

COMPLETION REPORT FOR PROJECT:

Summary

<p>Participating UN Organisation: UNICEF</p>	<p>Cluster: D – Health and Nutrition</p>
<p>Project No. and Project Title: D2-06: Strengthening Immunization Services in Iraq</p>	<p>Project Location/Region/Province: National programme, all 18 governorates</p>
<p>Reporting Period: June 2005 – December 2007</p>	<p>Report Number: Completion Report</p>
<p>Counterpart organisations / implementing partners: Ministry of Health (MoH)</p>	<p>Project cost: US\$ 7,900,000</p>
<p>Abbreviations and acronyms: MoH: Ministry of Health DoHs: Directorates of Health EPI: Expanded Programme on Immunization MMR: Measles, Mumps and Rubella PHCC: Primary Health Care Centre PNIDs: Polio National Immunization Days WHO: World Health Organisation UNICEF: United Nations Children’s Fund UNDG: United Nations Development Group</p>	<p>Project Status: Completed Project Duration: 22 June 2005 – 31 March 2007 Project Extensions: One (From 22 June 2006 till 31 March 2007)</p>

I. Purpose

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

Main objectives: The development goal of this project was to contribute (by the end of 2006) to the reduction of infant mortality rate from 101/1000 in 1998 to 51/1000 and Under 5 mortality from 126/1000 in 1998 to 63/1000.

Specific Objectives

- Poliovirus free status is maintained throughout the country.
- Number of reported measles cases reduced by 90% compared to previous years.
- Coverage of all essential vaccines among infants at national level attained at 90% and above.

Outcomes expected

By the end of the project, immunization services will be strengthened throughout the country through attainment of the following outcomes:

- Required supplies for PNIDs and routine immunization procured and distributed.
- National vaccine store rehabilitated and operational (*added in 2006 following a fire, which destroyed the store and decreased its vaccine storage capacity*).
- Transportation services to vaccination outreach teams supporting PNIDs provided (*added in 2006 due to the urgent need for support to PNIDs and the delay in identifying the required incinerators. MoH requested to use the funds planned earlier for the procurement of incinerators to provide transport services for PNIDs*).
- Sustain technical support to immunization 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 (MDGs):

This programme falls under Cluster D – Health and Nutrition, and the following four out of six matrix outcomes from the Joint UN-Iraq Assistance Strategy are addressed by the programme: a) 50% reduction in under-5 infant mortality; b) 15% reduction in maternal mortality; c) Increased access to quality health care services, especially for vulnerable populations and those residing in remote areas; and d) Enhanced disease prevention and control. In addition, the programme is contributing to MDGs 4 (reduce child mortality) and 6 (Combat HIV/AIDS, malaria and other diseases).

Project Management Arrangements

Line Ministry: The overall management of this project was coordinated by MoH in close collaboration with UNICEF. MoH has the overall responsibility for immunization services in all 18 governorates. In addition to its central offices and institutions in Baghdad, MoH has 16 DoHs in the central and southern governorates and 3 DoHs in the three northern governorates, which are mainly managed by MoH of the Kurdistan Regional Government (KRG). National EPI managers and EPI staff in DoHs, and local authorities in all governorates have been actively involved in every stage of implementation, monitoring and subsequent taking-over of all activities related to the project.

Collaboration with UN Agencies: UNICEF collaborated with WHO in supporting immunization interventions especially the implementation of the PNIDs and MMR campaigns. WHO was mainly responsible for capacity building of EPI staff and strengthening of surveillance and reporting systems at all levels.

Co-ordination: UNICEF has been actively involved in deputizing the health and nutrition cluster. UNICEF's role in this sector is based on its knowledge of immunization interventions in Iraq stemming from its presence in the country for over 25 years, its global institutional experience in emergency health and nutrition interventions, and strong linkages with other UN agencies and NGO partners involved in immunization related services.

Implementation and Monitoring Mechanism: Given the volatile security situation within the country, the UNICEF Iraq Support Centre in Amman continues to support and manage day-to-day operations inside Iraq. Operations inside the country are being carried out by well-experienced national staff based in Erbil and Basra as well as through a network of facilitators, who are employed through a corporate contract. The Senior Project Officer for Health and Nutrition was responsible for overall implementation of the project activities supported by 4 national staff based in Amman and Erbil. UNICEF Supply Division in Copenhagen facilitated international procurement of major supplies and equipments. In addition, UNICEF made use of its pre-qualified local contractors to undertake rehabilitation work of the Baghdad central vaccine store, while quality control at the project sites and monitoring of activities was undertaken by a team of monitors and engineers. These were responsible for tracking the arrival of supplies/ equipment and monitored its distribution to various governorates. In addition, local transportation companies were hired to provide transport services for distribution of supplies and immunization teams especially during immunization campaigns. EPI staff at various levels (national, DoH and Districts), were actively involved in every step of project implementation, monitoring and reporting. Furthermore, UNICEF has a very elaborate and stringent programme monitoring system through the use of its global software tool - ProMS (Programme Management System). ProMS enables daily monitoring of physical and financial progress of any project. Periodic accounting audits are also conducted to ensure transparency and proper utilisation of funds.

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: A total of US\$ 7,900,000 was received from the UNDG Trust Fund in 2005 for the implementation of this project. All funds made available to this project were fully committed by 31st March 2007 and the disbursements and utilization as of end June 2007 was nearly 100%. The utilization of funds was in line with the 10 broad categories of the approved budget, however, during the implementation of the project some re-programming of funds was made following the fire at the national vaccine store in 2006, which lead to a substantial reduction in the national capacity to store vaccines. Subsequently, MoH requested to use part of the cold chain equipment/resources to rehabilitate a national vaccine store. In addition, in the 2nd half of 2006 the expected output - incinerators for medical waste management at PHCC level was amended and budget adjusted to support transportation services for vaccination teams during 2006 PNID (*Final resource utilisation*

overview is attached as Annex 2).

Human Resources: The project was managed by the Senior Project Officer for Health and Nutrition and supported by two national officers and programme assistant. Resources provided under the project partially funded staff costs in the first and second year of implementation. In addition, as mentioned in the previous section, in-country EPI assessment, monitoring and supervision support was provided by a team of seven facilitators recruited through a corporate contract with a company Based in Baghdad.

III. Results

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

Basic immunization services both for routine and accelerated interventions were sustained benefiting nearly 4.8 million children under five and over 1 million pregnant women (as well as all women of child bearing age, which require Tetanus toxoid (TT) vaccination). The provision of EPI related supplies and equipments contributed to strengthening the cold chain system throughout the country. The polio free status was maintained for seven consecutive years (the last case reported in 2000). There has been a decrease in the number of measles cases from 9181 cases in 2004 to 820 cases in 2005 and to just 474 (out of which 209 were confirmed by laboratory) in 2006 and only 196 cases reported in the first 11 months of 2007. The third Multiple Indicator Cluster Survey (MICS3), which was carried out in 2006 indicates that infant mortality and under five mortality rates were 35 and 41 respectively. Therefore there is a significant decrease in child mortality in Iraq, which could be attributed to strengthened immunization services and a subsequent decrease in the number of deaths resulting from vaccine preventable diseases.

Despite some improvements, routine immunization services continued to suffer in 2006 and first half of 2007. Only 57 districts (out of 117) in 2006 and 44 districts in the first half of 2007 reported diphtheria, pertussis, tetanus (DPT3) coverage above 80%, as insecurity restricted outreach services in the south/centre governorates. Implementation of the Reach Every District (RED) approach to address this decline in the south/centre was initiated in the last quarter of 2007 (supported through other sources of funding, as well as from ITF).

Policy dialogue: Continued advocacy and lobbying for self sustenance of EPI interventions produced results when the government began undertaking the procurement of vaccines, needles and syringes required for routine and accelerated immunization services; an important achievement towards ownership and sustainability of immunization services in the country.

Employment generation: Rehabilitation of the Baghdad central vaccine store provided several employment opportunities, especially for unskilled labourers. The involvement of local transport companies in the distribution of supplies/equipments and provision of transport services to more than 5,300 vaccination teams also provided employment opportunities. In addition, more than 25,000 health staff participated in each immunization campaign (they were paid allowances for working overtime). In conclusion, it is estimated that at least 150,000-200,000 person days of employment opportunities were generated by this project.

Main activities undertaken and achievements/ impacts:

a) Procurement and distribution of various EPI related supplies

1. 8.3 million Auto-Disable (AD) syringes (0.5 ml) were procured and delivered to Baghdad in November 2005 to replenish syringe stocks for the routine immunization programme, which were used during the MMR campaign in April/May 2005. This intervention addressed 2006 requirements for 1 million infants and 1 million pregnant women, and syringes were distributed to all governorates based on their needs and stock situation.
2. 1 million BCG AD syringes (0.05 ml) were procured and delivered to Baghdad in November 2005 to cover 2006 national requirements for the routine immunization programme, benefiting 1 million infants.
3. 395,000 safety boxes were procured and distributed to all DoHs and respective health facilities estimated to cover annual needs for almost 2.5 years. These safety boxes were used for the collection of nearly 39.5 million used AD syringes for safe disposal. Some of these safety boxes were used during the MMR campaign, which was carried out throughout the country for the period 22nd April to 10th May 2007.
4. Cold chain equipments and related supplies (with a total value of over \$1.35 million), including spare parts and 213 refrigerators and freezers were procured and delivered to all governorates. These equipments contributed to strengthening the cold chain system throughout the country. In addition, some of these equipments will be installed in the newly established three regional stores in Babil, Erbil and Basra, which have been upgraded under UNICEF support -using other sources of funding- to assure easy access by all DoHs to vaccines and other related supplies, taking into consideration the increased insecurity in areas such as Baghdad, most governorates/DoHs are unable to go to Baghdad to collect their share of vaccines.
5. 20 million doses of Oral Polio Vaccine (OPV) were ordered and 15 million doses delivered to Baghdad for the 2006 spring and fall PNIDs. The government had accumulated stock of OPV and requested UNICEF to delay the delivery of the remaining 5 million doses, which were later delivered in February 2007.
6. Urgently needed 1 million doses of DPT were delivered in May 2006, and 500,000 doses of measles vaccine were delivered in October 2006.

Delivery of essential equipments for EPI services especially cold chain equipments, refrigerators and safety boxes has strengthened immunization services in most governorates, especially taking into consideration that most governorates are unable to access the central vaccine store in Baghdad due to insecurity. Provision of these equipments to DoH, districts and PHCCs has increased their vaccine storage capacity and sustained the cold chain system. This has enabled most governorates to sustain high immunization coverage rates (at least 80% and higher for DPT3) and maintain polio free status, in addition to helping avoid major disease outbreaks during the project period.

b) PNIDs: Transportation services for 5,300 vaccination teams for PNIDs in April/May and November/December 2006 were provided. The campaign in April/May 2006 reached over 98% coverage and the November/December campaign reached 94% coverage. In addition, UNICEF provided 12,000 register books which were used in the PNIDs.



Mobile immunization teams reaching remote areas during PNIDs



Efforts to strengthen EPI services contributed to maintaining the polio- free status in Iraq

c) Rehabilitation of the Baghdad Central Vaccine store: Following the fire at the national vaccine store in 2006, which led to a substantial reduction in the national capacity to store vaccines, MoH requested to use part of the funds initially planned for procurement of cold chain equipments to rehabilitate the vaccine store. The rehabilitation work (valued at nearly US\$ 0.5 million) was completed successfully and its capacity was increased.



Baghdad central vaccine store after the fire



Baghdad central vaccine store during rehabilitation



Rehabilitation work for the store under progress



The central vaccine store after completion of rehabilitation work

d) Sustain technical support to immunization services: The implementation of activities related to this project and immunization in general during the project period (2005 – 2007) would not have been possible without support from UNICEF staff. Therefore some funds were utilized to support expenses related to salaries and other entitlements. These technical staff provided required technical support and assistance to MoH and DoHs to ensure basic immunization services are sustained including Monitoring of NIDs. One of the significant achievements -as mentioned above - was the continued advocacy and lobbying by UNICEF health staff with the government, which eventually led to the allocation of substantial government funds to procure annual needs of all vaccines, syringes and needles.

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

- Insecurity and military operations remain paramount issues impeding programme implementation. Mothers are reluctant to go to health facilities for preventive essential health services (immunization, maternal and child health care, antenatal care, etc.) and go only when the child is critically ill. There are also incidences of health staff being kidnapped.
- Politicalization of the MoH and the high turnover of staff at senior/middle management levels (around 2/3) also negatively affected programme implementation. Special efforts continue to be required to build-up relationships with newly appointed managers and build their capacity to effectively manage UN assistance programmes.
- Problem of recurrent costs for immunization and other basic health services continues. Nevertheless, building on budget provisions made in 2005 for all vaccines for routine EPI by MoH, UNICEF is intensifying its advocacy efforts to ensure sustainability and self-sufficiency for all health and nutrition related activities.
- UNICEF has been unable to provide required technical support to MoH in certain technical fields inside Iraq as local expertise to lead this process are lacking. Remote technical support/guidance is not always as effective as needed and in many occasions MoH is unable to send their staff outside Iraq for training.
- Due to inadequate capacity within MoH it was difficult to agree on the final specifications of incinerators, and in view of some funding shortages for 2006 spring and fall PNIDs, MoH expressed the need to use funds allocated for incinerators for the procurement of additional required OPV vaccines and transportation services for supplies and vaccination teams during PNIDs.
- The results of the EPI coverage survey which was carried out in 2007 show that the EPI programme in the three governorates has good capacity to reach under-one children. However the study pointed out that there is a need:
 - a) To strengthen the EPI programme to reduce missed-opportunities and drop-out rates;
 - b) To increase and sustain routine immunization services provided at health centres;
 - c) To support sustained out-reach and mobile immunization services specially for remote rural areas;
 - d) To enhance EPI staff capacity in micro-planning, vaccine management and forecasting, cold chain system, surveillance and reporting;
 - e) To intensify focused social mobilization campaigns to raise knowledge about the importance of immunization, especially TT for women and the importance of adhering to the immunization schedule set for children.

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

The cluster approach adopted in 2004 has fostered close cooperation with other Agencies (in particular WHO, WFP, IOM, UNFPA, UNIDO, FAO, UNDP and NGOs). UNICEF is deputizing WHO in the health cluster (Cluster D) and actively participates in the work of the

cluster. Coordination with WHO specifically contributed to the progress of this project. In addition to the support provided by WHO to the surveillance of preventable diseases, their contribution to the planning of PNIDs scheduled for March/April 2006, and support to training, monitoring as well as logistics, is very valuable.

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

The project addressed gender equality by providing EPI support to all children. Routine immunization monitoring does not include gender disaggregated data, but all related coverage assessments/surveys always provide data on services disaggregated by gender. The project also aimed (for the 1st time) through the provision of incinerators and establishing the related disposal system to contribute to a long term positive impact on environment. However, this component was delayed due to lack of MoH capacity to provide specifications of the required incineration system to be used at PHCC level. Technical support was provided by UNICEF technical experts under ITF, but the establishment of the disposal system and capacity building activities will be done with other UNICEF available resources (as well as additional funds to be raised from external sources). Additionally the provision of safety boxes assured injection safety and contributed to safe environment practices. The community members and public at large participated actively in immunization services throughout the project period especially during the immunization campaigns.

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 main areas of focus for UNICEF support to MoH will concentrate on:

- a) Sustaining basic health services, including immunization as well as increasing immunization coverage in districts with immunization coverage (DPT3) below 80% especially in remote underserved areas.
- b) Advocacy for greater resource allocations to immunization services by the Government of Iraq, particularly for recurrent costs and other EPI related equipments and supplies including cold chain equipments to ensure the sustainability of immunization services after phasing out of external support.
- c) Capacity building of EPI staff at all level needs to be strengthened especially on planning, vaccine management and forecasting, reporting, monitoring and evaluation of all immunization activities, especially in areas with low immunization coverage.
- d) Improving the capacity of MoH/DoH in immunization waste management (this was not possible during the project period). There will be a need for mobilizing resources from the government and seeking additional funding support from external sources (donors) to improve the capacity of key EPI staff in waste management and also procurement and installation of incinerators.

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

One of the major components of the project was to improve MoH capacity to set out effective systems for management of immunization waste. Due to inadequate technical capacity within MoH, it was not possible to reach final agreement on the required specification of incinerators. In view of funding shortages for 2006 spring and fall PNIDs, MoH expressed the need to use funds allocated for incinerators to procure additional required OPV vaccines and transportation services to assure successful implementation of PNIDs. UNICEF received a formal request from the MoH which was submitted to and approved by the ITF steering committee/UNCT for Iraq.

Estimated Budget required:

- a) Routine child health services are being disrupted, increasing children's vulnerability to vaccine preventable diseases. Conflict has made it harder for families to access health centres for immunization and other primary healthcare services, or for health workers to hold outreach activities. Reports being received from MoH indicate that DPT3 coverage in more than half of the districts is falling below 80%. This calls for intensive efforts to boost immunization coverage through the RED approach, which will ensure that all children are reached. At least US\$ 2.5 million will be required to support MoH in micro-planning, conducting out-reach immunization activities and monitoring and reporting as well as capacity building (trainings) of key EPI staff at various levels.
- b) At least US\$ 1.5 million would be needed to support MoH/DoH in strengthening internal capacity and establishing an effective system of waste management (disposal). This is another major priority for the coming 2-3 years.
- c) In addition, the cost of implementing the Survival, Growth and Early Development (SGED) programme in Iraq for the year 2008 is approximately US\$ 18 million. So far only 9.5 million has been received reflecting a shortfall of over US\$ 8.5 million to assure effective service delivery.

Annex 1 Key Performance Indicators – Log Frame Matrix

Objectives	Measurable indicators	Means of verification	Outcomes
<p>Developmental objectives: Contribute to a national goal (by the end of 2006) to reduce infant and child morbidity and mortality: IMR reduction from 101/1000 in 1998 to 51/1000, and under 5 mortality from 126/1000 in 1998 to 63/1000.</p>	<p>IMR U5MR VPD incidence</p>	<p>Mortality survey Disease surveillance</p>	<p>a) The MICS3 indicated: i) IMR is at 35 and; ii) under five mortality at 41 (which is a significant improvement compared to previous surveys). b) Over the past 3-4 years the number of measles cases has been decreasing and polio free status has been maintained since 2000.</p>

<p>Immediate Objectives:</p> <ol style="list-style-type: none"> 1. Poliovirus free status is maintained throughout the country. 2. The number of measles cases is reduced by 90% compared to previous years. 3. Ensure that the coverage of all essential vaccines among infants at national level is 90%. 	<p>Immunization coverage reports from all DoHs in Iraq</p>	<p>MoH routine reporting, monitoring field visit reports and coverage survey</p>	<ol style="list-style-type: none"> a) No reported polio cases since 2000 (all AFP cases were negative). b) The number of measles cases had decreased significantly since 2004; from 9181 cases in 2004 to 820 cases in 2005 and to just 474, out of which 209 lab confirmed in 2006, and 196 in the first 11 months of 2007. c) The national immunization coverage (DPT3) was 77% by the end of 2006, figure falling below 80% compared to 84% in 2005. This has mainly been attributed to insecurity and violence in most parts of the country.
<p>OUTPUTS:</p> <ol style="list-style-type: none"> 1. The required supplies for PNIDs and routine immunization are procured and distributed. 2. National vaccine store rehabilitated and operational. 3. Transportation services to vaccination outreach teams to support PNIDs provided. 4. Sustain technical support to immunization services. 	<p>Number and types of AD syringes procured and distributed.</p> <p>Number of safety boxes procured and distributed.</p> <p>Number of OPV vaccines procured.</p> <p>Number of DPT vaccines procured.</p> <p>Number of measles vaccines procured.</p> <p>Number of vaccination teams participated in PNIDs</p> <p>Number of registry books for PNIDs printed and distributed.</p>	<p>Field visit reports of independent contracted monitors and surveys.</p> <p>MoH warehouse, & contracted monitors' reports on delivery/distribution/use</p>	<ol style="list-style-type: none"> d) Supplies procured include: i) 8.3 million 0.5 ml AD syringes, 1 million 0.05 ml BCG AD, ii) 395,000 safety boxes; iii) Cold chain equipments and related supplies (\$1.35 million), including spare parts and 213 refrigerators and freezers iv) 40 million doses of OPV; v) 1 million doses of DPT and; vi) 500,000 doses of measles vaccine. e) The national vaccine store in Baghdad was rehabilitated and extension made, increasing its storage capacity. Cold chain system was also strengthened. f) More than 5,300 vaccination teams were transported during each round of PNIDs and nearly 12,000 registers were printed and distributed. g) Three UNICEF staff provided the required technical support to MoH/DoH EPI on planning, implementation and monitoring of EPI activities.

Annex 2 PROJECT COSTS

CATEGORY	UNDG ITF approved budget	Actual COST	Percentage of Approved	Budget Revision approved (2006)	Percentage of revision
1. Personnel : including staff and consultants	77,710	71,407.36	92%	77,710	-
2. Contracts: including companies, professional services, grants	970,000	2,019,966.00	103%	1,970,000	-
3. Training	-	-	-	-	-
4. Transport	-	-	-	-	-
5. Supplies and commodities	3,900,000	3,767,665.78	96%	3,900,000	-
6. Equipment	2,300,000	1,388,670.52	107%	1,300,000	-
7. Travel	-	-	-	-	-
8. Security	-	-	-	-	-
9. Miscellaneous	-	-	-	-	-
Total Programme Expenditure	7,247,710	7,247,709.66	100%	-	-
10. Agency Management Support	652,290	652,290.00	100%	652,290	-
Total Expenditure	7,900,000	7,899,999.66		7,900,000	

NB: Certified financial statement showing the actual cost will be separately provided as soon as it is made available by the UNICEF Head Quarter in New York.

Annex 3 List of contract awards by procurement method

S/ N	Name of Contract/Project	Governorate	Amount
1	Renovation of central vaccine store in Baghdad - AL-FAHAD Contracting Co.Ltd	Baghdad	469,037.00
2	Contract for PNIDs – Burj Al-Dyar	Kerbala, Najaf, Babil and Qadisyah.	63,050.00
3	Contract for PNIDs – Khalid Bureau to cover	Baghdad (Kerk and Rusafa), Nenava, Anbar, Diala, Salah El-Din, Wasit, Kirkuk, Erbil, Sulmaniyah and Dohuk.	305,189.00
4	Provide transportation services for first & second round of Autumn PNIDs 2006 and when requested- Burj Al-Dyar for General Transport Co.	Baghdad (Khark and Risafa, Basrah, Wassit, Najaf, Babil, Qadissiya, Muthana, Missan, Erbil Duhok	685,220.00
5	Provide Transportation Service for first & second rounds of Autumn PNIDs 2006 and when requested - Al-Rad Co -Transportation & Trade	Nineva, Anbar, Diala, Salah-Eldeen, Kirkuk, Kerbala, Thiqr, Sulaimaniyah	497,470.00