





UNITED NATIONS DEVELOPMENT GROUP IRAQ TRUST FUND PROJECT # 66901:D2-21 MPTF OFFICE GENERIC FINAL PROGRAMME¹ NARRATIVE REPORT REPORTING PERIOD: FROM 03.2007 TO 12.2012

Programme Title & Project Number

- Programme Title: Support for Construction of Basrah Children's Hospital
- Programme Number : D2-21
- MPTF Office Project Reference Number: UNDG66901

Participating Organization(s)

- United Nations Development Programme (UNDP)
- World Health Organization (WHO) through Letter of Agreement

Programme/Project Cost (US\$)

Total approved budget as per

project document:

MPTF /JP Contribution⁴: \$21,750,000

Agency Contribution

Government Contribution

Other Contributions (donors)

TOTAL: \$21,750,000

Programme Assessment/Review/Mid-Term Eval.

Evaluation Completed

☐ Yes ■ No Date: *dd.mm*.yyyy

Evaluation Report - Attached

☐ Yes ■ No Date: dd.mm.yyyy

Country, Locality(s), Priority Area(s) / Strategic Results²

Country/Region

Iraq, Basrah and Marshlands (South)

Priority area/ strategic results

Children's Health

Implementing Partners

- NGOs: Project Hope (International NGO), Love and Peace Society (Local NGO)
- Government: Iraqi Government, Ministry of Health Baghdad, and Basrah Health Directorate

Programme Duration

Overall Duration (months) 63 months Start Date⁵ (dd.mm.yyyy) 22 Mar 2007

Original End Date⁶ (*dd.mm.yyyy*) 23 Dec 2008 Actual End date⁷ (*dd.mm.yyyy*) 30 Jun 2012

Have agency(ies) operationally

closed the Programme in its(their) Yes No system? Yes X

Expected Financial Closure date⁸: 30 Jun 2013

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¹ The term "programme" is used for programmes, joint programmes and projects.

² Strategic Results, as formulated in the Strategic UN Planning Framework (e.g. UNDAF) or project document;

³ The MPTF Office Project Reference Number is the same number as the one on the Notification message. It is also referred to as "Project ID" on the project's factsheet page on the MPTF Office GATEWAY.

⁴ The MPTF/JP Contribution is the amount transferred to the Participating UN Organizations – see MPTF Office GATEWAY

⁵ The start date is the date of the first transfer of the funds from the MPTF Office as Administrative Agent. Transfer date is available on the MPTF Office GATEWAY.

⁶ As per approval of the original project document by the relevant decision-making body/Steering Committee.

⁷ If there has been an extension, then the revised, approved end date should be reflected here. If there has been no extension approved, then the current end date is the same as the original end date. The end date is the same as the operational closure date which is when all activities for which a Participating Organization is responsible under an approved MPTF / JP have been completed. As per the MOU, agencies are to notify the MPTF Office when a programme completes its operational activities. Please see MPTF Office Closure Guidelines.

⁸ Financial Closure requires the return of unspent balances and submission of the Certified Final Financial Statement and Report.

FINAL PROGRAMME REPORT FORMAT

EXECUTIVE SUMMARY

Basrah Children's Hospital (BCH) was conceived and constructed to provide specialized healthcare services for children in Basrah and Southern Iraq, particularly in the areas of oncology (cancer) treatment. The BCH complex has been designed to provide for 360 cancer, 468 intensive care, 354 neonatal intensive care, and 2,230 acute care paediatric patients annually.

The history of this programme is complex. It was originally launched in 2003 as a USD \$50 million USAID-funded/managed programme. Budget issues, caused largely by security problems, led to the transfer of BCH from USAID to the United States Army Corps of Engineers (USACE). Over time USACE determined it could not implement the programme as intended. On 22 March 2007 the project officially became a UNDG Iraq Trust Fund (ITF) programme. It was to be managed by UNDP, which worked closely with the Iraq Ministry of Health (MoH), World Health Organization (WHO), the International NGO Project HOPE, and the Iraqi NGO Love and Peace. The U.S. Department of State and the U.S. Army Corps of Engineers remained on the project in a reduced capacity and for a limited period, acting as the UNDP Owner's Engineer until 10 May 2009, after which there was no U.S. Government involvement in finalizing the project.

After taking over the project UNDP carried out remaining required works in 20 discrete "work packages." These packages encompassed three key aspects: **construction**, **information systems**, and **training**.

- **Construction:** After the handover from USACE, UNDP planned to support implementation of the remaining **construction** components of the project in collaboration with USACE, which was expected to provide engineering and on-site management services under UNDP contracts.
- **Information Systems:** The information systems component of BCH included installation of a full Hospital Information System (HIS) a system for integrated management of patient records, staff records, etc. This component was to be spearheaded by the USA NGO Project Hope. UNDP recommended that the HIS included an Asset Management System (a system for tracking fixed assets/equipment, determining maintenance and inventory needs, etc.) to improve maintenance and repair efforts in the long-term.
- **Training:** WHO coordinated and implemented medical staff training; Project HOPE coordinated and implemented training to applicable staff on information systems.

BCH opened to provide certain health services on 22 October 2010, as by this time the majority of construction and information systems works were completed. Minor works as well as staff trainings remained, as well as the required "Operations & Maintenance" and "Defects Liability" periods built into all UNDP Iraq construction/infrastructure projects.

By the end of 2012, all remaining minor works and trainings were completed. BCH is now the main facility for advanced care of children in Basrah and Southern Iraq, and UNDP's collaboration and dedication on this project has helped develop strong relationships with MoH Baghdad and with the Basrah Health Directorate.

I. Purpose

The project sought to address the decline of health services over more than two decades in Basrah and lower southern region of Iraq. A 2004 Ministry of Health Report indicated that non-communicable diseases were becoming the leading cause of death in Iraq. The report addressed widespread concerns about the state of Iraq's health sector in the previous years, and illustrated alarmingly high mortality rates for children aged five years and below, as the Basrah population lacked access to adequate child healthcare facilities. Basrah Children's Hospital (BCH) was thus designed as a specialized child referral care centre focusing on paediatric oncology to significantly ameliorate the deteriorated child health conditions in Basrah and the entire southern region of Iraq.

It is important to note that the BCH project was not under the purview of UNDP or ITF until 2007. Assuming adequate working conditions in Basrah following the 2003 invasion of Iraq, the U.S. Agency for International Development (USAID) envisioned opening a state-of-the-art pediatric and teaching hospital, which was to be a joint initiative between USAID, its contractor Bechtel National Inc. (BNI) and Project HOPE, a non-governmental organization that assumed responsibility for supplying medical equipment and training hospital staff.

BCH's initially envisioned scope underwent several major changes based on discussions between USAID and Iraq's Ministry of Health, and USAID eventually settled on a 16,200 square meter, 94-bed facility supporting oncology and pediatrics. The project faced major challenges, including severe security conditions, region-wide cost increases in labor and local materials, undisclosed soil conditions, protracted disputes among contractors, and an extraordinarily ambitious project timeline.

The United States Congress had budgeted \$50 million for the hospital, but due to the above challenges it was determined that this amount would have to be increased to complete the project. USAID ultimately decided to transfer the BCH project to the U.S. Army Corps of Engineers (USACE). Major security, budget, and timeline issues caused USACE to transfer the yet-incomplete BCH project to UNDP in 2007, with funding from ITF.

Development Goal/Overall Objective:

• Project Document Outcomes:

Outcome 1: Improve access to quality tertiary, specialized paediatric healthcare services in Basrah and the southern region of Iraq in partnership with all stakeholders including the community.

Outcome 2: Create employment opportunities for poor and vulnerable segments of the population.

• **CPAP Outcomes:**

The project document for this project was developed in 2007 when UNDP still supported Iraq in addressing health sector issues. However, the focus of UNDP support has shifted towards capacity building for governance, economic development, and other issues central to UNDP's mandate. However, the scope of this project falls under the UNDP Country Programme Action Plan (CPAP) outcome 4, output 3, "Public authorities at national and sub-national levels demonstrate improved coordination, integration and accountability for local development and service delivery."

- UN Assistance Strategy for Iraq, Cluster 2, Health Before the UN Development Assistance Framework (UNDAF 2011-2014), UN Agencies operating in Iraq worked under the principles of the UN Assistance Strategy for Iraq, whose Health sub-cluster focused on "Increas[ing] access to quality health care services especially for vulnerable groups and the unreached." Key points include:
 - Delivery of an integrated primary health care package related to women and child health, nutrition, water, sanitation, sexual and reproductive health, health and hygiene promotion.
 - Provision of primary health initiatives, especially those related to communicable disease control and those that respond to acute maternal and child health and reproductive health needs.

• UN Millennium Development Goals Addressed:

- **MDG 4** Reduce Child Mortality, reduce by 2/3 the mortality rate of children aged 5 and below (key indicators: mortality of under five; mortality of infants; proportion of one-year-old children immunized against measles).
- MDG 6 Combat HIV/AIDS, Malaria and other diseases

■ **MDG 7** – Ensure Environmental Sustainability (With a focus on medical waste treatment).

The project, despite its extended time frame, (both its inception by USAID in 2004 and its continuation by UNDP from 2007-2012), aligned with health-related outcomes specified in country-level strategy frameworks which form the foundations for UNDP projects in Iraq today, but which did not exist at the time of project inception. These include:

UNDAF Iraq 2011-2014

- Priority 4: Increased access to quality essential services
- Outcome 4.3: Government of Iraq has enabled improved access to and utilization of quality primary health care services for all people in Iraq.

• Iraq National Development Plan 2010-2014

- Chapter 8. Public Services, Section 8.2. Health Sector
- **Vision:** A healthcare system that adopts primary healthcare as a foundation, including health services to satisfy individuals' needs according to international health standards to the extent possible.

II. Assessment of Programme Results

i) Narrative reporting on results:

Outcomes:

Prior to 2008, the specified outcomes above were referred to as 'Immediate Objectives'. This has been changed to conform with the current ITF project document.

Outcome 1: Improve access to quality tertiary specialized paediatric healthcare services in Basrah and the southern region of Iraq in partnership with all stakeholders including the community.

Outcome 2: Create employment opportunities for poor and vulnerable segments of the population.

This project sought to help address the decline of health services over more than two decades in Basrah and southern Iraq. A 2004 Ministry of Health Report indicated that non-communicable diseases were becoming the leading cause of death in Iraq, and pointed to alarmingly high mortality rates, over 40% for children aged five years and below. In Basrah Governorate, this could be attributed to a lack of adequate child healthcare facilities. Furthermore, many areas, including Basrah, completely lacked advanced facilities for cancer diagnosis and treatment. Therefore, Basrah Children's Hospital (BCH) was designed as a specialized child referral care centre focusing on paediatric oncology to significantly ameliorate the deteriorated child health conditions and lack of adequate care facilities in Basrah and the entire southern region of Iraq. As of 2011, the under-5 child mortality rate in Iraq stood at 31.9 percent, while the Fourth Round of the Multiple Indicator Cluster Survey (MICS-4, 2012) showed this rate in Basrah to be between 28.5 percent and 33.3 percent.

BCH is now the main facility for advanced care of children in Basrah and Southern Iraq, representing the achievement of project's overall expected outcome. To achieve the expected outcome of improving child health services in Basrah, UNDP designed 20 specific "work-packages" to complete the works begun by USAID and its contractors. BCH opened to provide certain health services on 22 October 2010, as by this time the majority of construction and information systems work-packages were completed. Minor works as well as staff trainings remained, as well as the required "Operations & Maintenance" and "Defects Liability" periods built into all UNDP Iraq construction/infrastructure

projects. By the end of 2012, all remaining minor works and trainings were completed and the project was operationally closed.

UNDP's collaboration and dedication on this project helped develop strong relationships with MoH Baghdad and with the Basrah Health Directorate. These relationships contributed to agreements for UNDP support on other hospital rehabilitation and construction projects throughout Iraq in Halabja, Ramadi, Tikrit, and Fallujah, funded via other donors.

• Outputs:

Outputs related to Outcome 1:

- **Output 1.1** Improved tertiary child healthcare services and increased number of referred sick children to the hospital in partnership with all stakeholders, including the community.
- Output 1.2 Extension of the construction of the 94-bed hospital completed.
- Output 1.3 Medical equipment delivered and installed, and functioned catering of the 94-bed hospital.
- Output 1.4 Two hundred (200) hospital health professionals and managers (physicians, nurses, technicians, administrators, facility engineers, and biomedical engineers) completed short-term and long-term trainings.

Activities under this output included the construction of all required sections and facilities of BCH that were not completed while the project was still under the purview of USAID and USACE, the equipping of the hospital as required, and training of medical and other key staff, all of which would serve to enable the opening of the hospital for patients. When UNDP took over the BCH project, it carried out an assessment of required works and drew plans for the implementation of 20 discrete "work packages" addressing all areas needed for BCH to be completed and fully operational.

These work packages included several construction works, including of medical facilities and basic infrastructure such as roads and parking. These packages also included the provision of medical and administrative equipment to BCH. These included a state-of-the-art Closed Circuit Security System; Medical Waste Treatment Equipment; Oxygen Generation Plant Equipment; IT Equipment, and a computerised Asset Management System. Another of the work packages was a community awareness campaign to build awareness of the specialized services offered by BCH and the referral and triage system at local Basrah medical facilities; such campaigns are crucial parts of all major UNDP construction/infrastructure projects, to ensure that community, religious, and tribe leaders know about the services available to them and to ensure their support for the project. Finally, a last package implemented by WHO included medical/support staff training to over 200 relevant staff, including as listed above, physicians, nurses, technicians, administrators, facility engineers, and biomedical engineers.

These work packages were fully completed by the end of December 2012, however BCH opened to provide certain health services on 22 October 2010. By this time the majority of critical work packages relating to construction and information systems were completed. Minor works as well as WHO's staff trainings remained, as did the required "Operations & Maintenance" and "Defects Liability" periods built into all UNDP Iraq construction/infrastructure projects. These periods ensure that sufficient time is given for on-the-job training for operating all installed equipment/facilities, and that any defects in contractor works are rectified by the contractor rather than at additional cost.

By the end of 2012, all remaining minor works and trainings were completed. BCH is now the main facility for advanced care of children in Basrah and Southern Iraq, and UNDP's collaboration and

dedication on this project has helped develop strong relationships with MoH Baghdad and with the Basrah Health Directorate. Therefore, Output 1 and all associated sub-outputs were successfully completed.

Outputs related to Outcome 2:..

- Output 2.1 Temporary short-term employment opportunities for unskilled and semi-skilled vulnerable and unemployed people created during the project construction phase.
- Output 2.2 Permanent long-term employment to professionals including medical professionals, management and technicians created during project operation.

Due to the vast amount of construction works and associated support tasks and services required, the BCH project created approximately 480,000 man-days of short-term employment (construction, security, transportation etc.) opportunities, and approximately 90 long-term employment opportunities for subsidiary site staff (e.g. kitchen, laundry, facility plants). In addition, it created approximately 510 long-term employment opportunities for main hospital staff, including doctors, nurses, engineers, and administrators.

c. Qualitative Assessment:

The BCH project had a remarkable scope and scale. It was a major, large-scale infrastructure and construction project that was originated and subsequently passed on by USAID to USACE, and then by USACE to UNDP, who completed what was begun. At a total project cost of USD \$21,750,000 (after a previous USD \$50 million invested by USAID and more by USACE), this has been one of UNDP's largest undertakings in post-invasion Iraq, and the largest in the South.

The scale and complexity of the BCH project is of particular importance because it is doubtful that Iraqi counterparts could have independently completed it once the U.S. Government determined it could no longer implement the project. For decades, but particularly since 2003, the outflow of thousands of qualified professionals from all parts of Iraq including engineers, architects, and medical professionals, left the Ministry of Health and the Basrah Governorate with severely diminished capacity to independently take on or complete the project. Had this project not been completed by UNDP, BCH likely would never have been opened.

More importantly, the project provides an array of medical services that did not exist in this area. After 2003, healthcare facilities, services, and human capital (medical professionals, etc.) were sorely lacking in Basrah and in southern Iraq. There were few reliable paediatric care facilities in the area, as evidenced by the MoH study, which was one of the catalysts for the project. Those that did exist could not provide advanced diagnostics, imaging, or oncology care that is now provided by BCH. In this sense, the opening of BCH on 22 October 2010 was a major milestone in both the provision of advanced medical/paediatric care in Basrah and in the South. It is also the first hospital successfully built in Iraq since the 1980s. The project's completion is a testament to UNDP's and the ITF's commitment to achieving the goals of the UNAS/UNDAF, the Iraq NDP, and the MDGs in Iraq: reproductive health and child mortality are among the key indicators of overall health as well as medical care, and are key targets in all the above strategy frameworks. BCH has contributed and will continue to contribute significantly to childcare in terms of vaccinations, and the treatment/prevention of communicable (e.g. HIV/AIDS, Malaria) and non-communicable (e.g. cancer) diseases.

Another positive outcome of this project is the stronger relationships forged with MoH Baghdad, the Basrah Health Directorate, and Basrah Governorate authorities, as a result of UNDP's effectiveness in completing the project. This is critical given UNDP's outlook in terms of project and funding opportunities. For example, UNDP's previous strong work in the health sector led to strong MoH cooperation with UNDP on several other multimillion dollar Hospital Construction projects including

Ramadi, Tikrit, Halabja, and Fallujah, which have been funded by the Government of Japan. UNDP's effectiveness on this project led to greater cooperation from the Basrah Governorate authorities on other UNDP projects in the area. In 2012 and 2013, following the conclusion of the BCH project, UNDP's major undertaking in the south is a joint initiative with Shell, including a Community Development initiative in the Majnoon oil field area of Basrah; which applies principles from the Local Area Development Programme (LADP)'s, and a comprehensive Vocational Training and Micro, Small, and Medium-sized Enterprises capacity development initiative.

Over the course of the project, UNDP also very successfully utilized the Remote Management methodology on this and other high-visibility construction/infrastructure projects carried out in Iraq, which enabled the continued implementation of projects in high security or red zone areas through a combination of delegation of responsibilities, use of in-country staff hiring protocols (often at lower cost and risk than international staff), and employing multiple monitors to ensure effective implementation.

ii) Indicator Based Performance Assessment:

When this project was conceived, first by USAID/USACE, then handed over to UNDP/ITF, its Logical Framework was drafted with a format different from the one provided in the ITF Reporting Template as of December 2012. The Logical Framework from the original Project Document is presented below as "Annex A".

Upon assuming responsibility for the project, UNDP assessed required remaining issues and proposed 20 discrete work packages to be implemented. These 20 packages are presented below as measurable **outputs**, leading to the overall **outcome** of ultimately constructing BCH. Detailed package summary reports are available to allow for review of the individual inputs, baselines

Output	Output / Package Name	Baseline	Target	Indicator(s)	Package Status	Target Met?
1	Stone Cladding.	N/A – not present at BCH	100% Package Completion	% Completion of PackageRemaining Works	Work completed.	Yes
2	Residential Building.	N/A – not present at BCH	100% Package Completion	% Completion of PackageRemaining Works	Works completed.	Yes
3	Roads and Parking.	N/A – not present at BCH	100% Package Completion	% Completion of PackageRemaining Works	*Defects were encountered during project Defects Liability period which were unresolved by Contractor (due to refusal to repair). UNDP Procurement Unit has been instructed to cash the performance bond in liaison with the UNDP Legal Support Office.	Yes
4	Closed Circuit Security System.	N/A – not present at BCH	100% Package Completion	% Completion of PackageRemaining Works	Works completed.	Yes
5	Steam autoclave and oxygen generation plant, fire fighting facility and perimeter wall.	N/A – not present at BCH	100% Package Completion	% Completion of PackageRemaining Works	Works completed.	Yes
6	Perimeter Drainage, Site Irrigation, Well and Soft Landscaping.	N/A – not present at BCH	100% Package Completion	% Completion of PackageRemaining Works	Works completed.	Yes
7	Provision of back-up diesel generators and auxiliary equipment for firm supply of electricity.	N/A – not present at BCH	100% Package Completion	% Completion of PackageRemaining Works	Works completed.	Yes
8	Medical Waste Treatment Equipment.	N/A – not present at BCH	100% Package Completion	% Completion of PackageRemaining Works	Works completed.	Yes
9	Oxygen Generation Plant Equipment.	N/A – not present at BCH	100% Package Completion	% Completion of PackageRemaining Works	Works completed.	Yes

10	Gap Items.	N/A – not present at BCH	100% Package Completion	•	% Completion of Package Remaining Works	Works completed.	Yes
11	Warehouse.	N/A – not present at BCH	100% Package Completion	•	% Completion of Package Remaining Works	Works completed.	Yes
12	General Furniture.	N/A – not present at BCH	100% Package Completion	•	% Completion of Package Remaining Works	Installation completed.	Yes
13	Domestic Furniture.	N/A – not present at BCH	100% Package Completion	•	% Completion of Package Remaining Works	Installation completed.	Yes
14	Offsite Internet Connection.	N/A – not present at BCH	100% Package Completion	•	% Completion of Package Remaining Works	Works completed.	Yes
15	IT Equipment.	N/A – not present at BCH	100% Package Completion	•	% Completion of Package Remaining Works	Equipment handed over to MoH.	Yes
16	Warehouse Shelving.	N/A – not present at BCH	100% Package Completion	•	% Completion of Package Remaining Works	Works completed.	Yes
17	Off Site Telephone.	N/A – not present at BCH	100% Package Completion	•	% Completion of Package Remaining Works	Work Completed.	Yes
18	Asset Management System	N/A – not present at BCH	100% Package Completion	•	% Completion of Package Remaining Works	Equipment delivered, installed, additional Asset Management training delivered.	Yes
19	Community Awareness Campaign	N/A – not present at BCH	100% Package Completion	•	% Completion of Package Remaining Works	School campaign completed; Exhibition in schools completed; Broadcasting of media spots completed.	Yes
20	Capacity Building Programmes	N/A – not present at BCH	100% Package Completion	•	% Completion of Package Remaining Works	All training delivered.	Yes

iii) Evaluation, Best Practices and Lessons Learned

Evaluation

No evaluation has been conducted of this project. However, the American University of Beirut (AUB) was contracted to carry out a weeklong site visit of BCH in September 2011 to assess all hospital facilities to ensure that BCH met the internationally accepted standards of the Joint Commission International (JCI) for hospitals. This assessment covered Medical Facility Planning (e.g. site survey, interdepartmental connections, routes/traffic); Medical Equipment Planning and Provision; Electrical Systems (electrical load, communications, CCTV, radio, computers, etc.); Mechanical Systems (HVAC, water supply, drainage, fire fighting), and Management and Staff. In addition, AUB developed policies and procedures (under JCI guidelines) for BCH to have an Infectious Disease Control Unit, a Quality Control Unit, and a Continuing Professional Health Education Unit based on internationally accepted standards and best practices.

Detailed findings were presented by AUB in an assessment report dated 23 December 2011 and are available at: http://www.aub.edu.lb/rep/rep_home/Pages/bch.aspx. Overall, the assessment found BCH to be well equipped with high quality equipment and facilities. It pointed out minor issues and construction defects noticed during the site visit, and recommended ways to rectify them to ensure long-term JCI certification. Upon the report's recommendations, these rectifications were completed in early 2012. The remainder of the report dealt with staff training issues and shortcomings. In response to these, staff training was completed with WHO support by mid 2012.

• Challenges / Lessons Learned / Best Practices

Challenges

The key challenges to this project were security threats and resultant unplanned cost escalation. This project had a complex history of handovers due to its originating with USAID, then handed over to USACE, and finally handed over to UNDP and ITF for final completion. Assuming adequate working conditions in Basrah following the 2003 invasion of Iraq, the U.S. Agency for International Development (USAID) envisioned opening a state-of-the-art pediatric and teaching hospital, which was to be a joint initiative between USAID, its contractor Bechtel National Inc. (BNI) and Project HOPE, a non-governmental organization that assumed responsibility for supplying medical equipment and training hospital staff.

BCH's initially-envisioned scope underwent several major changes based on discussions between USAID and Iraq's Ministry of Health, and USAID eventually settled on a 16,200 square meter, 94-bed facility supporting oncology and pediatrics. The project faced major challenges, including severe security conditions, region-wide cost increases in labor and local materials, undisclosed soil conditions, protracted disputes among contractors, and an extraordinarily ambitious project timeline.

The United States Congress had budgeted \$50 million for the hospital, but due to the above challenges it was determined that this amount would have to be increased to complete the project. The project was initially conceived before the extent of post-invasion sectarian and internal conflict in Iraq was ever foreseen. Unforeseen violence in southern Iraq severely delayed implementation this project. The unstable security situation at the outset of the USAID project led to the murder of a site security manager, the murders of 23 local subcontracted staff, threats to numerous foreign and local contractors, the kidnapping of a family member of a senior USAID contractor, and consequently, extensive project delays due to staff and subcontractors too intimidated to work or be on-site.

A consequence of the security situation was extreme project cost escalation. Project delays, contracting of security, and very expensive backup electrical power significantly added to the early costs of BCH. A significant opportunity cost was the lost worker productivity due to violence and the threat of violence. Workers were paid for work that was unable to be completed during the heightened violence periods further increased initial overall project costs. The combination of these factors exhausted USAID's initial budget faster than planned.

Unable to stay on budget due to security-related delays, USAID ultimately decided to transfer the BCH project to the U.S. Army Corps of Engineers (USACE). Ongoing security, budget, and timeline issues caused USACE to also transfer the yet-incomplete BCH project to UNDP in 2007, with funding from ITF. The security situation in Basrah was relatively calmer during the time of UNDP/ITF's project takeover, allowing for more effective and timely implementation. Nevertheless, from time to time security threats were encountered, but these are common issues typical to all UNDP projects occurring throughout Iraq.

One final challenge encountered during the UNDP-led project was a rare case of default by a contractor. UNDP's contractor hired to complete the Roads and Parking works package was notified of defects of his works, which are required to be repaired during the project Defects Liability period. The contractor ultimately refused to do so despite numerous attempts at intervention and negotiation by UNDP, MoH, and Basrah authorities. To date (March 2013), UNDP Procurement and legal offices are communicating to address the rare issue of cashing a contractor's performance bond.

Lessons Learned

At the outset of the UNDP-led portion of the project, the above security-related challenges were understood by UNDP—who had a history of capital-intensive projects in security-sensitive situations in Iraq—and who took more significant steps to minimize security risks, and therefore, to minimize consequent cost escalation problems.

However, it is still critical to not hastily plan projects of this complexity and capital requirements during times of major security uncertainty (e.g. shortly after an invasion and political upheaval). These projects will have extremely high security costs, human casualties, or in this project's case, both. It is true that UNDP/ITF projects in Iraq almost all take place with ongoing political and security uncertainty. However, USAID's decision to implement a complex, capital-intensive project in Basrah appears to have overlooked real security threats that should have been expected to arise following the 2003 invasion of Iraq. A capital-intensive project such as the construction of a hospital or other major infrastructure must not be allowed to take place without either (i) stable security conditions (ii) advance planned budget for security precautions.

With regard to the contractor default experienced by UNDP, this was a very rare case. Contractors are obligated to repair defects in their work; this usually takes place during the "Defects Liability" period built into UNDP Iraq construction/infrastructure projects. This period, explicitly outlined in all contracts issued by UNDP, has addressed and accounted for potential issues of poor workmanship or materials. However in this case, the contractor refused to address these defects despite the language of the contract, and numerous discussions and mediation attempts by UNDP and government counterparts. Despite the project being operationally closed, the issue of cashing this contractor's performance bond is still under discussion between UNDP's Procurement and Legal offices. The rarity of this issue makes it unlikely that it will occur again. Nevertheless, it was a valuable lesson to ensure

that contractors are explicitly made aware of all terms, conditions, timelines, and contractual obligations in the UNDP General Conditions – this could avoid the time that was lost in this situation.

Best Practices

To address the security and cost-related challenges of working on this and other long-term, capital-intensive, high-visibility construction/infrastructure projects in Iraq, the Multi-Sectoral Implementation Unit at UNDP Iraq employs a Remote Management methodology. In numerous areas, this methodology has enabled the continued implementation of projects in high security or red zone areas through a combination of delegation of responsibilities, use of in-country staff hiring protocols (often at lower cost and risk than international staff), and employing multiple monitors to ensure effective implementation. The implementation team overseeing this project was asked by UNDP Iraq management to compile the principles of this methodology as part of an effort to teach it to other country offices. It was also discussed that this project team responsible for the BCH and other remotely-managed projects could itself be assigned to manage large-scale construction/infrastructure projects in other UNDP countries. Such a setup could lead to cost savings and reduction of various staff/consultant/contractor redundancies.

Annex A. Original BCH Project Document Results Framework (See attachment)



UNITED NATIONS DEVELOPMENT GROUP IRAQ TRUST FUND

PROJECT DOCUMENT COVER SHEET

Logical Framework

Objectives	Measurable indicators	Means of verification	Important assumptions
Development Objective			
The development goal for this project is aligned with the targets of Iraq's National Development Strategy (2005) including health strategy and will contribute towards reducing child mortality rate.	 Infant Mortality rates, under five child mortality rates and similar indicators 		 WHO, UNICEF, MoH and similar surveys will be continued. Security situation does not deteriorate further; Close working relationships with MoH and community at Governorate level



UNITED NATIONS DEVELOPMENT GROUP IRAQ TRUST FUND

Immediate Objectives:			(Immediate Objective to Development Objective)
Immediate Objective 1 Improve access to quality tertiary, specialized paediatric healthcare services in Basrah and the Southern region of Iraq.	 MoH reports on Child mortality rates and similar indicators. Length of hospital stay reports; Increase in number of referrals; Child health care services levels. 	 Physical project. WHO and UNICEF reports and surveys. MoH reports and surveys. Post-execution impact assessment. 	 WHO, UNICEF, MoH and similar surveys will be continued. Security situation does not deteriorate further
Outputs			(Outputs to immediate objective)
1.1 Improved the tertiary child healthcare services and increase in the number of referred sick children to the hospital.	 Under five child mortality rates and similar indicators. Number of rejected cases. 	 WHO and UNICEF reports and surveys. MoH reports and surveys. 	WHO, UNICEF, MoH and similar surveys will be continued. Security situation does not deteriorate further
1.2 Extension of the construction of the 94 beds hospital is completed	 The construction is completed and; the hospital fully furnished; Hospital admission rates. 	 MoH reports and surveys. Receipt Report and Certificates Payment certificates and financial reports. Municipal records and reports. Hospital records and reports. Post-execution impact assessment 	 WHO, UNICEF, MoH and similar surveys will be continued. Trained staff is retained by the hospital. Security situation does not deteriorate further
1.3 Medical equipments delivered and installed and functioning	 Number and type of equipment delivered; 	 Receipt Report and Certificates Payment certificates and 	 WHO, UNICEF, MoH and similar surveys will be continued.



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Immediate Objectives:			(Immediate Objective to Development Objective)	
catering the 94 beds hospital; 1.4 Two hundred (200) hospital health professionals and managers (physicians, nurses, technicians, administrators, facility engineers, and biomedical engineers) have completed short term and long term trainings	Training programmes curricula	financial reports Post-execution impact assessment Assessment report on knowledge and skills status of the personnel Project records and reports. Capacity building programme reports	 Trained staff is retained by hospital. Security situation does deteriorate further Security situation does 	the not not

Activities:		Inputs:	Indicator	(Activity to Output)	
_	o the construction asrah Children	 US\$ 11,151,495 to be verified existence of the physical project 	 Reports of site visits; Firm fixed contracts Engineering Committee Report 		oes not
1.1.2 Contribute to the Basrah Ch	the equipping of ildren hospital	 US\$ 1,200,000 General Equipment US\$ 1,500,000 Misc. Equipment US\$ 4,000,000 Furniture All to be verified supply of the physical equipment 	 MoH and project Committee reports. Hospital records and reports. Medical equipment training report. 	■ Security situation de deteriorate further	oes not
1.1.3 Conducting awareness of	community campaigns and	 Number of community events held; 	 Notes for Record for the meetings; 	 Security situation do deteriorate further 	oes not



UNITED NATIONS DEVELOPMENT GROUP IRAQ TRUST FUND

Immediate Objectives:			(Immediate Objective to Development Objective)
enhancing their partnership	 Number of community leaders meeting with the project team; Number of information flyers and advocacy materials developed. UNDP totalling USD 0.1 million complimenting The Iraq Reconstruction Management Office (IRMO) 	Reports for the events.	
Outputs			(Outputs to immediate chiestics)
1.2.1 Technically assist MoH in the process of procurement spare parts and consumables	 At MoH cost. Technical support provided by UNDP; To be verified through sustainability of the provided assets and nominal healthcare services level 	 MoH/UNDP reports; Signed contract agreement by MoH; Physical deliverables. Post execution assessment 	MoH maintains the intended strategy. Security situation does not deteriorate further
1.2.2 Technically assist the MoH in the process of contracting an Operation and Maintenance (O&M) services	 At MoH cost. To be verified through sustainability of the provided assets and nominal healthcare services level 	Signed contract agreementDelivery report	 MoH maintains the intended strategy. Security situation does not deteriorate further
1.3.1 Assess training needs, knowledge and skill gaps of	UNDP totalling USD 2.1 million complimenting project Hope	Assessment report on knowledge and skills status of	Security situation does not deteriorate further



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Outputs	TROPET BEECH	ENT COVER SHEET	
/ 1			(Outputs to immediate objective)
(physicians, nurses, technicians, administrators, facility engineers, and biomedical engineers) 1.3.2 Conduct training programs, support fellowships for 200 staff including physicians, nurses, technicians, administrators, facility engineers, and biomedical engineers)	 Knowledge gaps and needs are identified in each category; Number of personnel to be trained in each category: 	the personnel Project records and reports. Capacity building programme reports Project records and reports. Capacity building programme reports Maintenance reports Post execution assessment	Security situation does not deteriorate further
1.3.3 Support the establishment of a functioning Continuing Health-Professional Education unit at the Basrah Hospital.	 Number of Audio visual equipment List of teaching learning material and documents available; Number of trained teaching staff Number of continuing education courses on site; 	 Project records and reports. Capacity building programme reports Post execution assessment 	 Security situation does not deteriorate further
1.4.1: Capacity building and training programmes delivered to two hundred (200) hospital health professionals and managers including physicians, nurses, technicians, administrators, facility engineers, and biomedical engineers.	 US\$ 2,100,000 Number of personnel in each category completed training and fellowships; Frequency of medical equipment maintenance needed reported; Quality assurance report 	 Project records and reports. Capacity building programme reports Maintenance reports Post execution assessment 	 Security situation does not deteriorate further



UNITED NATIONS DEVELOPMENT GROUP IRAQ TRUST FUND

Immediate Objectives:			(Immediate Objective to Development Objective)
Immediate Objective 2 Create employment opportunities for poor and vulnerable segments of the population.	 Number of short term employment created in the course of project implementation. Number of long term employment created during hospital operation. 	 ILCS and similar surveys. Project log-books and records Municipality records. Post-execution impact assessment. 	 ILCS and similar surveys will be continued and cover these areas and subjects Municipality covers these areas and subjects in its data collection Security situation does not deteriorate further
Outputs			(Outputs to immediate objective)
2.1 Temporary short-term employment opportunities to unskilled and semi skilled vulnerable and unemployed people will be created during the project construction phase	 Number of short term employment created in the course of project implementation. Number of long term employment created during hospital operation. 	 ILCS and similar surveys. Project log-books and records Municipality records. Post-execution impact assessment. 	 ILCS and similar surveys will be continued and cover these areas and subjects Municipality covers these areas and subjects in its data collection Security situation does not deteriorate further
2.2 Permanent long-term employment to professionals including medical professionals, management, technicians and so forth will be created during project operation.	 Number of short term employment created in the course of project implementation. Number of long term employment created during hospital operation. 	 ILCS and similar surveys. Project log-books and records Municipality records. Post-execution impact assessment. 	 ILCS and similar surveys will be continued and cover these areas and subjects Municipality covers these areas and subjects in its data collection Security situation does not deteriorate further



UNITED NATIONS DEVELOPMENT GROUP IRAQ TRUST FUND

Immediate Objectives: Activities:	Y		(Immediate Objective to Development Objective)
2.1.1 Recruit skilled and semi skilled labor to assist in the construction of the building which will create approximately 800 man-days of short-term employment for 600 workers during the construction period, thus resulting in some 480,000 man-days of short-term employment opportunities.	 Number of skilled and semi skilled personnel recruited during the project duration; Number of working days The entire project resources 	Indicator Receipt Report and Certificates. ILCS and similar surveys. Project log-books and records Municipality records. Post-execution impact assessment.	Activity to Output) ILCS and similar surveys will be continued and cover these areas and subjects Municipality covers these areas and subjects in its data collection Security situation does not deteriorate further
2.2.1 Recruit skilled personnel to operate the Hospital which will create approximately 510 long-term employment opportunities for hospital staff and approximately 90 long-term employment opportunities of subsidiary staff for the site, facility plants, kitchens, laundryetc.	 The entire project resources Number of personnel assigned to the hospital by MoH and recruited; 	 Receipt Report and Certificates. ILCS and similar surveys. Project log-books and records Municipality records. Post-execution impact assessment. 	 ILCS and similar surveys will be continued and cover these areas and subjects Municipality covers these areas and subjects in its data collection Security situation does not deteriorate further