Key Challenges:
The deteriorated security situation in Iraq has severely affected the water service delivered by the Iraqi water authorities. In addition, it had affected the implementation of water tinkering activity as indicated below:

- The quantity of distributed water was being supplied from filling point scattered in the near by residential areas where potable water is available in the network. Since the tankers supply process continues throughout the whole day and because the number of tankers was large, water shortage in the residential area connected to the same network occurred. As a result the drivers were forced to stop supplying from that filling point or in best cases this was limiting the operation time of the filling point to only few hours during the day.
- Fuel shortage affected daily distribution and quantity of daily water distribution was decreased
- Poor security situation affected the number of trips conducted by drivers per day
- Continuous traffic jams in Baghdad significantly increased the time needed to reach the nearest distribution areas and reduced the number of daily trips conducted by drivers
- The highly unstable electrical power system in Baghdad resulted in unsteady water pumping at the filling points

2. PURPOSE OF THE EVALUATION

This evaluation exercise is part of the UNDG-ITF project evaluation where specific criteria were applied to select some projects for evaluation purposes. This independent evaluation comes at the end of the implementation cycle of the project and aims to assess the overall contribution of the project towards strengthening capacity of Government Authorities in the implementation, operation & maintenance and management of sanitation facilities in Iraq while distilling lessons and good practices to feed into future programming. The evaluation will provide recommendations to enhance operational and programmatic effectiveness of similar initiatives in comparable situations. In addition, the evaluation will assess how UNICEF has contributed towards an enhanced partnership with GOI in addressing access to increased quantity and improved quality of water in Iraq.

The evaluation findings will be disseminated to all stakeholders at different levels including decision makers both within the Government of Iraq and the UN to support in the area of implementation operation & maintenance and management of sanitation facilities.

The evaluation findings will serve as an advocacy tool to demonstrate the results and feasibility of on-the-job training and other specialized training in capacity strengthening of Sewerage and Water Authorities staff in the proper management of sewerage systems to realize the full beneficial impact on the population. The project evaluation will also provide donors with a comprehensive assessment of the results and utilization of their investment in these programmatic areas. In addition, the evaluation will provide evidence of results as planned and accountability towards donors, GOI and the target population. The lessons from the evaluation and the evaluative evidence will also feed into the upcoming UNDG ITF lessons learned process as well as the proposed UNDG ITF project evaluations.
3. EVALUATION OBJECTIVES

The evaluation will address the Organization for Economic Cooperation and Development –Development Assistance Committee (OECD-DAC) evaluation criteria including relevance, effectiveness, efficiency, and sustainability. In addition, the evaluation will also look at the contribution of the project towards partnership building within UN, GOI and civil society. Specifically, the evaluation will be guided by the following key objectives:

1. To assess and showcase the achieved progress and results against stipulated project objectives and outputs for improved access to safe water to the affected population in the outskirts of Baghdad City and IDPs during critical shortages and emergencies.
2. To assess the efficiency and effectiveness of the interventions included in the project in addressing the underlying problem and see if the project has been option to respond to the particular issue/s.
3. To assess the relevance of project components;
4. To understand the extent to which this project has contributed to forging partnership with at different levels including with GOI the Government of Iraq, Civil Society and UN/donors;
5. To appreciate the management arrangements in place by the GOI and/or the beneficiary communities towards the sustainability of various project-initiated services and benefits.
6. To assess the management arrangements (including procurement procedures, coordination, monitoring) in place by GOI and/or the beneficiaries towards the sustainability of various programs/project initiated services and benefits.
7. To assess the opportunities created for employment, especially during implementation;
8. To generate lessons on good practices based on assessment from the aforementioned evaluation objectives and to provide recommendations to GOI, UNICEF and other key stakeholders on how to maximize the results from similar initiatives in comparable situations.

4. SCOPE OF THE EVALUATION

This evaluation will follow the project geographical coverage as guided by the project document, more focus would be given to selected areas where intensified interventions were conducted focusing on both direct and indirect project beneficiaries and implementing partners including officials from the Mayorality of Baghdad, Ministry of Municipalities & Public Works and UNICEF staff.

Technically, the evaluation will cover all key components as per project design including:

- Testing of water at filling points
- Trucking water
- Distribution of water
- Training of staff in managing water tinkering operations

5. KEY EVALUATION QUESTIONS

Achievements and results

- How the project components have contributed to the realization of underlying project objectives, as perceived by the beneficiaries?
• Has the project been able to achieve the stipulated project results?
• How has the project contributed to enhancing access to safe water in select locations in Baghdad City and for IDPs?
• What has been the contribution of this project towards national priorities identified in NDS, ICI and MDGs?

**Efficiency and effectiveness**

• To which extent the project activities were implemented in a cost-effective way vis-à-vis the Iraqi context?
• How did the project results contribute to improved access to safe water in emergencies within the outskirts of Baghdad City and for IDPs?

**Relevance**

• Were the project strategies tailored to the current Iraqi context and in line with the national policies, priorities and strategic plans?

**Partnerships**

• Who are the partners in this project? How they are selected? Has the project forged new partnerships/ strengthened existing partnerships and how?
• What factors hindered or fostered effective partnership development?
• To what extent has the project contributed to capacity development of the involved partners?

**Sustainability**

• What is current status of the project components? Are functions and facilities still maintained? Who is responsible for the management and oversight of project facilities after the project closure?
• What is current status of services provision in the country and high priority governorates? Has the service provision been affected (negatively or positively) after the end of the project cycle and why?
• Has the project resulted in knowledge transfer from those who were trained and capacitated in different competencies and how?
• How the project did address the issues of insecurity during the implementation phase? Were there any risk mitigation undertaken? If yes, how?

**Lessons learned and good practices**

• What are the good practices that have resulted from this project? How and why some these practices can be labeled as a ‘good practice’? Substantiate with evidence.
• What are the key lessons learned from the project implementation? What recommendations could be replicated in similar projects implemented in comparable situations?
• Are there any specific recommendations to be considered when designing similar projects in the future?

**Other considerations:**

• Value-added of the programmes and projects in comparison with alternatives
• UN’s partnership strategy and its relation to effectiveness in achieving the outcome
• UN’s strategic positioning and its comparative advantage
• Cross-cutting issues applicable to the project/ programme
• Operational effectiveness of the programme/project and the extent to which underlying strategies, processes and management structures contribute to development effectiveness of each UNDG ITF programme/project.
• Each evaluation question should be substantiated with evidence and disaggregated information by sex, ethnicity, location and/or other relevant criteria.

Please also refer to Annex 2 and Annex 3 for recommended questions on development and operational effectiveness respectively. The suggested questions will generate the necessary evaluative evidence and information at programme/project level to feed into the UNDG ITF Lessons Learned Exercise.

6. EVALUATION METHODOLOGY

A detailed evaluation methodology, approach and programme of work will be agreed upon between the UNICEF and the evaluation team before the start of the evaluation. The evaluation team will meet in Amman for orientation, briefing and initial interviews with UNICEF staff in Amman followed by similar discussions/briefings by UNICEF staff based in Baghdad and Erbil and the national counterparts. An inception report will be prepared by the Evaluation Team Leader outlining the evaluation framework, key challenges if any and implementation arrangements including a detailed work plan.

Desk Review

The evaluation team will review the project document, progress reports, external reviews and evaluations with focus on UNDG ITF and other documentary materials generated during project implementation to extract information, identify key trends and issues, develop key questions and criteria for analysis, and compile relevant data during the preparatory phase of the evaluation. The team will also review relevant national strategies to see the links between the project objectives and national priorities.

Data collection and analysis

In consultation with UNICEF the evaluation team will identify all stakeholders to be included in the evaluation exercise. Once stakeholders are identified, the evaluation team will devise participatory approaches for collecting first hand information. These will include interviews, focus group discussions, observations, end-user feedback survey through questionnaires, etc.

Field visits to target districts

Field visits will be conducted to all project sites and meetings will be held with all partner institutions including water quality labs at national and high priority governorates where intensified project activities were implemented. To the extent possible, field surveillance officers and beneficiary populations in all districts will be engaged in the evaluation process to get their feedback and reflection on project benefits.

• Field visits to the sites where focus group discussion will be held;
• Field visits to the areas where the services have been provide through this project where questionnaires, focus group discussions, interviews and site observations will be used to gather the needed information;
• Focus group discussions will be held with the community leaders and Sheikhs and the beneficiaries from the upgraded services;
• Questionnaires will be used for beneficiaries from the different capacity building activities including the six government staff who received on-the-job training.
7. EXPECTED DELIVERABLES

The expected outputs from the evaluation exercise are:

- Output and possible outcomes Evaluation Report agreeable to the UN Evaluation Groups (UNEG) standards and requirements is produced;
- Presentation of the final report to the UNICEF team.

The evaluation report will contain but not limited to:

- Assessments of project management and implementation process, highlighting (Quality of works, deviations from the plan and variation orders if any)
- A detailed assessment of project achievements – what went well and why? What went wrong and why?
- Relevance of the project design in addressing underlying problems
- Sustainability of the project
- Assessment of project’s effectiveness in addressing the key problems associated with water quality
- Efficiency of the project components/approaches in delivering water quality control services (resource usage)
- Overview of partnerships developed and coordination mechanisms in support of project implementation
- Lessons learned
- Recommendations on future projects development and implementation:
  - Defining good management/implementation practices, opportunities and challenges.
  - Other appropriate recommendations on implementation arrangements.

It should include a description of:

- how gender issues were implemented as a cross-cutting theme in programming, and if the project gave sufficient attention to promote gender equality and gender-sensitivity;
- whether the project paid attention to effects on marginalized, vulnerable and hard-to-reach groups;
- whether the project was informed by human rights treaties and instruments;
- to what extent the project identified the relevant human rights claims and obligations;
- how gaps were identified in the capacity of rights-holders to claim their rights, and of duty-holders to fulfill their obligations, including an analysis of gender and marginalized and vulnerable groups, and how the design and implementation of the project addressed these gaps;
- how the project monitored and viewed results within this rights framework.

The evaluation report outline should be structured along the following lines:

- Executive summary
- Introduction
- Description of evaluation methodology with challenges
- An analysis of situation in line with evaluation objectives and key evaluation questions
- Findings and Conclusions
- Recommendations
- Lessons learned
• Annexes

The evaluation report should not exceed 30 pages in total (excluding annexes). First draft of the report should be submitted to the UNICEF Iraq Offices within 2 weeks of completion of in-country evaluation process.

8. COMPOSITION, SKILLS AND EXPERIENCE OF THE EVALUATION TEAM

Requirements and Qualifications of the Independent Evaluators:

The evaluation will require the following functions, competencies and skills:

1. Evaluation team leader with documented experience in:
   a. Designing and managing complex evaluations;
   b. Leading multi-disciplinary and multi-cultural teams of evaluators;
   c. Development projects in Arab speaking countries;
   d. Development projects related to Health sector response;
   e. Designing and supervising qualitative and quantitative field surveys;
   f. Drafting evaluation reports in line with agreed UN and DAC standards;
   g. Excellent command of English (excellent drafting skills to be demonstrated).

2. National evaluators with documented experience in evaluations

The evaluation team must have the necessary technical competence and experience to assess the quality of the technical assistance provided under this project.

The execution of the evaluation will require full command and control of the specific situation in Iraq and full respect of the UN security rules for Iraq. The ability to carry out field operations in Iraq is a key requirement and must be demonstrated.

The evaluation team leader will be responsible for elaboration of an evaluation strategy, including the design of field surveys and elaboration of questionnaires; guiding the national evaluators for their field work in Iraq; analysis of survey results; gathering of complementary information from project staff, collaborators and stakeholders through telephone interviews and other means; and preparing a presentation of conclusions and recommendations as well as a final evaluation report.

The evaluator(s) will be responsible for carrying out the field surveys (under the guidance of the team leader). The field surveys will provide the foundation for the evaluation and must therefore be executed in line with the highest standards of professionalism and impartiality.

The evaluation unit of UNICEF will be responsible for the quality control of the evaluation process and report. It will provide inputs regarding findings, lessons learned and recommendations from other evaluations, ensuring that the evaluation report is in compliance with established evaluation norms and standards and useful for organizational learning of all parties.

The UNICEF office in Amman and Iraq will logistically and administratively support the evaluation team to the extent possible. However, it should be understood that the evaluation team is responsible for its own arrangements for transport, lodging, security etc.
9. MANAGEMENT ARRANGEMENTS

The Evaluation will be undertaken by independent evaluator/s (individual consultant/s or organization) that is in line with the UNEG Norms and Standards and in accordance with the parameters included in the terms of reference.

The evaluation will be undertaken in close consultation with the three line ministries and efforts will be made to allow the GOI partner/s to drive the evaluation process in line with UNEG Norms and Standards.

Role of UNICEF:
- Provide project background information and any other relevant data required by the evaluation team
- Ensure that all stakeholders are informed about the evaluation process
- Oversee the process in accordance with the agreed terms of reference and the UNEG Norms and Standards, and ensure that the process remains neutral, impartial and independent
- Approve the evaluation final report and disseminate evaluation findings
- Facilitate the field work for the evaluation team and contact with the MMPW and other relevant partners and stakeholder
- Provide management response to evaluation findings and recommendations

Role of National Counterparts
In line with Paris Declaration, the national counterparts will be encouraged to participate in the evaluation process right from planning to sourcing information to the dissemination of evaluation findings and contribution to management response. This would enhance national ownership of the process and promote the spirit of mutual accountability.

Role of Evaluation Team/ Evaluator/s
The Evaluation Team is responsible for:
- Undertaking the evaluation in consultation with UNICEF and line ministries and in full accordance with the terms of reference;
- Complying with UNEG Norms and Standards as well as UNEG Ethical Guidelines;
- Bringing any critical issues to the attention of the Evaluation Manager (appointed by UNICEF) that could possible jeopardize the independence of the evaluation process or impede the evaluation process;
- Adhering to the work plan, to be mutually agreed with UNICEF, as commissioner for this evaluation; and
- Ensuring that the deliverables are delivered on time, following highest professional standards.

The evaluation team will report to the Evaluation Task Manager while providing regular progress updates on the overall process to UNICEF Senior Management.

GOI- UNICEF Task Force:
A UNICEF-GOI team will be formed to provide oversight and overall guidance to the evaluation process. The team will comprise of coordinators nominated by the line ministries to coordinate this process within
the ministries at governorate and district levels as well as a focal points from UNICEF

The team will oversee that the evaluation process is in line with the TORs, UNEG Norms and Standards and implemented in a participatory, neutral and impartial manner.

10. INDICATIVE WORK PLAN

<table>
<thead>
<tr>
<th>Phase</th>
<th>Key Activities</th>
<th>Time Frame*</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparatory phase</td>
<td>Agreement on methodology and detail work plan</td>
<td>February 2010</td>
<td>Evaluation Team, UNICEF, and GOI</td>
</tr>
<tr>
<td></td>
<td>Participate at the initial stakeholder meeting to launch the evaluation process</td>
<td>February 2010</td>
<td>UNICEF and Evaluation Team</td>
</tr>
<tr>
<td>Field work/ Data Collection</td>
<td>Review of documents, reports, supporting materials</td>
<td>February 2010</td>
<td>Evaluation Team</td>
</tr>
<tr>
<td></td>
<td>Meetings with GOI counterparts on the field work</td>
<td>February 2010</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Finalize questionnaires for primary data collections</td>
<td>March 2010</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Visit project facilities</td>
<td>March 2010</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Meeting with secondary beneficiaries (community leaders, sheikhs and project beneficiaries)</td>
<td>March 2010</td>
<td></td>
</tr>
<tr>
<td>Data Analysis</td>
<td>Undertake data analysis of the qualitative and quantitative data acquired from the field work and data collection processes</td>
<td>March 2010</td>
<td>Evaluation Team</td>
</tr>
<tr>
<td>Reporting preparation</td>
<td>Preparation of the draft evaluation report</td>
<td>March 2010</td>
<td>Evaluation Team</td>
</tr>
<tr>
<td></td>
<td>Presentation on draft findings/ report to UNICEF</td>
<td>April 2010</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Finalization of the Report based on feedback from peers, MMPW and UNICEF</td>
<td>April 2010</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Submission of Evaluation report to UNICEF and GOI</td>
<td>April 2010</td>
<td></td>
</tr>
<tr>
<td>Dissemination</td>
<td></td>
<td>To be advised</td>
<td>UNICEF</td>
</tr>
</tbody>
</table>
ANNEX B: Source of Information

I. Desk study documents:

Project Progress Reports
- UNDG ITF Final 6 Monthly Report / UNICEF E3-09
- UNDG ITF Six Monthly Report June - December 2006 E3-09

Strategic Programme Documents
- UN Assistance Strategy 2008-10

Normative Guidance
- UNEG Norms for Evaluation
- UNEG Standards for Evaluation
- UNEG Ethical Guidelines
- UNDG RBM Harmonized Terminology

II. Preliminary interviews
- UNICEF Amman Office
- UNICEF Iraq

III. In-depth Interviews

<table>
<thead>
<tr>
<th>Governorates</th>
<th>Location / Job description</th>
<th>Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baghdad</td>
<td>UNICEF representative</td>
<td>Eng. Ali Ayoub</td>
</tr>
<tr>
<td>Baghdad</td>
<td>UNICEF</td>
<td>Dr. Ali Ismael</td>
</tr>
<tr>
<td>Baghdad</td>
<td>Mayoralty of Baghdad MMPW</td>
<td>Eng. Mohamed Majeed</td>
</tr>
<tr>
<td>Baghdad</td>
<td>Mayoralty of Baghdad MMPW</td>
<td>Eng. Munther Adnan Sarhan</td>
</tr>
<tr>
<td>Baghdad</td>
<td>Municipality Council</td>
<td>Abo Mohamed</td>
</tr>
</tbody>
</table>

Beneficiaries from targeted areas

Attendance for the pre evaluation meetings

<table>
<thead>
<tr>
<th>UNICEF</th>
<th>SOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. Charlie Hrachya (Chief of WASH)</td>
<td>Mr. Basil Sadik (Director)</td>
</tr>
<tr>
<td>Mr. Deen Kaphle (Chief of Operation)</td>
<td>Dr. Dina Al Tayar (Project Coordinator)</td>
</tr>
<tr>
<td>Ms. Padma M. Karunaratne (Chief of planning, monitoring &amp; evaluation)</td>
<td></td>
</tr>
<tr>
<td>Eng. Waleed Al-Dhahi</td>
<td></td>
</tr>
<tr>
<td>Eng. Ali Ayoub</td>
<td></td>
</tr>
<tr>
<td>Eng. Mahmoud Shakir</td>
<td></td>
</tr>
</tbody>
</table>
ANNEX C: Field Evaluation Guidelines:

Objectives/Activities: 1 to 3

The “Emergency Water Supply to un-served/ underserved / vulnerable areas in Baghdad and the IDPs (E3-“09)” Project aims to support ongoing emergency water supply operations in more than ten un-served and underserved residential areas of Baghdad City where water distribution network is either absent or the water is contaminated with sewage water. This is seen necessary to provide water to about 180,000 people and avert possible outbreak of water borne diseases in the most deprived areas within the City. Six hospitals dealing with the victims of daily incidences of violence and bombing in Baghdad have benefited from the daily distribution, while emergency water supply operations played a major role in providing the needed potable water to Baghdad main hospitals during water cut-offs. The water tinkering operations provided the needed relief to areas affected by chronic shortages until the services therein would be resumed. Indirect beneficiaries include the families who will be supported through employment of their family members involved in water tinkering operations. The actual water delivery started in August 2006 and completed in February 2007. In this period 329,490 cubic meters of water were delivered benefiting approximately 150,000 beneficiaries.

The evaluation will address the Organization for Economic Cooperation and Development –Development Assistance Committee (OECD-DAC) evaluation criteria including relevance, effectiveness, efficiency, and sustainability. In addition, the evaluation will also look at the contribution of the project towards partnership building within UN, GOI and civil society. Specifically, the evaluation will be guided by the following key objectives:

Project activities:
- Testing of water at filling points
- Trucking water (329,490 cubic meters)
- Distribution of water to more than ten un-served and underserved residential areas of Baghdad City including 6 hospitals.
- Training of staff in managing water tinkering operations.
- Indirect beneficiaries include the families who will be supported through employment of their family members involved in water tinkering operations.

Project under evaluation duration:
The original duration of this project was 8 months starting from 1 June 2006; however the overall actual duration was from 1 June 2006 to February 2007 (1 month delay).

Project location:
The project was implemented in vulnerable areas in Baghdad

Stakeholders for each activity:

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<tr>
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<th>Activity # 1</th>
<th>Activity # 2</th>
<th>Activity # 3</th>
<th>Activity # 4</th>
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<tbody>
<tr>
<td>1</td>
<td>UNICEF local Staff</td>
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<td>2</td>
<td>Mayoralty of Baghdad</td>
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<td>Ministry of Municipality (MMPW)</td>
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<td>City Council</td>
<td>City Council</td>
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<td>Community Leaders</td>
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General evaluation guidelines:

1. Visit the filling points within Baghdad and report on the condition and sustainability of their operation and intended purpose, including water and sanitation facilities.
2. What is their opinion of the project idea in general?
3. Was the outcome the way they were expecting?
4. What were they expecting? Ask them about this in detail!! Even if they said yes with the previous question. Was their answer (expectations) according to the proposal?
5. According to the project ToR the project implementation should take 8 months and started on 1 June 2006 but ended in February 2007 (1 month delay):
   a) What was the reason for this delay? (lack of funds, government regulations, government approvals, contracting, others)
   b) How did UNICEF, Municipality and other stakeholders deal with this delay.
   c) How did this delay affect the project outputs and objectives?
6. How is the design of the project activities relevant to the context and actual needs of the targeted communities?
7. How do the proposed interventions and project activities have a potential for replication for other sewage systems in other governorates?
8. How the needs, purpose and overall objectives were properly defined before the rehabilitation started? (please clarify the mean in which the needs were defined and involved stakeholders during the need assessment stage)
9. What were the challenges during project implementation? (security, logistics, coordination, legislations, government approval, funds, contractors capacity, cooperation among stockholders, UNICEF procedures, others)
10. What was the role of the Municipality in this project? What was the contribution of other ministries in the implementation of this project? Ministries that contributed to the implementation of this project:
    a) Ministry of Health
    b) Ministry of Municipality
11. In general how was the situation of the surrounding community before implementation of the project? (Accessibility to WATER, Quality of the WATER)
12. How did the situation of the surrounding communities improve after the implementation of the project? (Accessibility to WATER, Quality of the WATER)

In addition to the aforementioned guidelines/questions SOC are also seeking to elaborate on the below questions:

Achievements and results

- How the project components have contributed to the realization of underlying project objectives, as perceived by the beneficiaries?
- Has the project been able to achieve the stipulated project results?
- How has the project contributed to enhancing access to safe water in select locations in Baghdad City and for IDPs?
- What has been the contribution of this project towards national priorities identified in NDS, ICI
and MDGs?

**Efficiency and effectiveness**

- To which extent the project activities were implemented in a cost-effective way vis-à-vis the Iraqi context?
- How did the project results contribute to improved access to safe water in emergencies within the outskirts of Baghdad City and for IDPs?

**Relevance**

- Were the project strategies tailored to the current Iraqi context and in line with the national policies, priorities and strategic plans?

**Partnerships**

- Who are the partners in this project? How they are selected? Has the project forged new partnerships/ strengthened existing partnerships and how?
- What factors hindered or fostered effective partnership development?
- To what extent has the project contributed to capacity development of the involved partners?

**Sustainability**

- What is current status of the project components? Are functions and facilities still maintained? Who is responsible for the management and oversight of project facilities after the project closure?
- What is current status of services provision in the country and high priority governorates? Has the service provision been affected (negatively or positively) after the end of the project cycle and why?
- Has the project resulted in knowledge transfer from those who were trained and capacitated in different competencies and how?
- How the project did address the issues of insecurity during the implementation phase? Were there any risk mitigation undertaken? If yes, how?

**Lessons learned and good practices**

- What are the good practices that have resulted from this project? How and why some these practices can be labeled as a ‘good practice’? Substantiate with evidence.
- What are the key lessons learned from the project implementation? What recommendations could be replicated in similar projects implemented in comparable situations?
- Are there any specific recommendations to be considered when designing similar projects in the future?

**Other considerations:**

- Value-added of the programmes and projects in comparison with alternatives
- UN’s partnership strategy and its relation to effectiveness in achieving the outcome
- UN’s strategic positioning and its comparative advantage
- Cross-cutting issues applicable to the project/ programme
- Operational effectiveness of the programme/ project and the extent to which underlying strategies, processes and management structures contribute to development effectiveness of each UNDG ITF programme/ project

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Each evaluation question should be substantiated with evidence and disaggregated information by sex, ethnicity, location and/or other relevant criteria.

**Field evaluation guidelines per activity**

**Activity 1:**

**a) Achievements and Results:**
1. What is the water tests required and what stakeholder is responsible for selecting these tests.
2. How implement these tests.
3. What is the mechanism implemented to carry these tests.
4. Assess the testing mechanism during the project implementation (check tests results and charts)
5. During the site visit make sure to check if the filling points where visited? How many times/month?
6. Are the beneficiaries happy with the service?
7. If there are any comments, WRITE these down. i.e. Should it have been different? Was it needed?

**b) Efficiency and Effectiveness:**
1. Describe the drinking water services before and after the testing.
2. How could the intervention have been done better, faster and more cost economic?
3. To what extent, this activity participates in improving access to safe water.
4. To what extent, this activity participates in reduction in incidences of water borne diseases.
5. To what extent, this activity participates in reduction of time spent in fetching water.
6. What is the number of beneficiaries served?

**b) Relevance**
1. Was the project implemented according to plan? Everything finished on time?
2. If not, why not? Was UNICEF informed on time?
3. How have the conditions of the intended beneficiaries group changed since the beginning of the development intervention?
4. Assess the preliminary studies carried by UNICEF to justify the project and needs.

**c) Partnership**
1. Has the project strengthened existing partnerships and how?
2. What factors hindered or fostered effective partnership development?
3. Were stakeholders consulted before starting the implementation and during planning and designing stage
4. To what extent has the project contributed to capacity development of the involved partners?
5. Were there a sense of ownership among stakeholders (DoH, Municipality, community leaders, others)

**d) Sustainability**
1. Are project activities still implemented and by whom.
2. Are stakeholders still carrying water tests to insure the water quality?
3. How are objectives in line with needs, priorities and partner government policies?
4. Are all planned beneficiaries using or benefiting from the projects’ results?
5. Did the rehabilitation face any problems during the implementation period?

**e) Lessons Learned**
1. What could have been done better when implementing similar activities in the future?
2. What are the good practices that have resulted from this project?
3. How and why did some of these practices be labeled as a ‘good practice’? Substantiate with evidence.
4. What should have been done differently? Quotes of direct and indirect beneficiaries (please state the person interviewed name, age, gender and occupation)
5. Assess the output from this intervention.

Activity 2 and 3:

b) Achievements and Results:
1. What is the number of beneficiaries served by tinkered water per day?
2. What is the number of locations served per day?
3. What is the number of tanker-trips per day to each location?
4. What is the quantity of water distributed in each location per day? (is there standard for each family or random distribution of quantities)
5. What is the number of tankers used for filling/distribution per day?
6. Describe the trucking and distribute mechanism (is there water holding tank in the neighborhood or directly from the water tanker to beneficiaries by jerry cans)
7. What is the quantity of water filled-in and trucked per day?
8. Are the beneficiaries happy with the service?
9. If there are any comments, WRITE these down. i.e. Should it have been different? Was it needed?

f) Efficiency and Effectiveness:
1. Was there any delay in the project implementation and what was the reason?
2. Describe the drinking water services before and after the delivery of tinkered water.
3. To what extent these activities participated in lifting the suffering from the benefitted communities.
4. Was the tinkered water delivery implemented according to plan?
5. How could the intervention have been done better, faster and more cost economic?
6. To what extent, this activity participates in improving access to safe water.
7. To what extent, this activity participates in reduction in incidences of water borne diseases.
8. To what extent, this activity participates in reduction of time spent in fetching water.
9. What is the quantity of water provided to affected beneficiaries per day?

g) Relevance
1. Was the project implemented according to plan? Everything finished on time?
2. If not, why not? Was UNICEF informed on time?
3. How have the conditions of the intended beneficiaries group changed since the beginning of the development intervention?
4. Assess the preliminary studies carried by UNICEF to justify the project and needs.

h) Partnership
1. Has the project strengthened existing partnerships and how?
2. What factors hindered or fostered effective partnership development?
3. Were stakeholders consulted before starting the implementation and during planning and designing stage
4. To what extent has the project contributed to capacity development of the involved partners?
5. Assess the cooperation among the rehabilitation contractors and supply contractors with Municipality/DoH in the governorate.
6. Were there a sense of ownership among stakeholders (Municipality, community leaders, others)

i) Sustainability
1. Examine the warranty period.
2. How are objectives in line with needs, priorities and partner government policies?
3. Are all planned beneficiaries using or benefiting from the projects’ results?
4. Did the rehabilitation face any problems during the implementation period?
5. Did both of the benefited sites complete the rehabilitation and are they operational now?

j) Lessons Learned
   1. What could be done to make the rehabilitation more effective when implementing similar activities in the future?
   2. What are the good practices that have resulted from this project?
   3. How and why did some of these practices be labeled as a ‘good practice’? Substantiate with evidence.
   4. What should have been done differently? Quotes of direct and indirect beneficiaries (please state the person interviewed name, age, gender and occupation)
   5. Assess the output from this intervention.

Activity 4:
a) Achievements and Results:
   1. What is the number of government staff trained?
   2. Where did the training take place?
   3. What was the government staff trained on?

b) Efficiency and Effectiveness:
   1. Did beneficiaries benefit from the training?
   2. Do beneficiaries practice what they were trained on?
   3. Was the training in line with the needs?
   4. Assess the maintenance tools provided to this maintenance team under this project
   5. Were there any maintenance systems for the project (delivery of tinkered water, testing) in place, once the project was handed over to the related government department?
      a) Is the maintenance system functional?
      b) If not, why not, and what are the problems?
      c) Can these be solved? How, and how quickly?
      d) Who is responsible for providing the maintenance? UNICEF, Municipality, other?

c) Relevance
   1. Assess the maintenance of the training materials.
   2. Assess the training plan
   3. Assess the training agenda.
   4. Describe the maintenance structure.
   5. Assess the background of the maintenance team benefited from this project.
   6. Assess the background of the trainers
   7. Is there a maintenance plan (visits, what to check in each visit)

d) Partnership
   1. How could the intervention have been done better, faster and more cost economic?
   2. Were government staff, trainers and other stakeholders consulted during training planning and workshops design?

e) Sustainability
   1. Has the project resulted in knowledge transfer from those who were trained and capacitated in different competencies and how?
f) **Lessons Learned**

1. What are the good practices that have resulted from this project?
2. How and why did some of these practices be labeled as a ‘good practice‘? Substantiate with evidence.
3. What should have been done differently?
Annex D: Pictures:

Water Trucking
ANNEX E: SOC background:

Stars Orbit Consultants is an external Monitoring and Evaluation organisation; its strength lies in the long experience of the corporate management team and its employees. SOC’s mission is to achieve professional Monitoring and Evaluation aiming to evaluate the past, monitor the present and plan for the future.

Between 2004 and 2009, SOC successfully performed Monitoring and Evaluation activities on more than 200 programmes and grants on behalf of donors and international organisations in various parts of Iraq including (Baghdad, Basrah, Missan, Thi Qar, Mothanna, Qadissiya, Najaf, Babil, Karbala, Anbar, Mosel, Salah El Din, Diyala, Kurkuk, Erbil, Sulaymanyia and Dohuk), the Monitoring and Evaluation activities have been carried out by more than 30 qualified, well trained and professional employees stationed in all the 18 governorates.

Since most of the projects implemented in Iraq are now remotely managed from outside Iraq, the need for professional, effective, objective and honest Monitoring and Evaluation mechanism starts to grow to ensure that the program meets its original objectives, donor perspective and expected outputs.

For more details on SOC and its activities, please visit www.starsorbit.org