Department of Humanitarian Affairs
Iraq Programme

PRELIMINARY PUBLIC HEALTH POLICY PAPER MDOU/UNOHCI

Executive Summary

The public health policy for SCR 986 phases I and II, consists basically of obtaining base-line information on the nutrition, health and water/sanitation status of the Iraqi population, for pre and post-resolution evaluation. The purpose of this is to use reliable indicators that will permit the measurement of the impact of interventions (increased food rations, provision of pharmaceuticals/medical supplies and improvement of water/sanitation activities). This information is to be obtained from, among others, the GOI, Ministry of Health, Water Authorities, WHO and UNICEF.

Prior to the Gulf war, Iraq was dependent on the import of two requirements for a healthy life, food and medicine. In the pre-war years in Iraq, local food production was supplying only 30% of the country's food requirement. The shortage of food at affordable prices has put the population at risk. The public rationing system system in central and southern Iraq and the food aid provided by WFP and other relief organizations, particularly in Northern Iraq, have reduced the impact of food deprivation. Before 986, the food rations met about one half of people's daily caloric needs.

The total value of Iraqi food imports in 1989 exceeded $2 billion U.S. dollars. In 1989 the Ministry of Health of Iraq spent over $500 million U.S. dollars for the purchase of drugs and medical supplies. More than $100 million U.S. dollars use to be spent per annum on preventive maintenance of the water supply and sanitation facilities. At present in all three areas, actual expenditure is a fraction of what it use to be (between 5 - 10%).

The Nutritional Status Survey at Primary Health Care Centres undertaken during Polio National Immunization Days on 12 - 14 April 1997 by the Ministry of Health, UNICEF and WFP examined 15,000 children under 5 years of age for weight and height/length in the 15 Governorates of South/Central Iraq. Its purpose was to provide baseline data for SCR 986, in accordance with the MOU. General malnutrition (underweight for age) in 1997 occurs in 24.7% of children under 5 years of age compared to 9.2% of children in the same Iraqi Governorates in 1991, one year after the UN sanctions. Chronic malnutrition (low height for age) is slightly more (27.5%) and acute malnutrition (low weight for height) is 8.9%. The pattern of malnutrition by age shows that the level of acute malnutrition for children aged 6 - 23 months are greater (14%) than the aged 24 - 59 months. There is no sex nor urban/rural difference.

The 1996 Multiple Cluster Survey undertaken by the Government of Iraq and UNICEF confirmed the serious nutritional status of young children in Northern Iraq. About one in every five children (19% or 95,000 children) is underweight (low weight for age), and 26% of children under 5 (or 130,000 children) are chronically malnourished (low height for age), with children aged 6 to 24 months most at risk. The vast majority of the country's population has been on a semi-starvation diet for years.

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This tragic situation has important implications on the health status of the population and on their quality of life, not only for the present generation, but for the future generation as well.

As regards mortality, certain studies have concluded that at present, 50% of all paediatric deaths and 33% of all adult deaths may not be currently recorded. At the least, infant, maternal and crude mortality rates are double those prior to the 1991 Gulf war (WHO,1996).

As regards morbidity since 1991, among the most important health problems faced by the Iraqi population are: malnutrition, nutritional anemia, vitamin A deficiency, iodine deficient goitre, malaria, acute respiratory infections, enteric infections (cholera and typhoid) with resulting dehydration, leishmaniasis, measles, poliomyelitis, tetanus, and meningitis.

Major surgical interventions have been reduced to 30% of pre-sanctions levels because of an acute shortage of anaesthetics and surgical equipment and supplies. Laboratory services have declined to about 50% of pre-sanctions levels owing to a lack of equipment, chemicals and reagents.

Among the government responses to the worsening health situation over the last few years are, among others, facilitating private practice, cost recovery and self financing of public medical institutions, increasing user fees, private services in public facilities, substitution of nursing services with family care and encouraging health workers to innovate.

By 1995, access to potable water in urban areas had decreased from 95% in 1990 to 92%, and in rural areas from 75% to 44%. Water treatment plants are currently working at only 40 % of their nominal capacities. The existing sewage treatment plants are currently non-operational and raw sewage is being disposed of without treatment to the rivers; the direct source of drinking water for many, causing health hazards and contamination with increasing incidence rates of water-borne diseases.

Recommendations:

- Establish adequate baseline information on status of nutrition, health and water/sanitation pre and post- 986 SCR to be able to measure impact of interventions.
- Establishment of a nationwide nutrition surveillance system. If this is not possible than consider adding marasmus, kwashiorkor and vitamin A deficiency to the list of reportable diseases currently monitored by the MOH information system.
- The registration of deaths and cases of communicable and non-communicable diseases must be improved to have an adequate picture of the magnitude of mortality and morbidity in Iraq.
- Hospital sanitation and provision of potable water must improve so that, together with 986 pharmaceuticasl/medical supplies and water/sanitation support, a favorable impact on health can be observed.
- Public health campaigns through mass media regarding, among others, immunization, breast-feeding, the boiling of drinking water and the practice of safe sanitary practices.

INTRODUCTION

Resolution 986 (1995) states "the concern of the serious nutritional and health situation of the Iraqi population, and by the risk of a further deterioration in this situation", by the Security Council.

The MOU as regards observation includes as its main objectives:

+ "The confirmation of equitable distribution of humanitarian supplies to the Iraqi population", and
+ "To ensure the efectiveness of the operation and determine the adequacy of the available resources to meet Iraq's humanitarian needs".

As regards observation in the health sector it mentions, among other aspects:

- the observation of medical supplies and equipment will focus on the existing distribution and storage system. It will involve visits to hospitals, health centers as well as medical and pharmaceutical facilities;
- the observation of food distribution will include the quantity and prices of food items imported under the resolution, and the data gathered will be used to determine the impact on the nutritional status of the population; and
- the observation of the water/sanitation sector will be carried out by collecting data on the incidence of water-borne diseases and water quality control checks.

This public health observation process will take into account health data (statistics, indicators and surveys) generated by the Ministry of Health, United Nations Agencies and GOI.

Among other considerations, the Executive Summary of the Distribution Plan of the GOI:

+ states in paragraph 3, that food distribution will receive 805 million dollars and will ensure a daily intake of 2,030 kcal and 47 grams of protein per person/day as well as soap and detergent rations. Food distribution will be implemented within the existing rationing practice.
+ states in paragraph 4, that medicine and medical supplies will receive a total allocation of 210 million dollars. These items will reach the actual beneficiaries through hospitals and primary health centers in Iraq using the existing distribution system. All Iraqi citizens and foreign residents have access to the public health services.
+ states in paragraph 5, that the plan allocates 44.2 million dollars for the repair and rehabilitation of water and sanitation facilities in the country.

These 3 specific allocations total more than 1.059 billion dollars and are directly related to the public health of the population of Iraq.

For the purpose of gathering data, in the Interim Report of the Secretary General on Implementation of SCR 986 (1995) states in paragraph 27 that the observation and reporting mechanism is also designed to evaluate the humanitarian situation in Iraq, performing among various tasks, " analysis of data from various sources, including relevant ministries of the Government of Iraq, as well as programmes, funds and agencies of the United Nations system ".

Resolution 1111 (1997) mentions once again , among other considerations, that the Security Council is " determined to avoid any further deterioration of the current humanitarian situation".

See summary chart of 986 financial implications and allocations.

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NUTRITION, HEALTH AND WATER/SANITATION

Worldwide, the public health community has been observing a health transition of changes from a pretransition environment dominated by high fertility, high mortality, infectious disease and malnutrition to an environment of low mortality and low fertility with a disease profile that increasingly emphasizes non-communicable diseases of adults and the elderly.

As regards deaths due to groups of causes in the world in 1990, a study group (WHO, Harvard School of Public Health and the World Bank) came up with the following classification and the worldwide contribution to deaths:

	Deaths Worldwide in 1990
Group 1 Communicable Maternal, Perinatal and Nutritional Conditions	1 in 3
Group 2 Noncommunicable Diseases	5 in 10
Group 3 Injuries	1 in 10

NUTRITION

The accomplishments in health and nutritional status of the Iraqi population acheived over the last two decades in part due to the oil wealth have been rapidly deteriorating due to the prolonged sanctions. In the pre-war years in Iraq, local food production was supplying only 30% of the country's food requirement. The total value of Iraqi food imports in 1989 exceeded $ 2 billion U.S. dollars.

At present, while food is readily available in markets the purchasing power of the average Iraqi has declined, especially for the salaried civil servants, pensioners and destitutes.

As a result of the almost 7 years of sanctions, most of the Iraqi population is suffering from reduced food intake. Thus the nutritional status of much of the population, especially the most vulnerable groups including children under five, is in decline. The Ministry of Health has reported a significant increase in cases of malnutrition, such as kwashiorkor, marasmus and other micronutrient deficiencies. Among these are vitamin A deficiency, iodine deficiency with resulting goitre, low birthweight infants and iron deficiency anaemia among pregnant women.

Prior to April 1997, the food ration provided by the Government of Iraq satisfied about 50% of daily caloric need and did not meet the full requirement for energy, protein and most essential vitamins and minerals. Furthermore, economic difficulties prevented many Iraqi families from fully complementing their food requirements through market purchases. Consequently, their nutritional status had deteriorated significantly.

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In April, 1997, UNICEF, WFP and Iraq's Nutrition Research Institute, carried out a nutritional survey of 15,000 children under five years of age in 87 Primary Health Care Centres in the 15 central and southern governorates.Results show that 25% of these children were malnourished. Of this group, 27% were chronically malnourished and 9% acutely malnourished.
In order to better assess nutritional needs of the population in the three Northern Governorates, UNICEF undertook a Multiple Indicator Cluster Survey in August 1996. This Survey randomly sampled 2,175 households in all three governorates and revealed that 19.3% of children under 5 years were malnourished, and of these, 26% were chronically malnourished and 4% were acutely malnourished.

HEALTH

Before August 1990, the health care system in Iraq was based on an extensive and developed network of primary, secondary and tertiary health care facilities. These facilities were linked among themselves and with the community by a large fleet of ambulances and service vehicles, and by a good communications network facilitating referral to the next level of the health care system. It was estimated by the Government of Iraq that 97% and 78% of the urban and rural populations, respectively, had access to health care. While the system tended to emphasize curative aspects, it was complemented by a set of public health activities that included malaria control, an expanded programme of immunizations, tuberculosis control activities.

Because of the current situation, the health facilities are faced with a severe shortage of critically needed items and supplies. This health situation is seriously aggravated by the poor environmental quality, malnutrition and difficult socio-economic conditions. It is estimated that only one quarter of the medical equipment available in health care facilities is still operational. Major surgical interventions have been reduced to 30% of pre-sanction levels. There is a general lack of anaesthetics and disposable equipment such as gloves, syringes and catheters. Laboratory tests have also been severly affected (50% of pre-sanctions levels) by the severe shortage of equipment, chemicles and reagents.
Published reports on health in Iraq describe alarming increases in malnutrition and rising rates of immunization preventable disease, gastroenteritis and malaria.

Regarding drugs and medical supplies, patients are, at best, offered doses lower than what would be required by their health conditions. The production of the local pharmaceutical industry has come to a stand still. In 1989, the Ministry of Health spent over $500 million U.S. dollars for the purchase of drugs and medical supplies. By 1995, this figure was about 22 million U.S. dollars.
First Priorities/Needs:
- life-saving and essential medicines, required vaccines and sera for protecting children and eligible groups of the community against infectious diseases, supplies for surgical operations, reagents for the diagnosis of diseases, insecticides and pesticides to control insect-borne diseases;
- provision of good quality drugs at low cost;
- provision of spare parts for the rehabilitation of hospital equipment; and
- supply of ambulances.

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In estimating the needs for medicines and medical supplies, the following criteria are taken into consideration: population per governorate, seasonal variation of diseases, disease prevalence, health indicators (vaccination coverage, morbidity, mortality, prevalence of non-communicable diseases), epidemics of infectious disease, and environmental health conditions.

WATER/SANITATION

Since 1990, the annual budget for the maintenance of the water and sewerage treatment plants has diminished from $100 million U.S. dollars to $8.5 million, making it difficult to repair and maintain the high technology water supply systems.
In view of the importance of potable water and sanitation for public health, the Government of Iraq has adopted a long term programme to provide these services according to international scientific standards per capita.
The production of drinking water in the 14 governorates amounts to 1400 million cubic metres per year. The design production of Baghdad amounts to 850 million cubic meters per year. However, the estimated efficiency of the existing facilities does not currently exceed 40% of their design capacity. The percentage of waste is estimated at more than 40% of the actually produced water.
As regards sanitation, the design capacity for the 14 Governorates, except Baghdad, amounts to 153 million cubic meters per year, and the design capacity for Bagahdad amounts to 680 million cubic meters per year. In addition, there are 256 pumping stations comprising more than 1,000 vertical and submerged pumps. Although the system requires complete renovation, the first distribution plan seeks to provide only the minimum requirements for maintaining and operating the system for the first six months.
The status of the water and sanitation sector in the three northern Governorates remains critical as the water treatment plants are operating at about 60% of pre-1991 levels.

The analysis of health policy can be usefully divided into 3 tasks:

1. Choosing intervention, which assesses the cost effectiveness of potential disease control technologies by combining technical analysis (epidemiological and clinical) with economic considerations.

2. Designing delivery systems, which have 3 key elements:
   - planning the development of human and physical infrastructure;
   - planning the logistical system for drugs and supplies; and
   - planning appropiate information and incentives structures and financial instruments.

3. Choosing the appropiate mix of governamental institutions (what governments can do through the provision of information, taxation, regulation, direct investment and research).

OBSERVATION

Objectives:

1. Whether the government of Iraq has ensured equitable distribution of supplies authorised under the resolution; and
2. Whether revenues authorised are adequate to meets Iraq's humanitarian needs

Observation in the health sector will include a nutritional assessment of the Iraqi population, in cooperation with the Ministry of Health, in order to provide regular updated reporting on the most pressing needs. Medical supplies and equipment will be monitored through the existing storage and distribution systems. This will involve visits to warehouses, hospitals, clinics, health centres and other relevant facilities where such supplies are stored or tested. Observation of the water and sanitation supplies will determine whether they are delivered to appropiate end-users and used for their intended purposes. The relevant facilities will be visited by UN personnel who will also conduct surveys of the availability and quality of potable water and the incidence of water-borne diseases. All relevant indicators will be used.

NUTRITION

United Nations nutritionists have concluded that the current food ration under SCR 986 provides food and nutrient supply at basic survival level. It provides 2,030 kcal which can be compared to a desirable minumum of not less than 2,500 calories per capita per day. Compared to basic survival needs, WFP estimates that the SCR food basket supplies 93% of the caloric needs, 100% of the required protein and 97% of thiamin needs. However, it only covers 69% of Iron, 41% of niacin and vitamin B12 and 13% of calcium.Since iron deficiency is an issue of public health concern, there is scope to further improve the nutritional status of expectant women and children through the fortification of flour with iron. Even if the ration were to be upgraded to provide 2,500 calories per day, there may be little real impact on nutritional status until there are significant improvements in health services, sanitation and access to clean water.

HEALTH

Any assesment of the adequacy of SCR 986 medical supplies in meeting the health needs of the population is hampered by the slow and partial arrival of pharmaceuticals/medical supplies. Indeed, the continuous degradation of the medical sector has been exacerbated by this situation. According to information provided by the MOH, no more than 4% of the medicines needed in Iraq were available during the last five months. The number of surgical operations, performed mostly for emergencies, has decreased by 17% and the laboratory tests by 8% compared to the same period in 1996. The present low bed occupancy rate in hospitals and the low use of health facilities does not reflect the magnitud of morbidity, which would be the basis for a realistic assessment of adequacy.

It is hoped that, with the arrival of significant quantities of pharmaceuticals/medical supplies, it will be possible to apply standard indicators that will help assess the health situation more adequately. There is need of an objective assessment of the impact of arrivals on the quality of care, and of the general adequacy of medical supplies to meet the needs of the country.

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Prior to the arrival of pharmaceuticals/medical supplies into Iraq, WHO observers had conducted a through assessment and analysis of the drug distribution system of the government. A computerized programme had also been set up to follow medical supplies as they arrive, which, for the first time, allows the speedy monitoring of stock positions countrywide, as well as an immediate check of the actual availability within each governorate. The computerized programme includes a master list of all medical items included in the Distribution Plan, with the 661 Committee reference number. In this way, all shipments can be carefully monitored at all levels of the drug distribution system.

Health Intervention can be population based or clinical:

Population Based (public health):
a) change of personal behaviors;
b) control of environmental hazards;
c) immunization;
d) mass chemoprofilaxis; and
e) screening and referral.

Clinical:
a) health centres or clinics;
b) hospitals; and
c) specialized centres.

The first table included in this preliminary paper is the List of Health Facilities in Iraq, updated by WHO for 1997. This is followed by a simplified monitoring form for reports on hospital facilities.

In 1993 the center/southern governorates had aproximately 27,902 beds in the hospital system. In 1996 in the private sector there were an estimated 2,009 beds. In 1993 in the public sector there were 7,395 medical personnel (1,632 specialists, 4,827 general practitioners, 97 dentists and 893 pharmacists). During the same year and in each governorate there were 15 general health laboratories and 893 dispensary health laboratories.

ANALITIC CAPACITY BUILDING

The measurement of the nature and magnitud of the health problem in a population and its trends and determinants is essential to design intervention strategies that maximize the effectiveness of the health technologies.

Demoghaphic Analysis

Such data will provide the basis for designing intervention strategies as well as assessing the effect of the disease burden on the population. Includes accurate measures of the number of the population, its social and economic characteristics and the trends and determinants of population change.

The second table included in this paper is on the population of Iraq, 1996 and the third table is the estimated population of Iraq by the MOT, GOI for July 1997 and January 1998.

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Selected health indicators in Iraq before Sanctions, 1988 - 1989:

Birth Rate	43 per 1,000 population
Crude Death Rate	8.0 per 1,000 population
Infant Mortality Rate	51 per 1,000 live births
Under 5 Mortality Rate	94 per 1,000 live births
Maternal Mortality Rate	160 per 100,000 live births
Low Birth Weight	5% (below 2.5 kg)
Life Expectancy	66 years

Tables to be Prepared During August 1997
Sources:Central Statistical Organization, G.O.I.;Vital and Health Statistics Department, MOH; WHO; UNICEF; FAO; and Water Authotities.
For 1997, all information is required on a monthly basis.

Baseline
Yearly Cases of Malnutrition in Children less than five years old in Iraq, 1989 - 1996
Reported Mortality Rate in Children less than 5 years old in Iraq, 1989 - 1996
Infant Mortality Rate in Iraq, 1989 - 1996
Maternal Mortality Rate in Iraq, 1989 - 1996
Percentage of Low Birth Weight Births to Total Births in Iraq, 1989 - 1996
Reported Incidence Rates of Malaria Cases in Iraq, 1989 - 1996
Reported Incidence Rates of Cholera and Typhoid in Iraq, 1989 - 1994
Reported Incidence Rates of Leishmaniasis in Iraq, 1989 - 1994
Reported Incidence Rates of Tetanus and Poliomyelitis in Iraq, 1989 - 1994
Reported Incidence Rates of Diphtheria and Pertussis in Iraq, 1989 - 1996
Reported Incidence Rates of Measles and Meningitis in Iraq, 1989 - 1996
Major Surgical Operations in Iraq, 1990 - 1996
Laboratory Investigations in Iraq, 1990 - 1996
Drinking Water Quality in Iraq, 1995 - 1996
Percentage of Water Samples with Bacterial Contamination, 1995 - 1996

As regards population information for 1995 (World Health Statistics 1995, WHO, Geneva, 1996) there is the following information on Iraq:
1995 Population: 20,449,000

Age Groups: 0 - 14 years	(43.6%)
15 - 64 years	(53.5%)
65 +	(3.0%)

Growth Rate = 3%
Crude Birth Rate= 35.8 per 1,000 inhabitants
Crude Death Rate= 5.9 per 1,000 inhabitants
Life Expectancy at Birth= 68 years
Infant Mortality Rate= 46.7 per 1,000 live births
Prevalence Rate of Underweight Children Under Age 5= 20 - 29%

The following are samples of information required to calculate specific rates:

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Crude Death Rate=Number of Deaths in One Year / Total Population x 1,000

Infant Mortality Rate=Number of Deaths Aged Under 1 Year in a Period of Time / Number of Live Births in the Same Time Period x 1,000

Incidance Rate= Number of New Cases in a Period of Time / Total Population x 1,000 or 1,000,000

Point Prevalence Rate=Number of Persons with the Disease at an Instant in Time / Total population at That Instant x 1,000 or 1,000,000

Iraq Monthly Country Situation Report
(Year , Data and Source)

1994 Child population (0 - 15 years) = 9.23 millions (Central Statistical Organization)
1994 Under 5 Mortality Rate= 140 per 1,000 live births (Iraq Human Development Report 1995 and Ministry of Health)
1994 Infant Mortality Rate= 111.7 per 1,000 live births (IHDR 1995 and MOH)
1994 Maternal Mortality Rate= 130 per 100,000 live births (IHDR 1995 and MOH)
1995 Underweight (% moderate and severe)= 44.4% (IHDR 1995 and MOH)
1994/1995 Access to Safe Water (% Total/Rural/Urban)= 77.5/44.2/91.9 (Water and Sanitation Survey 1995)

1996 One Year Olds Immunized Against (%):

Tuberculosis	101.6	
DPT3	94	
OPV	95.6	
Measles	97.7	(Ministry of Health 1996)

1995 Pregnant Women Immunized Against Tetanus (TT2)= 70% (Ministry of Health)

Epidemiologic Surveillance

This capacity is essential to assess the magnitude of health problems, define their determinants, and monitor the effect of health program interventions. For the purpose of colecting information, the existing vital statistics information and surveillance systems in Iraq will be used: In epidemiology, the population is both the unit of study and also the unit to which the findings are applied, in the form of public health policy.

The fourth table included in this report is the Reported Incidence Rates of Communicable Diseases of Epidemiological Importance for Iraq, 1994 - 1996. As with mortality, we would have to consider under-reporting of cases as well as the health sectors difficulty in diagnosing cases for lack of equipment, tests, reagents, etc.

In 1989 the number of registered deaths were 92,255 (52,657 male and 39,598 females).
In 1990 the number of registered deaths were 76,684 (43,602 male and 33,082 females).

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POLICY

- Health policy should move on multiple fronts simultaneously (facility based and population based).

- Health strategies should be goal oriented.

- Program inputs (and costs), outputs and expected outcomes.

- Information systems must be established that provide timely data on health outcomes, intermediate objectives and program inputs and costs.

FOLLOW UP ACTIONS FOR THIS POLICY PAPER

1. Information from existing vital statistics organizations/departments and epidemiologic surveillance systems.

2. Baseline Morbidity and Mortality Statistics for the 7 most recent years, by sex and age groups for Iraq. Communicable and Non-Communicable Diseases.

3. Baseline information on the health sector (human and material resources as well as activities) of public and private health facilities, for the country and by center/south and northern governorates. Most Recent Year Available.

4. Visits to public health facilities to evaluate level of care being provided.

5. Impact of 986 foodstuffs distribution on vulnerable populations: under 5 years, 5 to 15 years and maternal groups. Baseline Information 6 most recent years for the country and by center/south and northern governorates.

6. Impact of 986 water/sanitation supplies on environmental health conditions related to water and sanitation. Baseline Information (95 - 96)for the country and by center/south and northern governorates.

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References

1. Resolution 986(1995) adopted by the Security Council at its 3,519th meeting, on 14 April 1995.
2. Memorandum of Understanding Between the Secretariat of the United Nations and The Government of Iraq on the Implementation of SCR 986 (1995). 20 May 1996.
3. Distribution Plan Submitted by the Government of Iraq to the Secretary General of the United Nations in Accordance with the MOU of 20 May 1996.
4. Interim Report of the Secretary- General on Implementation of Security Council Resolution 986 (1995). UN, 25 November 1996.
5. Resolution 1111(1997) adopted by the Security Council at its 3,786th meeting, on 4 June 1997.
6. Disease Control Priorities in Developing Countries. The World Bank, Washington,D.C. 1993.
7. The Global Burden of Disease. Harvard School of Public Health, World Health Organization and the World Bank. 1996.
8. World Health Statistics 1995, World Health Organization, Geneva, 1996.
9. Annual Abstract of Statistics 1994, Republic of Iraq. Board of Ministers Planning Commission. General Statistical Organization.
10. Evaluation of Food and Nutrition Situation in Iraq. Terminal Statement prepared for The Government of Iraq by the Food and Agricultural Organization of the United Nations. FAO, UN, Rome, 1995.
11. Medical Care in Iraq Following Six Years of Economic Sanctions, Columbia University, Center for Economic and Social Rights and Health Development Project. September 19,1996.
12. The Health Conditions of the Population of Iraq Since the Gulf Crisis, World Health Organization. March, 1996.
13. Impact of Oppresive Sanctions on Health, Nutrition and Environment in Iraq. Ministry of Culture and Information. Baghdad, June, 1994.
14. The 1996 Multiple Indicator Cluster Survey: A Survey to Assess the Situation of Families In Iraq. Final Report with Results from the Northern Governorate. UNICEF, Iraq. May,1997.
15. Nutritional Status Survey at Primary Health Centres During Polio National Immunization Days (PNID) in Iraq. April 12 - 14,1997. Conducted by the Ministry of Health (GOI), UNICEF/Iraq and World Food Programme/Iraq. 24 May, 1997.
16. Iraq Country Situation Reports (ICSR), UNICEF. 1995 - 1997.

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United Nations

UNOHCI

Multi-Disciplinary Observation Unit

Public Health Office
United Nations Inter-Agency Humanitarian Program

Oil exports since 10 December 1996
Food arriving since 20 March 1997
Pharmaceuticals / Medical Supplies arriving since 9 May 1997

FINANCIAL IMPLICATIONS FOR TWO BILLION DOLLARS OIL SALE

53.0 %	Escrow Account to Provide Funds for Humanitarian Purchases.
13.0 %	separate Account Established for the Purchase of Humanitarian Goods to be Provided by the United Nations Inter-Agency Program.
30.0 %	Transferred Directly to the United Nations Compensation Fund.
2.2 %	United Nations Operational and Administrative Costs.
0.8 %	Special Account Operating Costs United Nations Special Commission.
1.0 %	Escrow Account for Operational and Administrative Costs including Distribution and In-Country Monitoring of Humanitarian Goods, Banking Related Charges for the "Iraq Account", Auditing, Oil and Customs Inspections, Independent Oil Experts assisting the 661 Committee and other Administrative Costs.
100 %	Total

53 % and 13 % Accounts

Food	$804,630,000	61%
Detergents and spare parts	$101,380,000	8%
Good Quality Drugs, Vaccines, Medical Equipment and Ambulances	$225,400,000	17%
Water Sanitation Supplies and Equipment	$44,200,000	3%
Rehabilitation of Infra-Structures in Electricity, agriculture and Education Sectors, as well as Energy and Demining Activities	$145,070,000	11%
TOTAL	**$1,320,680,000**	**100%**

LIST OF HEALTH FACILITIES IN IRAQ / WHO / UPDATED 1997

CENTER/SOUTH					
GOVERNORATE	**HOSPITALS**	**HEALTH CENTRES WITH DOCTORS**	**HEALTH CENTRES WITHOUT DOCTORS**	**SPECIALIZED CENTRES**	**TOTAL**
BAGHDAD	16	110	0	16	*142*
NINEVAH	13	101	11	3	*128*
BASRAH	10	57	10	3	*80*
THI-QAR	6	31	32	0	*69*
BABYLON	8	33	30	6	*77*
DIYALA	8	29	28	2	*67*
ANBAR	10	40	72	1	*123*
SALAH AL-DIN	6	35	35	2	*78*
WASIT	5	23	9	2	*39*
NAJAF	5	23	14	2	*44*
TAMEEM	4	39	17	3	*63*
QADISIYAH	6	23	22	1	*52*
MAYSAN	7	20	7	0	*34*
KERBALA	5	15	8	4	*32*
MUTHANNA	4	23	1	0	*28*
SUBTOTAL	*113*	*602*	*296*	*45*	*1056*

NORTH OF IRAQ					
GOVERNORATE	**HOSPITALS**	**HEALTH CENTRES WITH DOCTORS**	**HEALTH CENTRES WITHOUT DOCTORS**	**SPECIALIZED CENTRES**	**TOTAL**
SULEIMANIYAH	11	49	176	0	*236*
ARBIL	12	28	81	0	*121*
DOHUK	6	34	39	0	*79*
SUBTOTAL	*29*	*111*	*296*	*0*	*436*
GRAND TOTAL	*142*	*713*	*592*	*45*	*1492*

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REPORTS REGARDING HOSPITAL FACILITIES
MONITORING FORM

1. Observers:

2. Name of Hospital:

3. Date of Visit:

4. Location: District Governorate

5. Hospital Director/Contacts:

6. Telephone #:

7. Date of Construction/No. Floors:

8. No. of Beds/Daily Occupation Rate:

9. Services Available:

10. Computers:

11. No. of Outpatients (average per day):

12. Surgical Care:

13. Shortage Pharmaceuticals/medical supplies:

14. Private Wards:

15. Ambulances:

16. Health Personnel:

17. Frequent Health Problems:

18. Services Visited:

19. Equipment Needing Repairs:

20. General Sanitation:

21. Hospital Water Supply:

22. Preparation Regarding Reception 986 Pharmaceuticals/medical supplies:

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POPULATION OF IRAQ, 1996

GOVERNORATE	TOTAL	%	ADULTS	CHILDREN UNDER 1
BAGHDAD	5373106	24.65	5207985	165121
NINEWAH	1957203	8.98	1909276	47927
BASRAH	1581956	7.26	1541729	40227
THI-QAR	1202048	5.51	1173559	28489
BABYLON	1144547	5.25	1122559	21988
DIYALA	1048805	4.81	1032977	15828
ANBAR	1023640	4.70	997134	26506
SALAH AL-DIN	819867	3.76	795122	24745
WASSIT	758767	3.48	742647	16120
NAJAF	744068	3.41	716561	27507
TAMEEM	735640	3.37	721317	14323
QADISSYA	726595	3.33	708789	17806
MISSAN	641612	2.94	616878	24734
KARBALA	603257	2.77	588713	14544
MUTHANNA	436021	2.00	421886	14135
SUBTOTAL	18797132	86.23	18297132	500000
NORTH OF IRAQ *				
SULEIMANIYAH	1304555	5.98	1282202	22353
ERBIL	1016519	4.66	998091	18428
DOHUK	681538	3.13	667793	13745
SUBTOTAL	3002612	13.77	2948086	54526
GRAND TOTAL	21799744	100	21245218	554526

SOURCE: DISTRIBUTION PLAN, GOI,MOU,MAY 1996 AND *UNOHCI INFORMATION UNIT, APRIL 1997

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POPULATION OF IRAQ, JULY 1997 TO JANUARY 1998

GOVERNORATE	JULY 1997			JANUARY 1998		
	TOTAL	ADULTS	CHILDREN	TOTAL	ADULTS	CHILDREN
BAGHDAD	5539193	5484064	55129	5641798	5586669	55129
SALAH-AL-DIN	801405	795581	5824	816290	810466	5824
NINEVEH	2049639	2041991	7648	2087845	2080197	7648
TAMEEM	755752	751481	4271	769812	765541	4271
DIALA	1075991	1070531	5460	1096020	1090560	5460
ANBAR	1059905	1052633	7272	1079600	1072328	7272
BABYLON	1182331	1178193	4138	1204375	1200237	4138
KERBALA	621214	617014	4200	632758	628558	4200
NAJAF	773328	764193	9135	787626	778491	9135
QADISIYA	755411	749831	5580	769441	763861	5580
MUTHANA	453921	448171	5750	462306	456556	5750
BASRAH	1634828	1613920	20908	1665025	1644117	20908
MAYSAN	671823	660350	11473	684178	672705	11473
DHI-QAR	1247445	1236416	11029	1270578	1259549	11029
WASIT	780721	776773	3948	795255	791307	3948
SUBTOTAL	19402907	19241142	161765	19762907	19601142	161765
NORTH OF IRAQ						
DUHOK	693129	683319	9810	705835	696025	9810
ARBIL	1070951	1062137	8814	1090701	1081887	8814
SULEMANIYAH	1336753	1320019	16734	1361297	1344563	16734
SUBTOTAL	3100833	3065475	35358	3157833	3122475	35358
GRAND TOTAL	22503740	22306617	197123	22920740	22723617	197123

SOURCE: MINISTRY OF TRADE, GOVERNMENT OF IRAQ. THE NUMBER OF ADULTS WER

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REPORTED INCIDENCE RATES OF COMMUNICABLE DISEASES OF EPIDEMIOLOGICAL IMPORTANCE FOR IRAQ 1994 - 1996 RATES PER 100,000 INHABITANTS

DISEASE	1994	1995	1996
POLIO	0.354	0.170	0.027
DIPHTHERIA	0.699	0.769	1.211
PERTUSSIS	6.887	5.025	5.720
MEASLES	58.349	36.691	1.174
TETANUS	0.244	0.155	0.068
NEONATAL TETANUS	0.454	0.311	0.211
CHOLERA	4.293	4.109	0.082
TYPHOID FEVER	261.918	210.673	144.078
MENINGITIS	16.469	15.762	4.005
C. LEISHMANIASIS	32.923	37.509	34.912
KALA-AZAR	13.800	15.144	15.754
MALARIA	473.839	438.176	222.483

SOURCE: WHO TOTAL POPULATION FIGURES IRAQ
1994: 20,007,000 1995: 20,536,000 1996: 21,797,132

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