



## COMPLETION REPORT FOR COMMUNITY-BASED INTEGRATED WATSAN REHABILITATION AND MANAGEMENT PROJECT (E3-05)

### Summary

**Participating UN Organisation:**

UN-HABITAT

**Cluster:**

Cluster E - Infrastructure Rehabilitation

**Project No. and Project Title:**

E3-05

Community-Based Integrated WATSAN  
Rehabilitation and Management Project

**Project Location/Region/Province:**

14<sup>th</sup> Ramadan Neighbourhood  
Diwaniya City, Qadisiya Governorate

**Reporting Period:**

12 Sept. 2005 – 31 Dec 2006

**Report Number:****Counterpart organisations / implementing partners:**

Ministry of Construction & Housing (MoCH)  
Ministry of Municipalities & Public Works (MMPW)  
Local Directorates at Diwaniya City  
LIFE for Relief & Development

**Project cost:**

USD 1,983,516

**Abbreviations and acronyms:**

Gol – Government of Iraq  
INGO – International Non-Governmental Org.  
O&M – Operation & Maintenance  
SWM – Solid Waste Management  
UNICEF – United Nations Children's Fund  
WHO – World Health Organization  
Watsan – Water & Sanitation

**Project Duration:**

12 Sept. 2005 – 31 Dec 2006

## I. Purpose

### **Main objectives and outcomes expected as per approved Project/Programme/project document:**

The main objective of the project was:

To demonstrate within six months an effective context specific strategy for helping the Government of Iraq meet its aspiration of delivery of 'quick impacts' in the water supply & sanitation sector. In the longer term this will provide policy & strategy pointers to help GoI meet its commitment to achieving the Millennium Development Goal 7, Targets 10 & 11 and the HABITAT Agenda.

In this context, the project had two inter-linked sub objectives:

1. To improve the living conditions and reduce health risks in the 14<sup>th</sup> Ramadan Neighbourhood in Diwaniya city through community based infrastructure rehabilitation and management of services; and
2. To provide (document & widely disseminate) a replicable model with best practices in community empowerment, participatory planning, implementation and management of basic services.

To this end, the expected Outcome was:

An overall improvement in the 'Quality of Life' of poor residents brought about by qualitative changes in availability of basic services and strengthened appreciation of environmental health issues.

Output:

1. Improved access to **water supply and sanitation services** for 950 households (of which 110 are women-headed households) through rehabilitation and new capital infrastructure works, that will also generate at least 9000 person days of direct labour and local consultancy assignments;
2. Effectively functional community based Solid Waste Management system that will generate 15,000 person days of local employment per annum in the management of services;
3. Improved 'all weather' accesses from all individual houses to main roads and establishment of a street cleaning programme ;
4. Universal coverage (in the neighbourhood) of the public outreach programme on environmental health;
5. Improved housing for atleast 300 households through a housing rehabilitation programme of the Ministry of Construction & Housing, in partnership with UN-HABITAT; and
6. Improved community capacity in planning, implementation & management of Watsan services.

### **Reference to how the programme/project related to the UN Assistance Strategy to Iraq and how it aimed to support Iraq national development goals and the Millennium Development Goals:**

The project addresses the following:

**National longer-term priority or goals:** To reduce the percentage of people without access to safe drinking water and sanitation by 50% by 2015 (MDG/ICSD) and to contribute significantly to reaching the infant mortality rate and nutrition MDG;

**High-level/ Infrastructure Rehabilitation cluster outcome by the end of 2005:** Recover water and sanitation coverage to 1990 levels (urban water 97% rural water 75% sanitation 75%);

**High-level/ Infrastructure Rehabilitation cluster outcome by the end of 2007:** Decentralised management with strong public private partnerships and community involvement (particularly women) achieving water and sanitation service approaching 1980s levels (urban 350 lcd, rural 250 lcd).

Further, the project also addresses the priorities and objectives of the new **Iraq National Development Strategy** of improving the quality of life through provision of clean drinking water, the

reduction of maternal and infant mortality, and the promotion of private sector led implementation of local community projects. The project also supports Gol efforts in meeting its commitment towards Millennium Goal 7, Targets 10 and 11.

### **Project Management arrangements**

The project was managed by a project implementation unit comprising of the UN HABITAT Project Coordinator, representatives of the Local Council (LC), Municipality & Housing Commission, representative of the local Water Supply and Sewerage Directorates and two UN HABITAT Technical Field Supervisors.

All physical rehabilitation and new capital works were planned and designed by the Technical Team engaged by UN HABITAT, who also worked in close consultation with the local authorities and the LC functionaries. Local contractors, whose services were procured by UN HABITAT, executed all physical works. Although it was originally intended to package the physical works in a number of small contracts to maximise local employment generation, eventually the entire work was executed by a single big Contractor largely using mechanised processes. This was to ensure timely completion and also minimise the period of disruption in essential services.

LC functionaries were appropriately involved in all procurement processes. Regular supervision, management and monitoring were carried out by the UN HABITAT field supervisor and consultants. Relevant Local Authorities were periodically involved in the supervision of physical infrastructure works and in the process of final measurement of works and handover upon completion. Only the solid waste dumpers were procured internationally through a competitive process managed by the United Nations Office in Nairobi.

The field teams also led on the mobilization of the local community, establishment and capacity building of Neighbourhood Committees (NC). The international NGO (M/s. LIFE) was responsible for the design and rolling out of the Outreach Programme.

Throughout the life of the project, UN-HABITAT maintained close and regular contact with the concerned line ministries in Baghdad, namely the Ministry of Municipalities & Public Works and Ministry of Construction & Housing. Monthly progress reports were shared with them as well as with UNCT Infrastructure Cluster, the Office of the DSRSG (HRD) and the UNDG ITF.

## II. Resources

**Total approved budget and summary of resources used for the programme/project from the UNDG Iraq Trust Fund (and non-Trust Fund resources where applicable):**

[UNDG ITF funds received.](#)

The project was able to leverage approximately \$1.5 million from the Ministry of Construction and Housing for housing rehabilitation. However, this was utilized through direct procurement by the Ministry as a parallel project.

CATEGORY	UNDG ITF approved budget	Actual COST	Percentage of Approved	Comments
<b>1. Personnel</b> · including staff and consultants	144,000	152,119.40	5.64	The implementation took longer than planned and this required for project management and supervisory staff to be retained for a longer duration
<b>2. Contracts</b> · including companies, professional services, grants	1,369,000	1,451,284.52	6.01	More works were undertaken
<b>3. Training</b>	20,000	19,698.75	-1.51	
<b>4. Transport</b>	10,000	9500	-5.00	
<b>5. Supplies and commodities</b>	6,000	4,354.64	-27.42	The field team was provided accommodation within the local sewerage directorate and this helped to reduce some of the recurring costs
<b>6. Equipment</b>	245,000	157,580.00	-35.68	UN-HABITAT was able to negotiate more attractive prices of the equipment supplied
<b>7. Travel</b>	12,000	10,727.49	-10.60	
<b>8. Security</b>	36,120	36,120.00	0.00	
<b>9. Miscellaneous</b>	33,036	33,771.02	2.22	
<b>10. Agency Management Support</b>	108,360	108,360	0.00	
<b>Total Expenditure</b>	<b>1,983,516</b>	<b>1,983,516</b>	100	

[Human Resources](#)

Five National staff were engaged for this project. This included three full time Technical Experts and a team of two deployed by the INGO LIFE. They were backstopped (part time) by a UN HABITAT Team comprising three

international staff and one local staff member. Local coordination (especially with MMPW and MoCH) was provided by the UN HABITAT Baghdad team.

#### Project Assets

Office equipment purchased for the field office have been donated to the local authorities, following project completion.

### **III. Results**

#### **An assessment of the extent to which the programme/project component / programme /project has achieved the outcomes and outputs expected**

The project met its primary objective in demonstrating 'quick wins' through neighbourhood upgrading and benefited the entire resident community of nearly 5000 people, of the 14<sup>th</sup> Ramadan Neighbourhood. The main impacts have been a significant improvement in the visual and physical environment within the neighbourhood encouraging residents to invest on housing upgrading using their own resources; and an overall improvement in public awareness on issues of hygiene, SWM, water conservation etc. The quality and quantity of water supply has significantly improved; drainage and waste disposal systems have been introduced, roads have been made all weather and public open spaces have been landscaped. While such interventions have certainly addressed the original problem, sustainability of the project gains remains a key concern, especially relating to issues of longer term asset management and maintaining standards of basic services.

In addition to the improved living conditions and enhanced community awareness of environmental and public health issues, the project generated nearly 10,000 person days of local employment. This was lower than was originally envisaged as much of the rehabilitation works had to be undertaken in a mechanized mode to meet the project deadlines and also reduce the period of disruption in services.

Another unintended impact was the increasing demand on the Local Authorities from residents of adjoining neighbourhoods to undertake similar comprehensive upgrading in their localities.

The project also provided significant implementation lessons which continue to inform ongoing policy dialogue on Slum Upgrading and towards achievement of MDG 7 Target 11.

**Main activities undertaken and achievements/ impacts:**

All project activities are attributable to the funding from UNDG ITF.

The physical works included:

- installation of a new water supply pipeline;
- installation of a new storm water drainage system, including construction of a sewage pumping station;
- refurbishment of street network
- development of landscape and green spaces

The Community Development initiatives included:

- 3 workshops conducted on (Health Awareness, Community Awareness, and Human Development). A Drug Awareness workshop was also conducted.
- An extended Public Outreach Campaign comprising:
  - Development & distribution of brochures & posters on Water Conservation and Hygiene;
  - Short films on Solid waste, Human Development, and Hygiene telecast on local TV channels; and
  - Radio Spots on Health Awareness, Water Conservation, and Hygiene
- Survey of the needs and capabilities of the local society in 14 Ramadan Neighbourhood in Diwaniya; and
- Regular interactions, deliberations and advocacy with community change agents such as local leaders, educators, CBO representatives and children of the two local schools.

**Potable water mains:** The potable water mains that use to supply the whole area with water was a dilapidated old steel pipe that connected the area to the main supply pipeline from the water treatment plant. Heavily corroded and very badly scaled, and with a large number of leaks that not only wasted a lot of the water but also did not allow enough water to pass through due to a reduced diameter as a result of salt scaling. Consequently there was severe water shortage in the area. A completely new UPVC pipeline of 215 mm dia. replaced the old 100 mm pipeline with a total length of 2000 m. This action completely eliminated the problem of water shortages in the area.

**Street network and landscaping of open areas:** Only the main street in the area was paved with asphalt. The accessibility to the residences in the winter time was very hard since these streets will be completely muddy, and in-accessible. Regular overflows of household cesspools onto the open streets created extremely un-hygienic and unhealthy conditions, especially for children.

Under the project, a total of 9000 sqm of side streets were paved with concrete with 10 cm stabilizer courses and over 10,000 sqm of old pavement were renewed. All open areas were suitably landscaped and a street cleaning programme was introduced. The residents were initially opposed to this intervention since it began by excavating the paths to lay the storm water sewers and the water mains. Ironically, the residents of the adjoining neighbourhood who at the start were happy at not being subject to such inconvenience, later on realizing the obvious benefits (including increase in real estate values) became envious and started demanding similar works from the local authorities.

**Storm water system:** Originally septic tanks from individual households would overflow onto the open streets and then onto improvised ditches dug just outside the houses. The overflow from these small ditches in turn would flow into larger ditches that criss-crossed the neighbourhood thus severely contaminating the environment. To solve this problem, a storm water system with adequate capacities to carry heavy sewage was constructed with inbuilt arrangements such as pipeline network, pumping station, manholes road gullies etc that would easily enable it eventually connect to a Sewage Treatment Plant, proposed by the local authorities. Approximately 3250 ML of sewerage pipelines (ranging in dia from 400mm and 600mm), 87 manholes, 180 gullies, and a pumping station with a total capacity of 600 M<sup>3</sup>/hr with facilities of an operator's room and a standby generator were installed under the project. Once the storm water system started functioning all the ditches that criss-crossed the area were re-filled and done away with alleviating the agony of the people in that area.

**Solid Waste Collection:** The project put in place a daily street cleaning and garbage collection programme and has also equipped the local authorities with two trucks for transporting solid waste. Garbage collectors were also installed at strategic locations.

**Shelter Upgrading:** 300 houses were identified by the local Housing Directorate as being severely deteriorated. A parallel initiative of shelter upgrading was taken up by the authorities under direct supervision of the Housing Commission. Procedural delays however limited the intervention to only 50 houses.

**Community Development:** Through the support of the INGO, LIFE for Relief and Development a number of awareness generation campaigns and community development workshops were conducted. Environmental Awareness campaigns included distribution of posters, cartoon serials on the local television networks, sensitisation and training workshops of community leaders etc. Drawing competitions for children on health and environment issues helped to raise local awareness. Workshops were also conducted on the role of the community in environment and civic management. More than 60% of the population were directly exposed to different community development activities. In the words of the community these activities helped in:

- Raising educational levels, and raising awareness on what will benefit the community in various aspects (hygiene, cleanliness etc);
- Limiting substance abuse and other negative practices in the neighbourhood;
- Creating job opportunities; and
- Strengthening community civic sense.

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

While lessons learned from this project are not new to similar initiatives relating to upgrading of poor neighbourhoods, they were reaffirmed through this implementation experience. These include:

Developmental

- “Quality of Life’ outcomes are maximised when improvements occur simultaneously across all basic services such as water supply, drainage, sewage disposal, solid waste management, road connectivity. This is further reinforced when ‘soft’ and ‘hard’ interventions are combined. Through interventions that improved the access roads, drainage, water supply, sewage and solid waste disposal and landscaped open spaces, there was a noticeable improvement in the neighbourhood environment.
- Improvements in public/basic services motivate residents to invest in shelter improvements from their own resources. Although the Ministry of Construction & Housing pursued a parallel initiative to rehabilitate houses within the same neighbourhood, with delays occurring in implementation, many resident households just went ahead and made investments in shelter improvements from their personal resources.
- For projects gains to be locked in and to counter the bias towards physical/technological solutions, instead of a community based approach, substantial investments in sensitization and building the capacity of both the community and the local authorities are required. This in turn requires a much longer term engagement, which was not possible under this project. One of the casualties of such a short project time frame was the absence of adequate discussion on appropriate technology choice and maintenance management arrangements, both of which are critical for sustainability. Therefore, while the project successfully delivered most of the planned outputs, sustainability remains a concern.
- Quick demonstration of results is a must to gain the trust of the community. A regular street cleaning initiative was introduced under the project and this in turn was able to motivate residents to bear with the disruption in services without much complaint and also participate in many of the sensitization and awareness generation programmes under the project.

Implementation Management

- Right composition of the Management Committee is critical for ensuring a smooth delivery.

Progress had been initially slow because of difficult site conditions; lack on consensus on technical options for physical rehab works; and a slow and cumbersome decision-making process in the local Municipality. To address the latter problem, UN-HABITAT successfully argued for a change in the composition of the supervision committee and this helped to speed up field implementation. Further, with the UN HABITAT Technical Team operating out of the Local Sewerage Directorate not only helped considerably in building up good working relationships with the personnel of the Local Authorities, but also contributed to their quick grasp of the dynamics of decision making within these structures.

- Capacity building of all implementation personnel on softer aspects of the project is essential. The INGO contracted to carry out community development activities was unable to mobilise its international personnel on the ground because of security concerns. This along with the lack of suitably skilled and experienced local resources and inadequate guidance constrained the implementation of community development components of the project. Although they carried out most of the planned activities, initially they lacked the necessary vigour to fully achieve the stated outputs. This was substantially addressed through frequent meetings and guidance provided by the UN-HABITAT international staff. One major fallout of this was their inability to muster community inputs in the planning of the physical infrastructure and which has continued to remain the forte of the Local Authorities. In retrospect it would have been better if the Technical Team were appropriately oriented and capacitated to lead on the community development aspects as well.
- Integrated planning and common management structures are required across all implementation partners to maximise synergy and cost effectiveness in implementation. The complementary housing upgrading programme was carried out directly by the Housing Commission. Despite the resources available and the plans to rehabilitate 350 houses, the lack of capacity for planning & scheduling of works and quality technical supervision prevented them from meeting the planned targets within the scheduled project duration. One major lesson from this is that irrespective of the number of teams responsible for implementation of the different components of a project, the quality outputs of projects can be improved by adopting an integrated approach to planning and by establishing a common monitoring group with representation from the different implementation teams. This would help to bring in synergies across the different work-streams and also make the interventions more cost effective.

Initially, the handing over the completed works to the Local Authorities was a problem because of the size of the project and the cumbersome governmental procedures. To ease this, the entire works was divided into smaller manageable chunks and were handed over one small part at a time.

A few months after the completion of the physical works of the project UN HABITAT undertook a quick assessment of community perceptions of the project results. The findings were as follows:

- 96% stated that there noticeable changes in community behaviour (less garbage disposal in open public areas, increased water conservation, and cleaner streets and public open spaces);
- More than 80% were willing to make future financial contributions toward the cost of maintaining the services provided; and
- 92% were willing to take advantage of soft loans to cover the cost of individual housing improvements.

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

The close involvement of the local directorates of the Ministry of Municipalities & Public Works in the implementation of this project helped considerably to quickly bring in local knowledge and also instil a greater degree of local ownership.

Public hygiene campaign materials provided by UNICEF helped in reducing the time in the development of similar materials under the project.



**Highlights and cross cutting issues pertinent to the results e.g. gender disaggregation, policy engagement and participation of the public:**

Community Participation: The involvement of the client community in aspects of participatory planning of the rehabilitation works was central to the project approach in improving delivery of basic services. The short duration of the project presented a significant challenge to effective deployment of such a community based approach. While the project fell short of involving the community in actual planning of the infrastructure rehabilitation works, it managed to maintain a high level of community awareness of the various aspects of the project through a proactive communication strategy. Detailed information on the rehabilitation works were shared with the community on a regular basis. Similarly, through detailed household level surveys which covered 100% of the residents, key service delivery priorities were identified. The project had expected the international NGO to act as a strong social intermediation structure, capable of establishing links across disciplinary areas and between the community and other stakeholders. However, the INGO lacked the necessary capacities to play that role effectively within the short time frame of the project. UN-HABITAT was able to step in and get its technical team to supplement the INGO's inputs.

Gender: The project in itself was gender neutral as its interventions were designed to equally benefit both women and men. At the same time, with improved access to household level services did bring in a better quality of life for women residents who were previously disproportionately affected by the lack of proper services. Further, the project ensured that women were clearly targeted when it came to the various awareness generation and capacity building events.

Environment: The project was essentially focused on improvement of environmental services. Improved water supply, sanitation and an overall enhancement of the neighbourhood scape contributed to a significant improvement in the physical environment. Further soft interventions were also focused on issues of environmental management such as water conservation, solid waste management, personal hygiene etc.

Security: Like all other projects in present day Iraq, the volatile security situation remained a concern even within this project. However through engagement of project personnel who belong to the same location, use of local contractors and close working with the local authorities, security issues could be better managed and the project was implemented with relatively less disruption on account of security aggravation.

Capacity Building of State Actors: The project did not provide for any special set of interventions to strengthen the capacity of local state actors. However through close engagement with the participating Ministries and local authorities in all aspects of planning, procurement, implementation, supervision and monitoring the project, was able to provide 'learning on the job'. Following the completion of the project, series of discussions focusing on 'what worked' and 'what didn't' also contributed to participatory evaluation and lesson learning.

## IV. Follow up actions and sustainability

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

The project demonstrated a straight forward and cost effective approach to neighbourhood upgrading. However for replication and scaling up at the national level, concerted efforts are required for appropriate policy, strategy and programme development. This will in turn require a much longer term engagement which also provides for more pilot projects. UN-HABITAT has already put together a proposal on Slum Upgrading to complement its ongoing efforts to bring slum upgrading at the centre of the national development agenda. However, so far resources to pursue such an engagement are not available.

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

As mentioned previously, the project required some adjustments in its intended outputs, as follows:

- Packaging of Contracts to maximise Employment: Initially it was planned to procure works through small contract packages in order to maximise local employment generation. However, time constraints and the need to minimise the period of disruption of services required the project to engage a relatively bigger Contractor agency with mechanised work capabilities; and
- Community capacity enhancement for planning, implementation of infrastructure works and management of services. The limited implementation time frame and the limited capacity of the international NGO deployed for this purpose came in the way of allowing such capacity strengthening to take place. Instead the project focussed on working with the traditional service providers, i.e. the local authorities and exposing them to better project planning, implementation management and quality control. This also prevented the project from putting in place a community based solid waste management system.

**Estimated Budget required:**

To be determined.

## Annex 1 - Log Frame Matrix

Objectives	Measurable indicators	Means of verification	Outcomes
<p><b>Development Objective</b></p> <p>To demonstrate an effective context specific strategies for helping the Government of Iraq meet its aspiration of delivery of 'quick impacts' in the water supply and sanitation sector. In the longer term this will provide policy &amp; strategy pointers to help Gol meet its commitment to achieving the Millennium Development Goal 7, Targets 10 &amp; 11 and the HABITAT Agenda, in the longer term.</p> <p><b>National longer-term priority or goals:</b> To reduce the percentage of people without access to safe drinking water and sanitation by 50% by 2015 (MDG/ICSD) and to contribute significantly to reaching the infant mortality rate and nutrition MDG;</p> <p><b>High-level/ Infrastructure Rehabilitation cluster outcome by the end of 2005:</b> Recover water and sanitation coverage to 1990 levels (urban water 97% rural water 75% sanitation 75%);</p> <p><b>High-level/ Infrastructure Rehabilitation cluster outcome by the end of 2007:</b> Decentralised management with strong public private partnerships and community involvement (particularly women) achieving water and sanitation service approaching 1980s levels (urban 350 lcd, rural 250 lcd).</p>	<p>All households in the client community report at least 25% improvement over baseline figures across indicators of supply and access to water and sanitation services.</p> <p>Government of Iraq's Slum Upgrading Policy &amp; Implementation Strategies and MDG Progress Reports reflect lessons learnt from this project.</p> <p>Over time, reduction, in IMR, MMR and diarrhoeal diseases, as a result of improvements in access to quality water supply and sanitation services.</p>	<p>Project reports referenced to the baseline database and complemented by a 'third party' evaluation.</p> <p>Policy paper, related legislation and plan documents.</p> <p>Statistics of Ministry of Health, WHO and other sources, including special assessments and reports.</p>	<p>An ex Ante evaluation carried on a 50 % sample basis revealed a community wide perception that noticeable improvement had occurred across various basic services and in the quality of the overall living environment.</p> <p>Discussions are ongoing – premature to comment on results.</p> <p>Not yet evaluated.</p>

<p><b>Immediate Objectives:</b></p> <ol style="list-style-type: none"> <li>1. To improve the living conditions and reduce health risks through community based infrastructure rehabilitation and management of community services;</li> <li>2. To provide (&amp; widely disseminate) a replicable model with best practices in community empowerment, participatory planning, implementation and management of basic services;</li> </ol>	<p>A minimum of 25% improvement over baseline figures across indicators of supply and access to Watsan services for all households in the 14<sup>th</sup> Ramadan Neighbourhood.</p> <p>Well analysed success stories and lessons learnt from the project are well documented and are widely disseminated.</p> <p>Project (implemented) Strategy reviewed and refined by MMPW, MoCH in Lesson Learning Workshop.</p>	<p>Municipal Records</p> <p>Special citizens surveys</p> <p>Project database (reports of recurrent monitoring referenced to the project baseline)</p> <p>Special project publications and audio-visual documentaries/ video films.</p> <p>Workshop Reports</p>	<p>Quantitative baseline information was not available. However in an ex Ante evaluation, most residents reported significant improvement in both quality and quantity of services received as well as an overall improvement in the living environment within the neighbourhood.</p> <p>A number of discussions on the project were carried out with the relevant project partners. A significant outcome was the evaluation carried out by the Ministry of Construction &amp; Housing on its own implementation experience w.r.t. housing rehabilitation and especially why it had not been able to meet its planned targets. This is expected to inform future interventions.</p>
<p><b>Outputs:</b></p> <ol style="list-style-type: none"> <li>1. Improved access to <u>water supply and sanitation services</u> for 950 households (of which 110 are women-headed households) through rehabilitation and new capital infrastructure works, that will generate at least 9000 person days of direct labour and local consultancy assignments;</li> <li>2. Effectively functional community based <u>Solid Waste Management</u> system that will generate 15,000 person days of local employment per annum in the management of services;</li> </ol>	<p>At e.o.p.</p> <ul style="list-style-type: none"> <li>• Atleast 75% of the client households report at least 25% improvement in their water supply as measured in terms of quality, quantity, timeliness etc.</li> <li>• Significantly reduced incidence of open flow of untreated sewage and garbage lying unconnected in public areas of the neighbourhood.</li> <li>• Access from house to local roads by all weather roads.</li> </ul>	<p>Municipal Records and those of NGOs, Other Government Departments etc.</p> <p>Special citizens surveys</p> <p>Project database (reports of recurrent monitoring referenced to the project baseline)</p> <p>Special project publications and audio-visual documentaries</p> <p>Attendance records of outreach workshops maintained by the CB</p>	<p><b>See above.</b></p> <p>The short duration of the project did not allow capacity building of the community for basic O&amp;M and this remains a shortcoming of the project. However, the investments made in terms of increasing community awareness on various environmental and personnel hygiene issues has resulted in their being more demanding in terms of quality of services provided by the local authorities.</p>

<p>3. Improved 'all weather' accesses from all individual houses to main roads and establishment of a <u>street cleaning programme</u> ;</p> <p>4. Universal coverage (in the neighbourhood) of the public outreach programme on environmental health;</p> <p>5. Improved housing for at least 300 households through a housing rehabilitation programme of the Ministry of Construction &amp; Housing, in partnership with UN-HABITAT; and</p> <p>6. Improved community capacity in planning, implementation &amp; management of Watsan services.</p>	<ul style="list-style-type: none"> <li>• Reduced incidence of water logging caused by local drainage problems</li> <li>• A cadre of trained individuals from the client community are available to take care of basic O&amp;M of Watsan services in the neighbourhood.</li> <li>• The new SWM is able to provide regular employment to 50 persons.</li> <li>• A team from the local authorities and representatives from MoCH &amp; MMPW, as a result of 'learning by doing' on this project is able to take forward similar initiatives in future with minimal external assistance.</li> </ul>	<p>and INGO.</p> <p>Employment records</p> <p>Gol Ministry/Departmental Reports</p>	<p>The project could not put in the planned community based solid waste management system, due to limitations of time.</p> <p>No similar project has been undertaken by the partner authorities and therefore it is difficult to evaluate their capacities.</p>
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## Annex 2 PROJECT COSTS

CATEGORY	UNDG ITF approved budget	Actual COST	Percentage of Approved	Budget Revision approved (give date)	Percentage of revision
<b>1. Personnel</b> · including staff and consultants	144,000	152,119.40	5.64		
<b>2. Contracts</b> · including companies, professional services, grants	1,369,000	1,451,284.52	6.01		
<b>3. Training</b>	20,000	19,698.75	-1.51		
<b>4. Transport</b>	10,000	9500	-5.00		
<b>5. Supplies and commodities</b>	6,000	4,354.64	-27.42		
<b>6. Equipment</b>	245,000	157,580.00	-35.68		
<b>7. Travel</b>	12,000	10,727.49	-10.60		
<b>8. Security</b>	36,120	36,120.00	0.00		
<b>9. Miscellaneous</b>	33,036	33,771.02	2.22		
<b>10. Agency Management Support</b>	108,360	108,360	0.00		
<b>Total Expenditure</b>	<b>1,983,516</b>	<b>1,983,516</b>			

### **Annex 3 List of contract awards by procurement method**

- LIFE for Relief & Development
- Hayakel Steel Industries Company
- Al-Sunbula Al-Safra Company