UNITED NATIONS DEVELOPMENT GROUP
IRAQ TRUST FUND
Programme Cover Page

Participating UN Organisation(s):
WHO

Sector Outcome Team(s):
Health and Nutrition

Programme Manager(s):	
Name:	**Dr. Faiza A. Majeed**
Telephone:	**+962 79-5017767**
E-mail:	majeedf@irq.emro.who.int

Sector Outcome Team Leader(s):	
Name:	**Ezechiel Bisalinkumi**
Telephone:	**+962 79-5053669**
E-mail:	bisalinkumie@irq.emro.who.int

Programme Title:
Pilot Assessment of Congenital Birth Defects in Iraq in selected districts of Six Governorates

Programme Number:
D2-33

Programme Description:
Currently, there are no reliable and adequate data on incidence, prevalence and trends of congenital birth defects (CBD) in Iraq. The 2006 Multiple Indicator Cluster Survey (MICS-3) reported that 20% of children under 5 years of age have some forms of disabilities; some of these cases have been attributed to congenital malformations. There is a need for a comprehensive programme to better understand the distribution, trends and the magnitude of birth defects in Iraq.. Given the funding not being fully available, the programme has been divided into two phases, the first to be implemented with the available ITF funds. The proposed study in the first phase aims at drawing initial baseline data and understanding the trends of birth defects in the selected governorates in Iraq; analyzing spatial and temporal trends and detect changes in the incidence of birth defects in Iraq and capacity building of MoH laboratory technicians in investigation techniques. The assessment in the second phase will aim at conducting observational and analytical epidemiological and laboratory investigations to understand underlying risk factors; strengthening the disease registry/surveillance for birth defects in Iraq and finally the proposed study will assist in assessing the burden of the problem on Iraqi health care system and communities and in formulating evidence-based recommendations to address the problem.

Programme Costs:	
UNDG ITF:	US$ **336,650**
Govt. Contribution:	
WHO Core:	US$ **15,000**
TOTAL:	US$ **351,650**

Programme Location:	
Governorate(s):	Baghdad ,Anbar, Basrah, Thi Qar, Sulaymaniyah and Diyala
District(s):	To be identified
Towns:	

Govt of Iraq Line Ministry Responsible:
MoH COSIT,KRSO

Programme Duration:	
Total # of months:	18 months
Expected Start date:	01 July 2010
Expected End date:	31 December 2011

Review & Approval Dates	
Line Ministry Endorsement Date:	4 August 2009
Concept Note Approval Date:	13 June 2010
SOT Approval Date:	10 June 2010
Peer Group Review Date:	14 June 2010
ISRB Approval Date:	22 June 2010
Steering Committee Approval Date:	27 June 2010

Signatures of Agencies and Steering Committee Chair

I.	**Name of Representative**	Dr Hassan Elbushra
	Signature	
	Name of Agency	WHO
	Date	27 June 2010
II.	**Name of Steering Committee Chair**	Christine McNab
	Signature	
	Date	27 June 2010

National priority or goals (NDS 2007- 2010 and ICI):
NDS: Improve quality of Health

ICI Benchmarks (as per the Joint Monitoring Matrix 2008):
4.4.1.4 Improve health and nutrition of all Iraqis as a cornerstone of welfare and economic development.

Sector Team Outcome(s): Health and nutrition policy makers and service providers at all levels have developed, reviewed and implemented policies, strategies, plans and programmes

Joint Programme/Project outcome(s Health and nutrition policy makers and service providers at all levels have developed, reviewed and implemented policies, strategies, plans and programmes

Detailed Breakdown of Budget by Source of Funds and
Distribution of Programme Budget by Participating UN Organization

Participating UN Organization	Portion from ITF Budget (US $)
WHO	**$ 336,650**
Total ITF Budget (US $)	**$ 336,650**

Total budget (in US $): $ **351,650**

Sources:

- Government $0
- ITF (Balance in the Health sector) **$ 326,650**
- ITF (unearmarked or interest) **$ 10,000**

UN Core/non-core sources

- UN Org (specify: WHO) $15,000

1. Executive Summary

There are continued concerns raised regarding increased number of congenital birth defects (CBD) in Iraq, however there is no scientifically reliable data on the magnitude of the birth defects and associated risk factor in Iraq. There is a need for a comprehensive programme and to learn more about birth defects in Iraq that could shed light on the incidence of various conditions, such as the congenital heart defects and neurological defects in different geographic areas over time in Iraq. Given the funding not being fully available, the programme has been divided into two phases, the first to be implemented with the available UNDG ITF funds. The proposed study in the first phase aims at:

- Drawing initial baseline data from selected districts in 6 governorates and understanding the trends of birth defects in the selected governorates in Iraq;
- analyzing spatial and temporal trends and detect changes in the incidence of birth defects in Iraq
- Capacity building of MoH national public health TORCH (Toxoplasmosis, Rubella, Cytomegalo and Herpes virus) laboratory and technicians

The second phase will aim at:

- conducting observational and analytical epidemiological and laboratory investigations to understand underlying risk factors;
- Strengthening the disease registry/surveillance for birth defects in Iraq and finally the proposed study will assist in assessing the burden of the problem on Iraqi health system, medical services and communities and formulating evidence-based recommendations to address the problem.

The data will be collected from selected districts in six governorates (Baghdad, Anbar, Basrah, Thi Qar, Suleiymaniyah and Diyala). The baseline will also be built on the available MoH data on the high incidence of CBD by governorates and regions (South/centre and Kurdistan regions), as nationwide data collection and analysis will take longer time and will require immense resources.

In Phase I, the assessment will include, but not be limited to, the review a) birth certificates kept by midwives and birth registration offices**;** b**)** hospital logbooks and medical records**;** c) death certificates of newborn and stillborn babies at maternity units in the main general hospitals within the study area for 10 years (2000-2009**).**

The initial descriptive study in Phase I is intended to answer the basic questions regarding the trend and magnitude of the birth defects in the selected districts of 6 governorates, who are affected, where they live and when the anomaly appeared. Determination as to why these defects are happening in specific populations, in specific locations and during specific times will be done during later phases of the programme.

Phase II of the study will combine different feasible methods and make use of the available secondary data to generate evidence on the magnitude possible risk factors of birth defects in Iraq. In addition, the study will help generating some hypothesis and identify areas for both prevention and further research.

As a result of the study, the GoI will have an improved policy environment and institutional capacity to prevent, early detect and manage birth defects among newly born children. The outcome of the project will enable them to access baseline data on and trends of incidence and prevalence of birth defects. It will provide a starting point of a proper registration systems for documenting and monitoring birth defects and MoH staff will be made aware of the importance of data collection, prevention, early detection and management of birth defects Also the purpose of this project is that at the end of the 18 months, MoH will have a national programme with evidence based data on congenital birth defects and the tools to know more about the prevalence of CBD and their causes at national and local level and what approaches are needed to improve the registry system.

WHO will be responsible for the overall coordination of the project implementation. WHO will closely collaborate with the Iraqi Ministry of Health and other relevant Iraqi national institutions and ministries (Ministry of Planning and Development Cooperation, COSIT and KRSO, Ministry of Higher Education and Ministry of Environment). WHO will also seek active participation of relevant WHO collaborating Centers, UN agencies and Non Governmental Organizations (NGOs).

2. Situation Analysis:

Children are the promise and the future of every nation, being the core of its development. Child mortality is a critical measure of the wellbeing of children and a good proxy indicator of the overall level of development. Several generations of Iraqi children born since the early 1980s have faced adverse conditions which affected their nutrition, health, and mortality rates negatively.

Since the 1991 war and, more recently, since the war in 2003, damaged infrastructure, food shortages, poor environmental sanitation and non-functioning social and economic sectors have resulted in the deterioration in overall health conditions. Poor staff skills, insufficient essential materials for proper health care, poor health facilities condition including; lack or insufficient of medicines and equipment in addition to poor physical structure, all contributed to the low coverage rate of health services among children and women. The Multi Indicators Cluster Survey (MICS-3 /2006) reported an infant mortality rate (IMR) in Iraq of 35 per 1000 live births and the under five mortality at 41 per 1000 live births. Also revealed that about 14 % of newly born Iraqi children were of Low Birth Weigh (LBW)[1] and about one fifth of the Iraqi children under five years of age (21.8%; with nearly half of them severe) are suffering from stunting. The war and its aftermath have left deep physical and psychological trauma on the population of Iraq, especially in Fallujah.

Iraq has a young population; 45% are under the age of 15 years, and those below 5 years of age constitute 17% of the population (5 million)[2]; two-thirds of the population lives in urban areas[3]. In 1999, UNICEF, in partnership with the Government of Iraq and the local authorities in Kurdistan Region, carried out two parallel household surveys to estimate the levels, trends and differentials of childhood mortality and the overall maternal mortality ratio [2]. The findings of in-depth analysis of the results of the survey for childhood mortality of under-five year old by selected socio-demographic characteristics, and the causes of death have showed that the leading cause among neonates was cough/and or difficulty in breathing in 42.3%, followed by sudden death in 11.9%, congenital abnormalities in 10.3% and prematurity in 10.2%.[4]

Definition and causes: The *International Statistical Classification of Diseases and Related Health Problems (tenth revision/*ICD-10), includes birth defects in Chapter XVII: Congenital malformations, deformations and chromosomal abnormalities. Birth defects like inborn errors of metabolism and blood disorders of prenatal origin appear in other chapters. Birth defects can be defined as structural or functional abnormalities, including metabolic disorders, which are present from birth. The term congenital disorder is considered to have the same definition; the two terms are used interchangeably.[5] The term 'congenital anomaly' is used for all types of structural defects with which a baby can be born. Overall, these abnormalities can be classified broadly into malformations, malformation syndromes, disruptions and deformations, which provide some insight into possible underlying etiology. Irrespective of definition, birth defects can cause spontaneous abortions and stillbirths and are a significant but under-recognized cause of mortality and disability among infants and children under five years of age. They can be life-threatening, result in long-term disability, and negatively affect individuals, families, health-care systems and societies.

There are currently no sound estimates of the number of children born with a serious congenital disorder attributable to genetic or environmental causes. The most common serious congenital disorders are congenital heart defects, neural tube defects and Down syndrome. Haemoglobinophathies (including thalassaemia and sickle-cell disease) and glucose-6-phosphate dehydrogenase deficiency, which are not covered by the ICD-10 definition of congenital anomalies, account for 6% of all congenital disorders.
Genetic disorders and congenital abnormalities occur in about 2-5% of all live births, account for up to 30% of pediatric hospital admissions and cause about 50% of childhood deaths in industrialized countries. The magnitude of the problem of such disorders can be attributed to several factors including[6]:

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[1] Low Birth Weight – LBW, 14 percent as per 2006 Multiple Indicator Cluster Survey MICS3

[2] Iraq demographic and health indicators 2008 (MoH annual report)

[3] BMC Pediatrics; "Causes and Differentials of Childhood Mortality"; June 2009

[4] Ibid

[5] Management of birth defects and haemoglobin disorders: report of a joint WHO–March of Dimes meeting, Geneva, Switzerland, 17–19 May 2006. Geneva, World Health Organization, 2006.

[6] "Eastern Mediterranean Health Journal"; Volume 3, Issue 1; 1997

- high rate of traditional consanguineous marriages, increasing the frequency of autosomal recessive disorders;
- relatively high birth rate of infants with chromosomal disorders related to advanced maternal age such as Down syndrome and other trisomies;
- relatively high birth rate of infants with malformations due to new dominant mutations related to advanced paternal age;
- high frequency of hemoglobinopathies and glucose-6-phosphate dehydrogenase deficiency in many countries of the Region, possibly related to selective advantage against falciparum malaria and other as yet unknown factors;
- large family sizes;
- lack of public health measures directed at the prevention of congenital and genetically determined disorders, the dearth of genetic services and inadequate health care prior to and during pregnancy

That said, congenital abnormalities are a diverse group of disorders of prenatal origin which can be caused by single gene defects, chromosomal disorders, multifactorial inheritance, environmental teratogens and micronutrient deficiencies. Maternal infectious diseases such as syphilis and rubella are a significant cause of birth defects in low- and middle-income countries. Maternal illnesses like diabetes mellitus, conditions such as iodine and folic acid deficiency, and exposure to medicines and recreational drugs including alcohol and tobacco, certain environmental chemicals, and high doses of radiation are other factors that cause birth defects.[7]

Consanguineous marriages, which are believed to increase the frequency of autosomal recessive conditions, are common In Iraq due to high prevalence of marriages among 1st and 2nd cousins - the rate of malformations can be even higher. MICS3 does not report on malformations, but reports that 20% of U5 children have some form of disabilities which to some extend may account for congenital malformations.

Incidence, Prevalence and Epidemiology: Considerable uncertainties remain as to the incidence of and mortality attributable to congenital disorders, especially in countries that lack adequate registration of deaths. It is generally estimated that globally, around 14% of babies are born with a single minor malformation, for example a skin tag that can easily be removed and is of little consequence. However, around 2-3% of neonates have a single major malformation like spina bifida that will require more extensive medical treatment, or perhaps even be lethal.

Congenital disorders are a common condition. WHO estimates that some 260 000 deaths worldwide (about 7% of all neonatal deaths) were caused by congenital anomalies in 2004[8]. They are most prominent as a cause of death in settings where overall mortality rates are lower, for example in the European Region, where as many as 25% of neonatal deaths are due to congenital anomalies.[9]

WHO was requested in 2009 by MoH to support a surveillance programme on CBD in relation to infectious diseases that cause CBD among children which are toxoplasmosis, rubella, cytomegalovirus and herpes. MoH noted that in order to identify the magnitude of problem, there is a need to conduct an assessment to confirm of the CBD in Iraq.

Prevention: There are several country-level actions that can support the development of services for the prevention and care of congenital birth defects. Prevention requires reliable information on which to back up decisions and will in addition require basic public health approaches to be integrated into health systems including maternal and child health services. Many of the services and interventions proposed are already within the reach of while others can be added as needs and resources determine. Basic components of such national programme for the prevention and care of birth defects include a number of key elements, some of which are covered by this programme:.

a) Commitment of policy-makers and provision of adequate managerial support: this project will provide policy makers with reliable independent baseline data on the prevalence and incidence of CBD.

[7] Sixty-third World Health Assembly, Report by the Secretariat WHA63/A63 1 April 2010.

[8] *The global burden of disease: 2004 update*. Geneva, World Health Organization, 2008.

[9] Report of the Secretariat to the World Health Assembly, WHA63/A63, April 2010.

b) Integration of approaches to the prevention and care of birth defects into primary health care, with an emphasis on maternal and child health
c) Education and training for health-care providers, particularly those in primary health care which will be part of the project.
d) Organization of health-education programmes for the general population and recognized high-risk groups.
e) Initiation of a population-screening programme such as screening of newborn infants, premarital/pre-pregnancy screening, and screening during pregnancy, this is one of the key elements of the project.
f) Developing an appropriate surveillance system for birth defects.[10] and strengthening the national registry for birth defects. This would assist in early detection of changes in the incidence of birth defects in different geographical locations over time within Iraq, and would serve as a sensitive tool for monitoring and evaluating the impact of different interventions..

3. Lessons Learned, NDS and ICI Relevance, Cross-Cutting Issues, and Agency Experience in Iraq/in the Sector

Background/context, NDS and ICI relevance:

Following years of armed conflict and sanctions, improving access to quality health services remains one of the most imminent development challenges in Iraq. Enhanced access to health services is one of the major developmental objectives in the health sector of the National Development Plan. Limited access to health services, insufficient public health infrastructure and the environmental impact of conflicts, might have all contributed to the situation regarding CBD.[11]

The provision of solid baseline data and information on congenital birth defect amongst the Iraqi population at national and Governorate levels contributes to the NDS Goal: 7. Improve quality of Health. It directly contributes to ICI Benchmarks 4.4.1.4 Improve health and nutrition of all Iraqis as a cornerstone of welfare and economic development, and to the UNCT's health and nutrition outcome: "Health and nutrition policy makers and service providers at all levels have developed, reviewed and implemented policies, strategies, plans and programmes." Existing figures indicate that work on reducing the incidence of and mortality associated with congenital anomalies needs to be linked to efforts to achieve the Millennium Development Goal (MDG) 4 target of a two thirds reduction in the mortality rate of children under five years of age between 1990 and 2015. This study will contribute to achieving MDG 4 through enable national health programmes to better target and plan appropriate interventions. Recent studies have shown that the incidence of birth defects could be reduced by 70% through antenatal care services[12] in addition to community education, population screening, early diagnosis, genetic counselling and treatment. It will thus contribute to the achievement of MDG 5, improvement of maternal health.

The proposal is thus in line with the United Nations Assistance Strategy in Iraq (UNAS), the MDGs, the National Development Strategy (NDS) and the International Compact with Iraq (ICI) benchmarks. .

Lessons Learned:

- **Monitoring and evaluation:** An important lesson learned from previous experiences is the lack of monitoring and evaluation (M&E) at the outcome level and focusing the M&E process on the activity and output levels. The various elements of the project will capacitate the MoH to measure indicators at outcome level although the agencies will only be accountable for the output level. Mid term and final evaluations are planned in the framework of this programme and their results will be available for all stakeholders.
- **Coordination:** Years of analysis's and surveillance conducted in close collaboration between MoH ,WHO and COSIT, have led to a number of lessons learned that are especially applicable to the survey assessment component of this programme. To build on available data and avoid any duplication in analytical work, the

[10] Support in establishing surveillance systems may be obtained by collaborating with existing birth defect surveillance systems, including the International Clearinghouse for Birth Defects Surveillance and Research, which includes the Latin American Collaborative Study of Congenital Malformations, the WHO-supported International Database of Craniofacial Anomalies, and the European Registration of Congenital Anomalies.

[11] Common Country Assessment (CCA) for Iraq, 2009

[12] i.e. use of folic acid to reduce occurrence of neural tube defects, prevention of iodine deficiency and vaccination of adolescent females against rubella (WHO)

program will build upon data obtained from the complementary questions on congenital birth defects (CBD) included in other ongoing nationwide surveys such as the MICS 4 and the Iraq Women Integrated Social and Health Status Survey (I-WISH). The CBD assessment will be carried out in a coordinated manner with the MoH and other Health and Nutrition Sector Outcome Teams members.

Assessment of Cross-cutting Issues:

- **Human Rights:** This programme will contribute to identifying the magnitude of the population exposed to risk factors and hence will provide clear independent evidence on CBD in Iraq to assist in formulating human rights based policy and targeted interventions.
- **Gender equality:** This proposal will support the Ministry of Health and Ministry of Planning and Development Cooperation, COSIT and KRSO, Ministry of Higher Education in data collection that is segregated by sex which will provide accurate information on distribution of CBD burden on health system The need for gender mainstreaming throughout all policies and activities will be addressed in the various trainings and technical support rendered to the GoI within the context of this programme. Gender equality will be also ensured through the response component which will be based on the assessment and the disaggregated information provided. This will contribute to achievements of national and international commitments including the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW).
- **Key environmental issues:** Implementation of the project does not have any direct effect on the environment. But, there are selected environmental risk factors for congenital anomalies based on evidence. Phase two which will deal with the environmental interventions will be taking into consideration the results in Phase One.
- **Employment generation:** This programme will generate direct and indirect local employment opportunities in Iraq. It offers opportunities for participants to acquire specific training skills that they will be able to utilize for individual and social development. Supplies will be locally procured which indirectly will create employment opportunities and income generation. Around 200 professionals and similar number of support staff will be involved/supported/ recruited throughout the period of the programme.

Agency Experience in Iraq/in the Sector:

WHO has a long history in Iraq and has been present since 1948 providing strategic and policy guidance in the area of health governance and assistance in scaling up essential prevention treatment and care services since 2003. A total of 14 programs have been funded to revitalize and strengthen and sustain the Iraqi health system. Programs implemented focused on health care service delivery infrastructure rehabilitation, establishing referral laboratories, and emergency response. Currently WHO has more than 100 focal points, logistical and technical staff working in all 18 governorates and will be providing monitoring and oversight of all activities implemented.

4. The Proposed Programme

Guided by the NDS and the ICI, the concept and overall intention is to strengthen the capacity of Iraqi MoH health policy makers to improve policy and institutional capacity to prevent, early detect and manage birth defects among newborn babies. There is an articulated need for a comprehensive programme to better understand the distribution, trends and the magnitude of birth defects in Iraq.

Given the funding to carry out such a comprehensive study not being fully available at present, the programme has been divided into two phases: the first to be implemented with the available UNDG ITF funds, and the second phase to be funded with additional resources mobilized during the implementation of Phase I. During this phase, WHO will be seeking other sources for mobilizing funds to support phase 2 activities. Also, it will advocate for cost sharing with the GoI to ensure sustainability of the programe. The following is a plan of action for resource mobilization to support phase 2 interventions:

No	Actions	Responsible partner	Target dates	Remarks
1.	Develop a more detailed resource mobilization plan	MoH /WHO	July-September 2010	To be submitted to (PSC) for discussion and approval in the first steering committee meeting
2.	Designate a resource mobilization focal point in the (TSC)	MoH/WHO	July 2010	
3.	Initiate and enhance close contact with donors' HQ and regional office to support country resource mobilization	WHO/HQ/RO	July-December 2010	
4.	Produce resource mobilization materials or concept paper, attractive to donors, for the phase 2 project proposal	WHO/HQ/RO	November-December 2010	in coordination with CO and consolidate and update in the Regional Office
5.	Discuss with RO in including the Programme on CBD within the Biennium workplan for 2012-2013	WHO/Iraq office	August 2011	
6.	Convene donors meeting or meeting of interested parties at country level such as EC and other donors	MoH/WHO	Continuing	To maintain close contacts with donors at country level
7.	Initiate discussion with GoI on Resource Mobilization and cost sharing for phase 2 of the program	WHO/MoH	September 2010	
8.	Strengthen resource mobilization capacity in RO and COs	WHO	Continuing	

The overall programme and project outcome is: Health and nutrition policy makers and service providers at all levels have developed, reviewed and implemented policies, strategies, plans and programmes.

The initial descriptive study is intended to answer the basic questions regarding the distribution, type, trend and magnitude of the birth defects in the selected governorates, who are affected, where they live and when the anomaly appeared. Determination as to why these defects are happening in specific populations, in specific locations and during specific times will be done during later phases of the programme. This phase of the project also aims at supporting the development of the baseline and conduct preparatory work for Phase II.

Outputs of Phase I:

1. MoH is better able to understand the distribution, type, trends and magnitude of birth defects in selected districts of 6 governorates
2. MoH TORCH laboratory technicians have improved capacities to conduct tests on risk factors associated to birth defects.

The data will be collected from selected districts in six governorates (Baghdad, Anbar, Basrah, Thi Qar, Suleiymaniyah and a sixth one not yet identified by the MoH). The selection of areas will be done according to the following criteria:

a) Feasibility and security conditions;
b) Vulnerability and identified need (using the recent Analysis in the framework of IHAP and UNDAF)
c) Catchments population; and
d) Regional balance

Planned activities:

1. Technical assistance to develop the study protocols and data collection tools for the descriptive Study including detailed methodology and data collection tools (check lists and assessment forms)
2. Technical Consultation Meeting involving WHO experts, MoH officials, WHO collaborating centers and representatives of the target governorates to discuss and agree on the protocols of the assessment
3. Basic capacity building for laboratory personnel in methods of detecting associated risk factors for birth defects such as infectious disease
4. Support to the fieldwork for the baseline descriptive study

Depending on the initial results and availability of resources, the study could be expanded to other governorates. The results also will be complemented by the data of other surveys planned in 2010-2011, such as the Multiple Indicators Cluster Survey (MICS 4) and the Iraq Women Integrated Social and Health Status survey (I–WISH). An initial consultation meeting, involving WHO, MOH, sister UN agencies and WHO collaborating centers will be organized to discuss and agree on the scope and methods of the assessment. Technical assistance will be sought to develop the study protocol and data collection tools.

Trainings: WHO will organize a training of trainers in Amman, Jordan. The regional supervisors, the Programme Manager and the Programme Coordinator will be present at the trainings for monitoring and evaluation. The training of field staff will then take place at regional levels in Iraq. The necessary logistic and administrative support will be allocated for the field activities. The training of the teams will be followed by a one day pre-testing of the field assessment form.

The proposed project does not aim at preventing or treating congenital defects, however, the data made available will enable the MoH to plan and programme for preventions and interventions. Most birth defects of environmental origin can be prevented by public health approaches, including prevention of sexually transmitted infections, legislation controlling management of toxic chemicals (e.g. certain agricultural chemicals), vaccination against rubella, and fortification of basic foods with micronutrients (iodine and folic acid). Prevention may be considered in terms of life stage.

5. Results Framework and indicators

5. Results Framework and indicators **Programme Title:** Pilot Assessment of Congenital Birth Defects in Iraq in Six Governorates							
NDS/ICI priority/ goal(s):	**NDS:** *Improve quality of Health* **ICI Benchmarks (as per the Joint Monitoring Matrix 2008):** *4.4.1.4 Improve health and nutrition of all Iraqis as a cornerstone of welfare and economic development*						
UNCT Outcome (2008-2010)	*Improved performance of the Iraqi health system and equal access to services, with special emphasis on vulnerable, marginalized and excluded persons*						
Sector Outcome	*Health and nutrition policy makers and service providers at all levels have developed, reviewed and implemented policies, strategies, plans and programmes*						
JP Outcome 1	*Health and nutrition policy makers and service providers at all levels have developed, reviewed and implemented policies, strategies, plans and programmes*			**NDS / ICI Priorities: same as above**			
JP Outputs	**UN Agency Specific Output**	**UN Agency**	**Partner**	**Indicators**	**Source of Data**	**Baseline Data**	**Indicator Target**
Output 1.1 MoH is better able to understand the distribution, type, trends and magnitude of birth defects in selected districts of 6 governorates	MoH is better able to understand the distribution, type, trends and magnitude of birth defects in selected districts of 6 governorates	WHO	MoH/ Baghdad and KRG, MoP/COSIT and KRSO	1.1.1 A protocol on assessment of congenital birth defects developed	MoH reports	No	Yes
				1.1.2 Number of districts which successfully completed the initial descriptive study	MoH and WHO reports	0	7
				1.1.3 Number of data collectors(field workers) trained on data coolection tools	Training reports	0	48 (4 teams /governorate Each team 2 persons)

				1.1.4 % of trainees satisfied with the quality of training in terms relevance and usefulness	Pre-post training assessment	NA	80%
				1.1.5 Number of local supervisors trained on study on data collection tools	Training reports	0	7
				1.1.6 % of trainees satisfied with the quality of training in terms relevance and usefulness	Pre-post training assessment	NA	80%
				1.1.7 Assessment on type, trends and magnitude of birth defects in 6 districts completed	Assessment Report	No	Yes
Output 1.2 MoH TORCH laboratory technicians have improved capacities to conduct tests on risk factors associated to birth defects.	MoH (TORCH) laboratory technicians have improved capacities to conduct tests on risk factors associated to birth defects.	WHO	MoH/ Baghdad and KRG, MoP/COSIT and KRSO	1.2.1 Number of laboratory personnel trained on PCR for detecting associated risk factors (Toxoplasmosis, Rubella Cytomegalo and Herpes virus)	Training report	0	30
				1.2.2 % of trainees satisfied with the quality of training in terms relevance and usefulness	Pre-post training assessment	NA	80%
				1.2.3 Number of PCR equipment provided to MoH laboratories	Receiving Reports	0	2
				1.2.4 Number of Diagnostic kits provided to MoH laboratories	Receiving reports	0	10

6. Management and Coordination Arrangements

The MoH and the DoH in the selected governorates are key implementing partners whilst WHO is responsible for overall management, coordination and reporting. In addition to the close collaboration between WHO and the Government, WHO will work extensively with WHO Collaborating Centers[25] which will enable timely and efficient access to the best experts in the area of congenital birth defects. The WHO collaborating centers are institutions such as research institutes, parts of universities or academies, which are designated by the WHO Director-General to carry out activities in support of the Organization's programmes. Currently there are over 800 WHO collaborating centers in over 80 Member States working with WHO on many areas, including studies of congenital abnormalities. Access to the experts working these centers is essential given the limited scope of the study, the complexity of the study environment and in order to manage and foresee risks.

WHO will also seek active participation of relevant UN agencies and Non Governmental Organizations (NGOs). The study will be coordinated and complemented by other surveys and studies, including the Multiple Indicator Cluster Survey (MICS 4) and the Iraq Women's Health Survey (I-WISH) which both have agreed to include additional questions that will complement the data from this study.

A Part time WHO senior international Project Manager based in Amman supported by a MoH national Project Coordinator (part time 30%) based in Baghdad will constitute the core staffing to lead the study and follow up on project implementation. They will be supported by WHO staff already working in different WHO sub offices inside the country. The Project Manager will be in charge of the day-to-day management of the project, including implementation the work plan, budget planning and oversight, drafting terms of reference for the acquisition of services and supplies and the oversight of operations in the field. WHO's Regional Office and Headquarters will provide technical support and back up.

The project team will have monthly meetings and will review the progress of the project, plan ahead and/or resolve problems and bottlenecks and follow up activities related to the study planning, implementation, monitoring and maintaining documentation. In addition to this, a part time (30%) National Consultant in Public Health based in Baghdad will manage the technical aspects of the study and coordination between WHO Iraq Country Office, COSIT and KRSO. This person will be responsible for ensuring that the technical quality standards of the study, coordination of training workshops and reporting are maintained.

The MoH will establish and chair a Programme Steering Committee (PSC) in coordination with WHO in order to oversee the project and serve as the guiding mechanism for the larger programme once additional funding is secured. The steering committee will be comprised of representatives from other stakeholders. The PSC will meet at least on a quarterly basis and ad hoc whenever need to review the implementation and provide feed back. The PSC will establish and supervise the activities of a Technical Project Committee (TPC) and also be responsible for following and ensuring that the project is implemented in accordance with relevant standards and guidelines including the Sphere Standards and the Paris Declaration on Aid Effectiveness including the key principles of national ownership, harmonization with related programmes in the Iraq Health System, and managing for results in terms of assuring that the outcome of the study leads to a reflective response.

The initial work of the PSC will be focused on finalizing the work plans and identification of the needed staff within MOH and COSIT/KRGSO and thereafter with the process of recruitment and familiarization of selected staff and provision of the needed logistic support. A training program overseen by the TPC will then be undertaken to train the MoH staff on various assessment techniques and laboratory methods for detecting congenital anomalies related to infectious diseases..

[25] WHO Collaborating Centers are institutions such as research institutes, parts of universities or academies, which are designated by the WHO Director-General to carry out activities in support of the Organization's programmes (www.who.int/collaboratingcentres)

The Technical Project Committee (TPC) chaired by a MoH technical staff member, will be comprised of experts from WHO, MoH, DoH, MOHE and selected WHO collaborating Centers. The TPC will ensure that partners in the UN and NGO Health and Nutrition Sector Outcome Team are consulted in line with the principles of interagency collaboration. In addition, Ministry of Higher Education academicians will play a major role in the development of project protocol ,data collection tools, field work, data analysis and report writing .

The study components will be coordinated by the members of the TPC and overseen by the PSC. This coordination will include the necessary strengthening and establishment of national networks of MoH and COSIT staff for data collection activities.

Twenty four (24) data collection teams will be established and provided with necessary training under the supervision of the TPC. Each team will consist of two persons; one team leader, and one data collector. A local supervisor will be based in each of the governorates included in the study throughout the implementation phase of data collection, monitoring the quality of completed assessment forms on a daily basis (See table 1 below).

The PTC will identify and designate regional/local supervisors who will work in close coordination with the Project Manager and the Project Coordinator and the assessment and response staff. These regional supervision activities will be supported by WHO focal points at governorate levels.

Table 1: Summary of responsibilities of team leader and data collector

Role	**Responsibilities of team members during the assessment phase**
Team leader	• Identify Hospitals and focal points at health facility • Reviewing the assessment forms and check the completed data collection forms before leaving each health facility • Assist the data collector in reviewing the below mentioned documents • Maintain records and health facility control sheets • Plan revisits
Data collector	• Review Birth certificates kept by midwives and birth registration offices • Review Hospital logbooks and medical records • Review Death certificates of newborn babies at maternity units in the main general hospitals within the study area for 10 years (2000-2009)

7. Feasibility, risk management and sustainability of results

Although the security situation in Iraq is improving, it still remains unpredictable. As a result, adequate caution will be exercised in the movement of national and international staff during data collection. The recent national elections and possible changes in senior GoI staff also might impact the project implementation since the project will be implemented in close collaboration with GoI staff. To mitigate any negative impact these factors may have, WHO will rely on its existing network of local focal point facilitators, staff from field offices, and technical experts who will work in tandem with COSIT and KRSO data collection and analysis teams. WHO's national and international staff will provide regular oversight and guidance. Trained staff in MoH will be engaged in the study and that will ensure continuity in the project implementation regardless of any political changes in the country.

Irregular electricity supply (frequent power outages) in the country poses another challenge that could delay planned activities. The extensive field work (data collection) with the overload on caretakers in health facilities and in the birth registry offices could pose threats to data reliability; a contributing factor to possible variation in the study responses. Well trained supervisors at local level and smaller number of well trained field teams with close supervision could overcome this potential challenge. Training of trainers and data collectors according to the guidelines, with clear manuals as planned in the ToT training would mitigate this risk. Finally,

the project will be run as a joint project with the GoI, which will be required to take charge of some of the support provided and gradually assume total responsibility for the study results.

In addition to security and access related challenges, implementation delays might also take place due to slow feed back/communication and delayed correspondences with ministries. The extensive experience of the UN partner agencies in implementing similar programmes in various parts of the world and operating in the challenging environment inside Iraq has provided important inputs to the design of the programme to mitigate these factors.

Sustainability: The proposed project, as a first phase, will lay the foundations for the broader scoped programme, and as such will be sustained. It primarily engages the government at central and local levels as the main implementing partner responsible for its implementation and analysis, thus ensuring local ownership from the beginning. As part of the national effort to increase the availability of high quality data for MDG monitoring and beyond the study aims at providing baseline data for effective and efficient national planning and response. Several training workshops will be held to upgrade the capacity of the Iraq national team and provide them with best practices, up-to-date methodological techniques as well as exposing them to regional and international experiences in the area of congenital birth defects. A well designed capacity development strategy and exit strategy built into the second phase will contribute to the sustainability of outcome of the study and will stimulate continued research in the area.

Sustainability of the project will be further ensured through the institutional training programme, which will target both national and local levels. This will assist in the ongoing collection of data and entry into the HIS. Furthermore, the most important element for sustainability which is rendering institutionalized the process of regular situation analysis and response to identified needs will be part of exist strategy.

8. Monitoring, Evaluation, and Reporting

WHO will follow its monitoring and evaluation guidelines benefiting from existing monitoring structures in Iraq such as WHO's Offices and meeting Points in North, South and central regions, the Governorate-based facilitator network. Field staff will monitor the implementation of the project on the ground with oversight from the Project Manager who reports to the PSC. Progress will be monitored against outputs and indicators as detailed in the results framework in this project document. The regular meetings of PSC and periodic reports from the technical experts, COSIT and KRSO will provide regular updates on the progress of activities.

WHO will use its internal monitoring and evaluation process as described below.

- Track implementation of activities,
- Identify risks and provide contingency action,
- Ensure that technical support is timely provided as necessary.
- Provide a financial updates.
- Submit the quarterly fiches.

WHO will also produce quarterly reports to be submitted to the PSC Chair. The report will cover the following:

- Follow up on progress in the implementation of all programme activities as outlined in the programme annual plans of action,
- Identify any delays in programme implementation and recommend corrective action needed,
- Review quarterly financial reports for each of the programme activities.

The PSC will conduct quarterly meetings to:

- Review quarterly progress narrative and financial reports submitted by WHO to report on results,
- Take action over any contingencies and risks that may delay/hinder the project implementation,
- Oversee the midterm review process.

In addition, a regular monthly monitoring and reporting mechanism will be instituted. This will enable the Project Manager and Project Coordinator to regularly monitor the implementation process. In addition, to ensure the effectiveness of monitoring system, the six Governorate Focal Points will work in close coordination with the Project Manager and Project Coordinator. [26]. This standardized WHO integrated monitoring system will allow fast reaction to any sudden changes which might affect the implementation of the programme.

Project Evaluation

A final evaluation is planned to take place to determine the effectiveness of the programme and level of progress against the set quantitative and qualitative targets. The methodology of the evaluation will be based on the analysis of actual outputs against the designed target indicators through conducting final evaluation. This evaluation will be central in the development of the Phase II design.

Reporting

Financial reporting will be done in accordance with the MoU signed with the UNDG ITF Administrative Agent (AA) for the amount received. WHO's financial management procedures for disbursement and liquidation of funds will be used.

Quarterly reporting: WHO will submit quarterly progress reports and a monitoring schedule plan. The reports will be collated and finalized by the Project Manager and submitted to the PSC.

Annual reporting: Narrative progress and financial report will be done in accordance with the MoU signed with the UNDG ITF Multi Donor Trust Fund (MDTF) office.

[26] WHO has a network of national staff in Iraq at governorate level. This network will back up the implementation of the program whenever needed and will provide an additional monitoring mechanism.

9. Workplan and Budget

Work Plan for: ***Assessment of Congenital Birth Defects in Iraq***
Period Covered: ***01 July 2010 – 30 June 2011***

Sector Outcome (s): Health and nutrition policy makers and service providers at all levels have developed, reviewed and implemented policies, strategies, plans and programmes									
JP Outcome: Health and nutrition policy makers and service providers at all levels have developed, reviewed and implemented policies, strategies, plans and programmes.									
UN Organization-specific Annual targets	**Major Activities**	**Time Frame (by activity)**						**Implementing Partner**	**PLANNED BUDGET (by output)**
		Q1	**Q2**	**Q3**	**Q4**	**Q5**	**Q6**		
Output 1.1 MoH is better able to understand the distribution, type, trends and magnitude of birth defects in selected districts of 6 governorates									
WHO	1.1.1 Consultation and technical meetings (MoH,UN partners and Consultants)	**X**						MoH/ COSIT	**$287,000**
	1.1.2 Finalize assessment protocols and plan of work	**X**							
	1.1.3 Assessment team recruited and operational		**X**	**X**	**X**	**X**	**X**	MoH/ COSIT	
	1.1.4 Technical assistance to PSC	**X**	**X**	**X**	**X**	**X**	**X**		
	1.1.5 Training of Trainers (TOT) and for assessment team personnel		**X**					MoH/ COSIT/WHO	
	1.1.6 Training of data collectors at governorate levels		**X**					MoH/ COSIT	
	1.1.7 Training on data entry and management		**X**					MoH/COSIT	
	1.1.8 Data collection and field work		**X**	**X**				MoH/MoHE	
	1.1.9 Data entry and management			**X**	**X**			MoH/MoP	
	1.1.10 Report writing, printing and dissemination of study results				**X**	**X**		MoH/MoHE/WHO	
	1.1.11 Mid term evaluation				**X**			MoH/WHO	
	1.1.12 Preparation of work plan for phase two					**X**	**X**	MoH /MoHE/WHO	
	1.1.13 Social mobilisation and advocacy activities related to field work	**X**	**X**					MoH	
	1.1 14 Consultation workshop on discussing the results and next steps						**X**	MoH/MoP/MoHE/ WHO	
	1.1.15 Final evaluation						**X**	WHO/MoH and evaluation firms	
Output 2.1: MoH TORCH laboratory and technicians have improved capacities to conduct tests on risk factors associated to birth defects.									
WHO	2.1.1 Training of (TORCH) Lab Technicians			**X**	**X**	**X**		MOH/COSIT/WHO	**$49,650**
	2.1.2 Provision of Equipment for the Central Lab.			**X**	**X**	**X**	**X**	MOH/COSIT	
Total Planned Budget									**336,650**

WHO PROGRAMME BUDGET- ITF

PROGRAMME BUDGET		ESTIMATED UTILIZATION OF RESOURCES (US$)	
CATEGORY	**AMOUNT (US$)**	**2010**	**2011**
1. Supplies, commodities, equipment and transport	25,000	5,000	20,000
2. Personnel (staff, consultants and travel)	134,000	84,000	50,000
3. Training of counterparts	45,000	45,000	0.00
4. Contracts	98,000	73,000	25,000
5. Other direct costs	15,100	15,100	0
Total Programme Costs	**317,100**	**222,100**	**95,000**
Indirect Support Costs	19,550	13,700	5,850
TOTAL	**336,650**	**235,800**	**100,850**

Budget Narrative

Programme Project Budget

Budget Category	Item Description for Phase one	Unit	Unit Cost	Qty	WHO total budget USD	Total budget USD	ESTIMATED UTILIZATION OF RESOURCES US$	
							2010	2011
1. PERSONNEL					134,000	134,000	84,000	50,000
1.1 National Programme/Project Personnel					44,000	44,000	34,000	10,000
1.1.1	Senior national program manager (part time)	Person	12,000	1	12,000	12,000	6,000	6,000
1.1.2	National consultant,Public Health (part time for 4 months)	Person	8,000	1	8,000	8,000	4,000	4,000
1.1.3	4 Regional Focal points(per diem and travel) fior 2 months	person	3,000	4	12,000	12,000	12,000	0
1.1.4	6 Governorate focal points for 2 monrths	Person	2,000	6	12,000	12,000	12,000	0
1.2 International Programme/Project Personnel					10,000	10,000	10,000	0
1.2.1	Project coordinator (part time)	Person	10,000	1	10,000	10,000	10,000	0
1.3 International Consultants					80,000	80,000	40,000	40,000
1.3.1	WHO senior international Project manager(Part time)	Person	8,000	1	80,000	80,000	40,000	40,000
2. CONTRACTS					98,000	98,000	73,000	25,000
2.1	Contracting local contractor to organize Steering Committel meeting in Amman	Meetings	20,000	1	20,000	20,000	20,000	0
2.2	Logestic support to finalize assessment protocol and workplan	LS	2,000	1	2,000	2,000	2,000	0
2.3	Logistic support to data collection and field assessment including transportaion cost	LS	25,000	1	25,000	25,000	25,000	0
2.4	Data entry and managment,	LS	8,000	1	8,000	8,000	8,000	0
2.5	social mobilization and advocacy activities related to data collection and field work	LS	1,000	6	6,000	6,000	6,000	0
2.6	Mid term Evaluation	LS	5,000	1	5,000	5,000	0	5,000
2.7	Report writing, and printing the assesmnet report	LS	10,000	1	10,000	10,000	0	10,000
2.8	Consultation workshop for discussing the results and future steps	LS	12,000	1	12,000	12,000	12,000	0
2.9	Final evaluation	LS	10,000	1	10,000	10,000	0	10,000
3. TRAINING					45,000	45,000	45,000	0
3.1	Training of Trainers (TOT for assessment team personnel and supervisors	Package	20,000	1	20,000	20,000	20,000	0
3.2	Training of data collectors at governorate level	Training course	2,000	5	10,000	10,000	10,000	0
3.2	Training of Lab. Technicians	Package	10,000	1	10,000	10,000	10,000	0
3.3	Training on data entry and management	Package	5,000	1	5,000	5,000	5,000	0
4. SUPPLIES, COMMODITIES, EQUIPMENT and TRANSPORT					25,000	25,000	5,000	20,000
4.1	Equipment for IT processing and communications	IT equipments	2,500	2	5,000	5,000	5,000	0
4.3	Laboratory equipemnt	Lab(package)	20,000	1	20,000	20,000	0	20,000
5. PROGRAMME/PROJECT SUB-TOTAL					302,000	302,000	207,000	95,000
6. MISCELLANEOUS (Should Not Exceed 3% of BL 5)					9,060	9,060	9,060	0
7. SECURITY (Should Not Exceed 2% of BL 5)					6,040	6,040	6,040	0
8. TOTAL PROGRAMME COST					15,100	15,100	15,100	0
9. AGENCY PROGRAM SUPPORT COST (Incl. Monitoring & Reporting) 7 % of BL 8					19,550	19,550	19,550	0
10. PROGRAMME/PROJECT BUDGET TOTAL					336,650	336,650	241,650	95,000

WHO Budget explanatory note

No.	Activity Description	Total USD	Remarks
Output 1.		**$ 287,000**	
1.1.1	Consultation Meeting (MoH,UN partners and Consultants)	20,000	Consultation meeting for 3 days will be held in Amman with the members of the steering committee with a total cost of 20,000 to finalize the protocol and workplan
1.1.2	Finalize assessment protocols and plan of work	2,000	Logistic support to print and distribute Work plan and assessment design including pretesting $ 2000
1.1.2	Logistic support to field assessment including transportation costs	25,000	The cost for the field work for the teams each consist of 2 person(48 persons) for 2 weeks , + the cost for field assessment and transportation each for $25,000
1.1.3	Training (TOT and training at governorate levels) for assessment team personnel	30,000	ToT training in Baghdad or Erbil for 30 participants for 5 days = 20,000 - 2 training courses for local teams in north ,south and center for 3 days ($10,000)
1.1.4	Data entry and management,	8,000	MoH and MoHE team with total cost of $8,000
1.1.5	Consultation workshop for the results and future steps	12,000	Will be conducted after completing the assessment study and data analysis with a total cost of $12,000
1.1.6	Report writing, and printing the assessment report	10,000	Report writing and printing =$ 10,000
1.1.7	Monitoring and evaluation	15,000	- Mid term review= $ 5000 - Final evaluation= $ 10,000
1.1.8	Logistic support to field assessment including transportation cost	25,000	Logistical support for field and transportation for 12 vehicles = $ 25,000
1.1.9	Advocacy meetings for personnel at registration offices	6,000	6 advocacy meeting at registration (each course $ 1,000x6= $6,000)
1.1.10	Recruitment of national and international staff(part time duration) for the programme	134 ,000	- Senior national program manager (Part time)= $ 12,000 -4 regional Focal points(per diem and travel) for 2 months =(3000 for eachx4 = $12,000) - Project coordinator (part time) =$10,000 - National Consultant (Public health part time for 4 months with a total $8,000) - one Senior International Consultant to provide technical assistance, on field work and data entry and analysis $8,000 X 10 months = $80,000) -6 governorate focal points 2000x6=$12,000)
Output 2		**$49,650**	
2.1.1	Training of Lab technicians	10,000	Training of 25 Lab technicians
2.1.2	Provision of supplies and equipment	25,000	- Lab equipment
	Miscellaneous cost	14,650	
Total		**USD 336,650**	

Annex A: Agency Programme Status Profile

Sl. #	Programme ID #	Programme Title	Total Budget (US$)	Implementation Rate (% complete)	Commitments (% as of 30 April 2010)	Disbursements (% as of 30 April 2010)	Remarks
1	D2-25a	Strengthening of the Primary Health Care System in Iraq – Phase II	5,930,368	14	25	19	
2	D2-26	Preparatory Phase: HIV/AIDS Policy Support and Capacity Building Programme	$1,000,000	1	2	0	Funds received in April 2010
3	D2-27	Addressing Micronutrient Deficiencies in Iraq : Assessment and Responses	$1,827,394	1	2	0	Funds received in April 2010
4	D2-28	Support to the Government of Iraq's National Measles and Polio Vaccination Campaign	$1,488,748	2	2	0	Funds received in April 2010
5	D2-29	Support to improving Management and Safe Use of Medical Equipment	$2,540,683	1	2	0	Funds received in April 2010
6	D2-31	Adolescent and Youth Friendly Health Services at PHC level	$384,892	1	2	0	Funds received in April