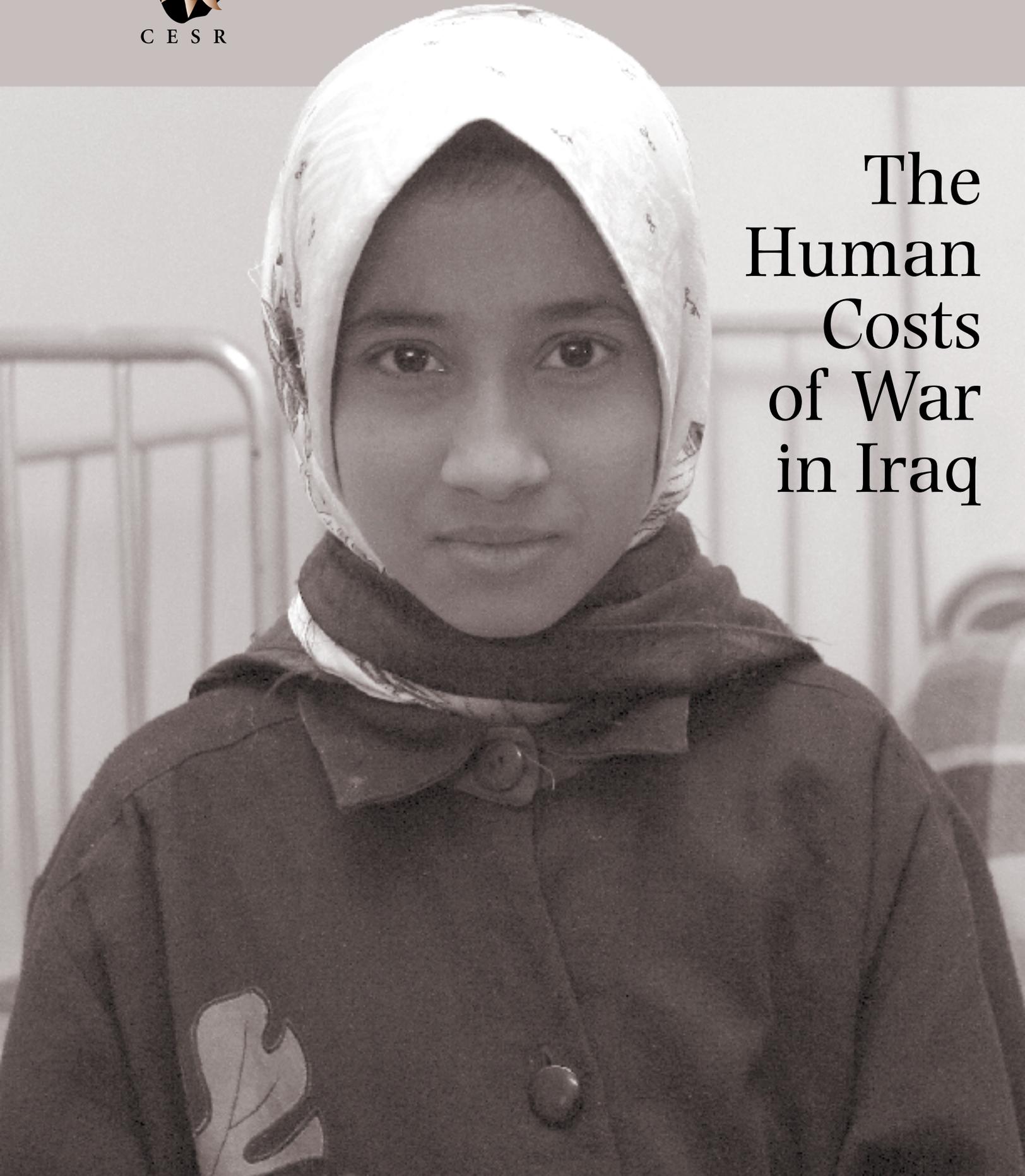




CENTER FOR ECONOMIC AND SOCIAL RIGHTS

The Human Costs of War in Iraq







The Center for Economic and Social Rights (CESR), based in New York, is a non-partisan international organization dedicated to promoting social justice through human rights. CESR has consultative status with the United Nations Economic and Social Council and serves as the Secretariat for the International Network on Economic, Social, and Cultural Rights, with hundreds of member organizations throughout the world.

Since 1991 CESR staff have organized six humanitarian missions to Iraq. These include the Harvard Study Team in March 1991, which first documented the post-war public health crisis and had its humanitarian findings incorporated into Security Council records; the International Study Team in August 1991, which conducted the first epidemiological study of child mortality in post-war Iraq; and a legal mission in 1996, which criticized Security Council sanctions policy for human rights violations and was featured on 60 Minutes. CESR's innovative reports have consistently highlighted the human costs and international law implications of war and sanctions in Iraq, and demanded that all parties to the conflict, including the international community as a whole, respect the human rights of the Iraqi population irrespective of the conduct of their leadership.

In response to the current crisis, CESR is working with concerned civic groups and individuals on an Emergency Campaign on Iraq. The purpose of the Campaign is to ensure respect for humanitarian and human rights principles by all parties to the Iraq conflict. Main activities include: sending fact-finding missions to Iraq; preparing a range of educational resources, from legal and scientific reports to popular fact-sheets; and advocating for a peaceful, law-based resolution to the crisis.

For more information please visit: www.cesr.org/iraq
or email Jacob Park at jpark@cesr.org

ACKNOWLEDGEMENTS

This report is dedicated to the 24 million Iraqi civilians who have lived through 12 years of hardship and face the prospect of yet another war.

We are grateful to all the Iraqis, United Nations personnel, and international aid workers who consented to be interviewed and shared documents with us for this report. We are also grateful to our Jordanian translators – Rajaa Al Jazar, Zakaria Salameh, Ali Abu Shakra, and Luay Shalkoub – who often translated under difficult conditions.

We would like to thank Terry Allen for the layout of the report in Baghdad. Special thanks to Hans von Sponeck, Ramzi Kysia, Sarah Leah Whitson, Ayliz Baskin, Jacob Park, Jason Florio, Robert Huber, Chris Caruso, Sara van der Pas, and Brenda Coughlin.

The six mission participants conducted research and wrote the first draft of the report under demanding conditions in Iraq. Elisabeth Benjamin, with Ronald Waldman, was responsible for the overall editing of the draft report in Baghdad. The following team members had primary

responsibility for each of the sections: **Health** ~ Michael VanRooyen, Ronald Waldman, Elisabeth Benjamin; **Food and Nutrition** ~ Peter Pellett and Elisabeth Benjamin; **Electrical Infrastructure** ~ Michael McCally; **Water and Sanitation** ~ Charlie Clements; and **Humanitarian Preparedness** ~ Ronald Waldman.

The Executive Summary was written by Roger Normand with Sarah Zaidi. The final report was produced and edited by Sarah Zaidi, Roger Normand, Elisabeth Benjamin, Hadi Ghaemi, and Jacob Park.

CESR gratefully acknowledges the generous financial support of The Ford Foundation, the Mertz Gilmore Foundation, and the John D. and Catherine T. MacArthur Foundation.

The views expressed in this report are those of the Center for Economic and Social Rights and do not necessarily represent the views of individual contributors.



Physicians
for Social
Responsibility

The findings of this report have been endorsed by Physicians for Social Responsibility (PSR). PSR is concerned about the humanitarian and environmental health consequences of war with Iraq. During the past century, war has disproportionately harmed civilians, and that disparity has only grown. When a great democracy considers going to war, it must examine the impact of its decision.

TABLE OF CONTENTS

Executive Summary	1
Chapter 1: Introduction	7
Chapter 2: Methodology	11
Chapter 3: Health Care System	13
Chapter 4: Food and Nutrition Status	21
Chapter 5: Infrastructure	24
Chapter 6: Humanitarian Preparedness in the Event of War	29
Appendix A: The 1991 Gulf War and A Possible War Scenario	34
Appendix B: Principles Guiding Humanitarian Action	35
Appendix C: United Nations Confidential Document Analysis	36
Bibliography	38
Research Team Biographies	39

EXECUTIVE SUMMARY



Jason Florio, Corbis/Sygma

The Center for Economic and Social Rights (CESR) sent a team of experts to Iraq from January 17-30, 2003 to establish a baseline of current conditions and assess the probable consequences of war. The Research Team's main finding is that the international community is unprepared for the humanitarian disaster of another war in Iraq.

The CESR Research Team was comprised of six experts in food security and nutrition, public health infrastructure, primary and public health care, and emergency and curative medicine. The Research Team: 1) conducted interviews in Baghdad, Kerbala, Kut, Basrah, Faw, Tikrit, Beiji, Mosul, Kirkuk, and Amman, Jordan; 2) collected extensive data from Iraqi civilians, clinic and hospital staff, government and United Nations (U.N.) officials, and staff of non-governmental organizations (NGOs); and 3) conducted a thorough literature review.

In addition, the Research Team obtained confidential U.N. documents on humanitarian conditions and emergency planning and conducted a review of available literature.¹

The Research Team was afforded an unusual level of

independence by the Government of Iraq. Most interviews and visits were conducted without Iraqi "minders" and with independent bilingual translators from Jordan.

This report focuses exclusively on the humanitarian implications of war to encourage informed public discussion and effective international action on this crucial yet overlooked element of the Iraq crisis. This limited focus does not reflect acceptance that war against Iraq is either justified or inevitable. While team members hold diverse political opinions about the war, they all agree that the human costs of war are unacceptably high.

The Research Team deplores the rush to war by the governments of the United States (U.S.) and the United Kingdom (U.K.) and urges that all possible steps be taken to achieve peace in accordance with fundamental principles of the United Nations Charter. The Research Team also deplores that Iraqis live under a repressive government that abuses human rights and contributes to the current vulnerabilities of the population. The people of Iraq should not be forced once again to pay the price for the political impasse between their leadership, the U.S. government, and other states.

¹ United Nations Executive Committee for Peace and Security, "Portrait of Iraq," Strictly Confidential (January 7, 2003); United Nations, "Portrait of the Current Socio-Economic Development Situation and Implications in Iraq Based on Specified Scenarios," Confidential

(January 20, 2003) [hereinafter "U.N. Portrait"]; United Nations Office for the Coordination of Humanitarian Affairs, "Integrated Humanitarian Contingency Plan for Iraq and Neighboring Countries," Confidential Draft (January 7, 2003) [hereinafter "U.N. Contingency Plan"].

FINDINGS

No one can precisely predict the extent of the crisis.² This report makes an informed assessment of probable humanitarian consequences of war based on field research, secondary data, confidential U.N. documents on humanitarian planning, and analysis of precedents. The main findings of the report are summarized below.

1 The Iraqi population is far more vulnerable to the shocks of war than it was in 1991, having been reduced after 12 years of sanctions to a state of dependency on government and international aid. Previously, Iraq was classified as a rapidly developing country with a modern urban infrastructure, an extensive welfare system, and a thriving middle class with significant personal assets.³ After 12 years of sanctions, the population has been impoverished and the civilian infrastructure remains fragile. Many characteristics of Iraqi society today are more comparable to the circumstances found in long-term refugee settings than to those in developing countries.



Terry J. Allen

- Since 1991, Iraq's rank on the United Nations Human Development Index has fallen from 96 to 127. No other country has fallen so far, so fast.⁴
- Over 60% of the population – 16 million people – depend for survival on a comprehensive government food rationing system.⁵ The ration is purchased through the sale of Iraqi oil and supplied through funds controlled and administered by the Oil-for-Food Program (OFFP).⁶
- The OFFP limits economic opportunities by failing to implement a cash component; civil servant salaries averaging US\$3-6 per month cannot cover even subsistence needs.⁷
- While nutritional status has improved recently due to increased humanitarian supplies under the OFFP and two years of good harvests, any disruption to the food distribution or health care systems will cause a rapid setback.
- Iraqis have been extremely isolated from the outside world for 12 years; the mental, physical, and educational development of an entire generation has been adversely affected by the extraordinary trauma of war and sanctions.⁸

2 International agencies are not adequately prepared to respond to the humanitarian consequences of war, especially if civilian infrastructure is attacked or disabled. Military attacks against electricity, transportation, telecommunications, and other necessities of modern civilian life would cause the immediate collapse of

² This report does not base different humanitarian outcomes on specific military scenarios. A number of other studies do that. See, e.g. Rogers, P., "Iraq: Consequences of a War," Oxford Research Group (October 2002); MedAct, "Collateral Damage: The Health and Environmental Costs of War on Iraq," IPPNW (November 2002); U.S. Military Displaced Civilian (DC) Camp Operations (November 11, 2002).

³ Economist Intelligence Unit Report (1996).

⁴ UNDP, Human Development Report, (July 2002).

⁵ United Nations, "Likely Humanitarian Report Scenarios," (December 10, 2002).

⁶ U.N. Portrait.

⁷ UNICEF, "The Situation of Children in Iraq," (February 2002) [hereinafter UNICEF Iraq Report]. Because of the lack of implementation of the cash component GOI cannot use OFFP revenue to pay local salaries or make purchases other than what is approved by the Sanctions Committee.

⁸ U.N. Portrait.



Jason Florio, Corbis/Sygma

Iraq's water purification, sanitation, public health, and food distribution systems, leading to increased hunger, sickness, and death, especially among children. Similar attacks in the 1991 war contributed to 47,000 excess child deaths within eight months.⁹

The CESR Research Team observed that few physicians or nurses have the necessary training to care for traumatic injuries. During war it is almost certain that the emergency health system would be overwhelmed. Given current vulnerabilities, civilian casualties could be far greater than in 1991, especially in the event of an extended military conflict with a siege of Baghdad.¹⁰

A confidential U.N. document warns that “the collapse of essential services in Iraq could lead to a humanitarian emergency of proportions well beyond the capacity of U.N. agencies and other aid organizations.”¹¹ The document also reports that:

- “In event of a crisis, 30 percent of children under five [approximately one million children] would be at risk of death from malnutrition.”

⁹ Ascherio, A., Chase, R., Cote, T. et al., “Effect of the Gulf War on Infant and Child Mortality in Iraq,” *New England Journal of Medicine*, 327: 931-36 (1992).

¹⁰ Rogers, Paul, “Iraq: Consequences of a War,” Oxford Research Group (October 2002); MedAct, “Collateral Damage: the Health and Environmental Costs of War on Iraq,” (November 2002).

- “Military conflict would result in significant disruptions of critical infrastructure in South and Center of the country . . . and sizeable internal and external population movements.” UNHCR is preparing for 600,000 refugees.
- “Access to war-affected civilians would be severely limited for the duration of the conflict.”
- “The capacity of the Government and other assistance providers to deliver basic services and to conduct relief operations would be severely limited.”
- “UNICEF expects shortage of essential drugs, especially antibiotics, to occur within one month of the onset of crisis.”
- Although agencies have engaged “in a discreet planning and preparedness effort for several months... [t]he current response capacity of the United Nations system remains well below the critical requirement established through the inter-agency planning process.”

3 Any attempts to replace rather than supplement Iraqi public health, food distribution, and infrastructure will exacerbate the humanitarian crisis. While Iraqi systems are severely stressed, they are functional and the majority of the population relies on them. The Research Team was struck by the dedication of thousands of professional staff and civil servants who maintain these crucial survival systems despite extraordinary obstacles. The U.N. acknowledges that the “humanitarian needs of the Iraqi population as a whole can be met only by national and local authorities” in light of “high levels of existing vulnerability and the dependence of most of the population on [the Government of Iraq] for their basic needs.”¹² The most common international approach to humanitarian emergencies is to establish new or parallel structures to provide food and medical treatment, as in a refugee camp. But this approach would deprive war-affected Iraqis of billions of dollars in humanitarian supplies provided by the OFFP as well as the services of thousands of experienced professionals.

¹¹ U.N. Contingency Plan.

¹² U.N. Contingency Plan.

- Iraq has 929 primary health care centers, compared to 1,800 prior to 1990. The Ministry of Health operates several hospitals in each governorate, partially financed by user fees, with a total capacity of 27,000 beds.¹³
- Iraq's food distribution system, the largest such operation in world history, supplies 24 million people with approximately 2,470 kilocalories per day through a network of 46,000 rations agents in the South and Center of Iraq. Despite its massive scope, this system serves to mitigate, rather than end, deprivation associated with sanctions.¹⁴
- Iraq's electricity system has an installed capacity of 9,500 megawatts to power its modern infrastructure. Although there is a partnership between Iraq, NGOs, and the UNDP to rehabilitate the system through the OFFP, current capacity remains at 43% of installed capacity.¹⁵



Jason Florio, Corbis/Sygma

- The national output of potable water remains at 50% of previous capacity and water quality remains substandard.¹⁶ Through repairs and rationing, access to safe water is approaching 1990 levels: 94% urban and 45.7% rural coverage.¹⁷

4 The secrecy of humanitarian preparations by the United States and the United Nations is impeding efforts to develop an effective emergency response capacity. The United States has not shared information about humanitarian planning with international agencies that are planning to provide assistance inside Iraq. Such secrecy regarding relief operations is difficult to reconcile with the U.S. government's detailed public statements about military operations. Similarly, U.N. agencies have also prepared confidential documents on emergency planning for Iraq that they have not shared with other relief agencies. Under these circumstances, the right of affected populations to receive assistance is likely to be compromised.

- The U.N. has closely guarded its operational planning for emergency relief, making effective humanitarian coordination with international NGOs difficult.
- The U.S. Department of Defense has prepared a classified humanitarian proposal that has been shared with members of Congress but not with the members of the international relief community.¹⁸
- A consortium of American NGOs has received grants of almost US\$2 million from USAID for relief aid in Iraq, yet relatively few have received necessary government licenses to operate in Iraq or neighboring countries. These groups have complained publicly about the lack of coordination between various government departments—the Pentagon, State Department, USAID Office of Foreign Disaster Assistance, and Treasury Department OFAC.¹⁹

13 UNICEF Iraq Report.

14 Gazdar, Haris, "Pre-Modern, Modern and Postmodern Famine in Iraq," Institute of Development Studies Bulletin, (October 2002).

15 UNDP, "Sectoral Report" (2003).

16 UNICEF, "Water and Sanitation Briefing Iraq South/Centre," annexed to "Working with Children to Build a Better Future," (undated 2002).

17 UNICEF Iraq Report.

18 CESR interviews in Washington, D.C.

19 Grossman, Elaine, "Humanitarian Crisis in Iraq Could Fast Undercut War Aims," Inside the Pentagon (February 6, 2003); CESR Interviews in Washington, D.C. and in Amman, Jordan (February 2003).



Jason Florio, Corbis/Sygma

5 All parties to war are obligated to respect the well-established principles governing humanitarian action: humanity, neutrality, independence, impartiality, and accountability. Under this framework, there is a clear separation between humanitarian actions and the political, military, or economic actions carried out by governments during a conflict. Military operations need to be distinct from humanitarian activities, especially at the height of hostilities. Civilians should not associate humanitarian organizations with military objectives.

- In off-the-record interviews, NGO staff expressed widely shared concerns that funding and access are being politicized to favor those humanitarian organizations most sympathetic to the war aims of the U.S. government.

- International relief agencies, especially in Europe, have publicly criticized the U.S. for politicizing aid and failing to guarantee humanitarian access to post-war Iraq as a right protected under international law.²⁰
- The tactic of airdropping individual food rations, condemned by the U.N. and independent relief agencies in Afghanistan as an ineffective and dangerous conflation of military and humanitarian operations, will apparently be conducted on a much greater scale in Iraq.²¹
- The subordination of humanitarian to military goals undermines principles of humanitarian action, neutrality in particular, and risks exposing aid workers to military attack and civilian anger, as happened in Afghanistan.

²⁰ Save the Children, et al, "Joint NGO Statement Against War" (Sept. 23, 2002).

²¹ Schmitt E. and Shanker, T. "U.S. Military Set to Provide Aid to Iraqi People in the Event of War," NY Times (February 11, 2003).

CONCLUSION

In the event of war, 30 percent [more than one million] children under five are at risk of dying from malnutrition.

– U.N. Contingency Plan

The Iraqi people already suffer severe deprivation under sanctions and will be in much greater need of humanitarian assistance in the event of another war. The total amount of grants pledged by governments (US\$65 million from the United States and US\$15 million the United Kingdom) is a tiny fraction of the revenues from Iraqi oil sales under the OFFP. For Phase XIII (December 5, 2002 to June 3, 2003), the Sanctions Committee has already approved more than \$1 billion of humanitarian supplies (food, medicine, vaccines, and spare parts) out of an expected total of \$4.93 billion in oil sales revenue.²²

The Office of the Iraq Program has stated that the OFFP would be terminated in the event of war, and that the \$10.9 billion worth of supplies already in the pipeline – paid for by Iraq but not yet delivered – would not be released without a new Security Council resolution.²³

It is safe to predict that the humanitarian crisis resulting from another war in Iraq would far exceed the capacity of U.N. and international relief agencies. It is therefore essential that the Security Council, and the U.S. in particular, respond to a number of urgent questions:

- Are civilian life support systems, in particular electricity, water, and sanitation, considered military targets as in the 1991 war?

- What are the contingency plans to prevent repetition of the “cycle of death” caused by increased malnutrition and disease, especially among children?
- What will happen to Iraqi government food distribution and public health systems in areas occupied by U.S. and other military forces?
- What will happen to the food, medicine, and other humanitarian supplies currently provided through the OFFP Program?
- How will the international community mobilize the enormous aid package necessary to prevent or mitigate a disaster?
- Why are humanitarian response plans being developed in secrecy and without necessary coordination among key actors?
- Will the U.S. military allow international relief agencies independent access to affected populations as required by humanitarian principles and international law?

The humanitarian community, and the international public in general, deserve answers to these life and death issues from the Security Council, and the governments of the U. S. and the U. K. in particular, in order to make informed decisions about the crisis in Iraq. With the world poised on the brink of a potentially catastrophic war, this does not seem too much to ask. 

²² U.N. Office of the Iraq Programme. “Plan for Phase XIII” (January 3, 2003); Office of the Iraq Programme, “The Humanitarian Programme in Iraq Pursuant to Security Council Resolution 986 (1995):” “Note by the Office of the Iraq Programme,” United Nations (November 12, 2002). Over the past six years, the government of Iraq through the Oil-for-Food Program has provided revenue for current humanitarian activities and United Nations administration. Between December 1996 and October 31, 2002, the Sanctions Committee has approved humanitarian supplies valued

at \$42 billion, including \$3.7 billion for the oil sector. Of this amount, \$26 billion worth of goods have been delivered, including \$1.6 billion worth of oil industry spare parts and equipment. This is equivalent to an average \$685 per person per year in the Center/South. Approximately \$10.9 billion worth of humanitarian supplies are currently in OFFP delivery pipeline.

²³ United Nations Office of the Iraq Programme, Update 25-31 January, 2003.

1

Over the past decade, Iraqis have experienced one of the most rapid declines in living conditions ever recorded.

At 437,072 square kilometers, Iraq is the size of the American state of California. The country descends from a 10,000-foot mountain range along its northern border with Turkey and Iran into desert plains in the south towards Kuwait and the west bordering Jordan and Syria. 70% of Iraq's 24 million inhabitants live in cities, most along the rivers between Baghdad and the Persian Gulf.¹ Kurds comprise 15-20% of the population and live mainly in northern Iraq, which produces most of the country's grains, fruits, and vegetables. Iraq's main commodity is oil, accounting for over 60% of export earnings and 90% of foreign exchange prior to sanctions.² Oil revenues were used to build a centralized bureaucracy and modern infrastructure, import 75% of food and medical supplies,³ and provide the population with the highest level of health and educational services in the Arab world.⁴

On August 6, 1990, in the wake of Iraq's invasion of Kuwait, the United Nations Security Council adopted

Resolution 661, which imposed multilateral sanctions on Iraq. The imposition of sanctions, followed by the 1991 Gulf War, took a heavy toll on the Iraqi people.

During the Gulf War, the United States and Allied aerial bombardment severely damaged Iraq's electrical grid, resulting in the failure of Iraq's public health, water, and sanitation systems.⁵ The failure of these systems led to

an increase in the incidence of diseases that had previously been under reasonable control.⁶ Outbreaks of previously well-contained communicable diseases, especially those related to poor water quality, malnutrition, and inadequate sanitation became increasingly common.

Over the past decade, Iraqis have experienced one of the most rapid declines in living conditions ever recorded. Iraq's place on the Human Development Index dropped from 96 in 1991 to 127 by the year 2000, on a par with the small southern Africa country of Lesotho. No other country has ever dropped so far, so fast.⁷ The debts accumulated during the Iran-Iraq War, destruction of



Jason Florio, Corbis/Sygma

1 US Department of State, "Background Note: Iraq," (December 2001).

2 The Economist, "Economist Intelligence Unit – Iraq," (1996).

3 Epstein, Susan, "Iraq's Food and Agricultural Situation During the Embargo and the War," 91-199 Cong. Res. Serv. Rep. (February 26, 1991).

4 The Economist, "Economist Intelligence Unit – Iraq" (1996).

5 Human Rights Watch, "Needless Deaths in the Gulf War," Middle East Watch, New York, 1991.

6 International Study Team, "Health and Welfare in Iraq After the Gulf Crisis: An In-Depth Assessment." International Study Team, Boston (1991) [hereinafter referred to as "IST"], 1991.

7 UNDP, "Human Development Report – Iraq," (July 2002).

civilian infrastructure in the Gulf War, and the inability to rebuild the country because of the economic sanctions wiped out most of Iraq's prior gains. Today, Iraq's 24 million people depend heavily on the government for their survival. The government, in turn, depends on oil exports to generate revenue under the Oil-for-Food Program (OFFP) operated by the United Nations. The economy, with the exception of the oil-industry, is at a standstill.

In April 1995, recognition by the government of Iraq and the world community of the devastating impact of economic sanctions on the civilian population resulted in the adoption by the United Nations Security Council of Resolution 986, the OFFP, which allowed oil sales to finance imports of food and other essential humanitarian needs. Iraq is currently permitted to sell unlimited oil on the world market in order to buy food and humanitarian supplies.⁸ All proceeds from such sales, however, are placed in a United Nations-controlled bank account, to which the government of Iraq has no direct access. Economic opportunities in Iraq are limited because the cash component of the OFFP has never been implemented. Civil servants' salaries average

US\$3-6 per month, an amount that cannot even meet subsistence needs.⁹

The OFFP's expenditure allocations remain similar to the original agreement and include reparations for the Gulf War, United Nations operations in Iraq, repair and maintenance of the oil pipelines, and humanitarian supplies for the 3 million Kurds in northern Iraq. In practice, only about one-third of the original revenue remains for actual food and humanitarian supplies for the 21 million people living in Southern and Central Iraq.¹⁰

PUBLIC HEALTH INFRASTRUCTURE IN THE 1990s

Prior to the Gulf War, Iraq's public health system was one of the most advanced in the Middle East region. Malnutrition rates were low, primary health care was easily accessible, and tertiary (hospital-based) care was becoming increasingly sophisticated. Infant mortality was 47 per 1000 live births per year and the mortality rate of children less than five years old was 56 per 1000 live births per year.¹¹ Considering these parameters together with other socio-economic variables, including educational levels and per capita income, the United

OIL-FOR-FOOD PROGRAM

The Oil-for-Food Program (OFFP) began at the end of 1996 after an agreement was reached between the United Nations and the Government of Iraq, which permitted Iraq to sell up to US\$ 2 billion of oil in a 180-day period (phase). OFFP is not a "humanitarian aid" program. It was meant as a "temporary measure," not a substitute for the Iraqi economy. The program has averted the worsening of the humanitarian crisis in Iraq. In December 1999, the ceiling on oil sales was lifted, enabling the program to move from an exclusive focus on food and medicine to repairing essential infrastructure. The program, however, cannot cover the developmental needs of Iraq.

Since the arrival of the first food items in March 1997, foodstuff over \$10 billion and health supplies over \$2 billion have been delivered to Iraq. Currently, \$10.9 billion worth of contracts, including \$2.5 billion of food supplies and \$450 million of health supplies are in the OFFP pipeline. The program is in Phase XIII which went into effect on December 5, 2002 and runs through June 3, 2003. Estimated revenue generated during this period at the current rate of exchange stands at \$2.6 billion for 95.5 million barrels of oil.

Source: OIP Update -25-31 January, 2003.

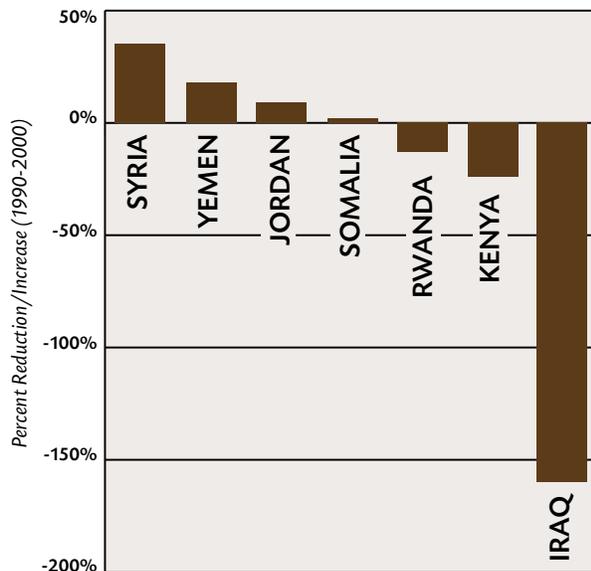
8 Cap on oil sales was lifted in December 1999 with the adoption of UN Security Council Resolution 1284, UNSC Res. 1284 (December 17, 1999).

9 U.N. Portrait.

10 United Nations Security Council Resolution 986 (April 14, 1995), Memorandum of Understanding (May 20, 1996); United Nations Office of the Iraq Program, "Oil-for-Food Programme: In Brief," (January 2003).

11 UNICEF, "Working with Children to Build a Better Future," (2002).

Change in Under-Five Mortality Rate (1990-2000)



Source: Sectoral Briefing to UNSC 661 Committee (Nov. 20, 2001)

Nations Development Program's (UNDP) Human Development Index ranked Iraq 96th among all nations, on a par with China and Iran.

Since the Gulf War and the imposition of economic sanctions, Iraq has had an increasing inability to prevent disease. This problem has been compounded by a parallel decline in the availability of curative services. Interruptions in the delivery of essential medicines and medical supplies make it difficult to guarantee effective treatment for patients with chronic illnesses. The progressive deterioration of clinics and hospital buildings, as well as medical equipment, makes it difficult for health personnel to practice their profession. Finally, the disruption of contact with the outside world, and the resulting inability of health personnel to stay abreast of new developments in public health and medicine, contributes to the difficulty health professionals have in providing optimal care for their patients.¹²

Beyond the health system itself, reduced availability of food and a grossly unbalanced household food basket

have led to a marked increase in childhood malnutrition and undoubtedly, although less well documented quantitatively by surveys, the diminished nutritional status of older children, adolescents, and pregnant women. All of these factors have contributed to a decline in the health status of the population.

In sum, the Research Team has found that the combination of a rapidly deteriorating public health infrastructure, a paralysis of both the preventive and curative medical services, and a precipitous decline in the quantity and quality of food available to the Iraqi population have contributed to a rapid "de-development" of the nation. During the 1990s, infant mortality doubled to 108 deaths per 1000 live births per year, and the under-five mortality rate skyrocketed to 131 deaths per 1000 live births per year.¹³

THE "REFUGEE CAMP" SITUATION IN IRAQ

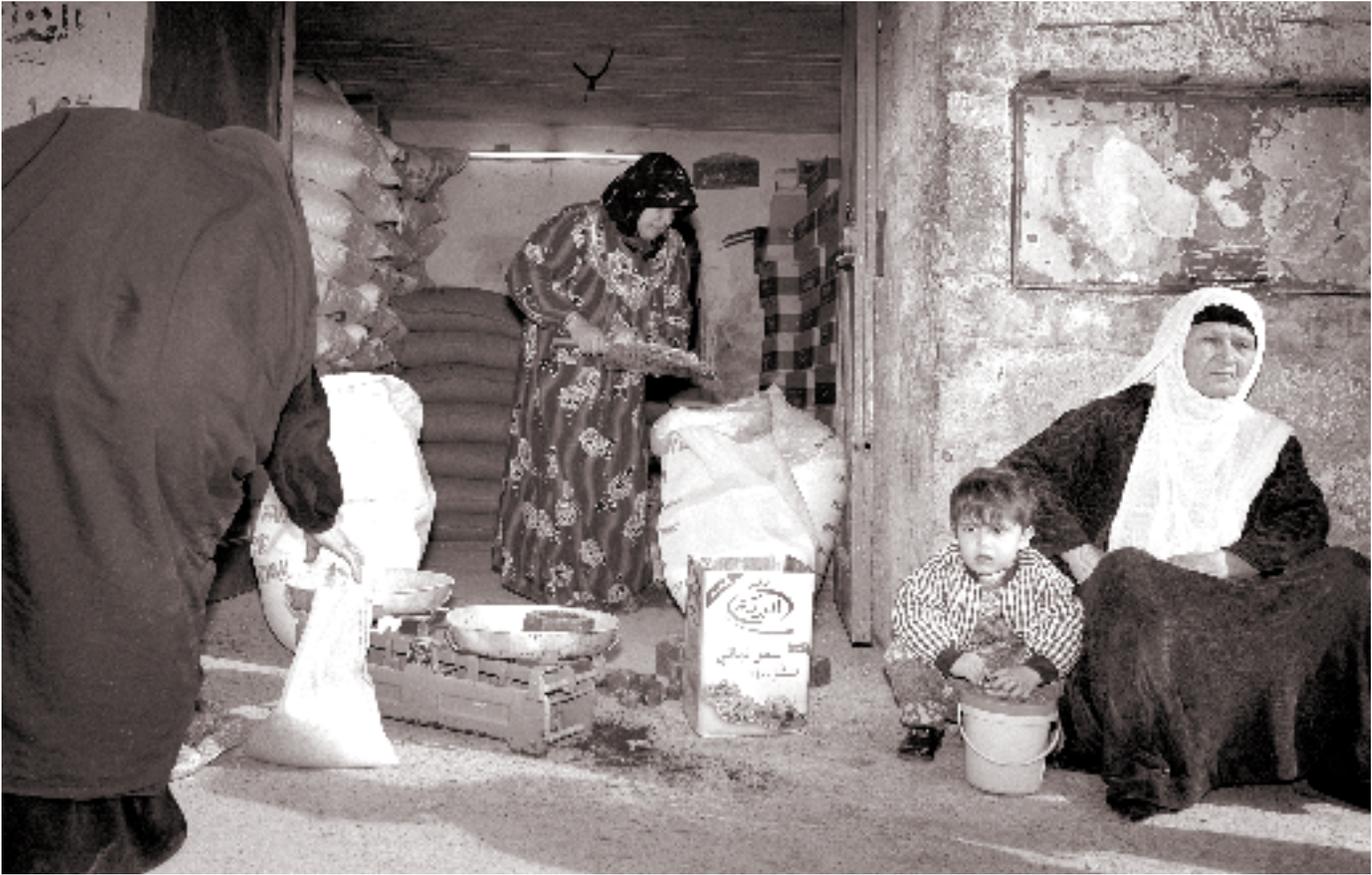
The implementation of the OFFP, a good harvest in the past two years (on the heels of three years of drought), and the remarkable efficiency of the government food distribution system have contributed to a turnaround in some social and demographic indicators. The quantity of food distributed by the Government of Iraq to the entire population has improved and the nutritional value (kilocalories per person) has more than doubled from 1,093 kilocalories per person per day in 1995 to 2,470 kilocalories per person per day in 2003. Malnutrition rates among children under five years of age have declined to less than half of the levels recorded in 1996.¹⁴ Incidence rates for childhood diarrhea are reported to have declined as well, an improvement that would have a beneficial impact on the prevalence of malnutrition and on mortality rates. Primary care clinics and hospitals are better stocked in both medicines and supplies than they had been during the 1990s.

Despite these recent improvements in health and nutrition indicators, the quality of life in Iraq has seriously declined since the pre-sanctions era. The CESR Research

¹² CESR Interviews (January 2003); U.N. Portrait of the Current Socio-Economic Developmental Situation and Implications in Iraq Based on Specified Scenarios, Confidential (January 20, 2003).

¹³ International Study Team, Ascherio, A., Chase, R., Cote, T. et al., "Effect of the Gulf War on Infant and Child Mortality in Iraq," *New England Journal of Medicine*, 327:931-36 (1992).

¹⁴ UNICEF, "Overview of Nutritional Status of Under-fives in South/Centre Iraq," (November 2002)



Robert Huber/Lookat Photos

Team considers the current plight of the population of Iraq to be in some ways analogous to that of people living in a refugee camp.¹⁵ Their situation is characterized by:

- near-total dependence on assistance from the international community for subsistence and survival;¹⁶
- a centrally-distributed ration of food that barely meets minimum international standards;
- a water and sanitation system that is severely compromised and highly vulnerable;
- as of late, slowly-improving health and nutrition indicators;
- a health system that increasingly meets only the primary health care needs of the population, with a declining ability to care for chronic and non-communicable diseases;
- a cash-poor economy, due largely to the lack of implementation of a cash component to the OFFP

¹⁵ However, it should be noted that the refugee camp metaphor holds to a point. Although there are strong parallels, as shown later in this introduction and throughout the report, Iraqis are not, of course, refugees. With some exceptions, they have not been uprooted from their homes, forced to flee, or resettled.

¹⁶ It should be noted that under the conditions of the OFFP, the international assistance is entirely paid for by the Government of Iraq, through the sale of oil.

in South and Central Iraq;

- severely limited communications with the outside world;
- increasingly limited educational and job opportunities;
- an absence of activities directed at economic and social development;
- a pervasive sense of uncertainty and despair regarding the future.

As the United States and others contemplate a military intervention, we are concerned with the potentially devastating humanitarian consequences of war.¹⁷ The CESR Research Team finds that a military intervention is likely to have an overwhelming impact on an already vulnerable population, and a humanitarian disaster is likely to ensue. 

¹⁷ U.N. Contingency Plan. This confidential United Nations document warns that “the collapse of essential services in Iraq could lead to a humanitarian emergency of proportions well beyond the capacity of U.N. agencies and other aid organizations.” See United Nations Office for the Coordination of Humanitarian Affairs, Integrated Humanitarian Contingency Plan for Iraq and Neighboring Countries, Confidential Draft (January 7, 2003).

2

The Team had access to a number of confidential United Nations documents that have not been commented on previously.

The CESR Research Team based its conclusions on interviews conducted in Baghdad, Kerbala, Kut, Basrah, Faw, Abu Al Khasaid, Tikrit, Beiji, Mosul, Kirkuk, and Amman, Jordan. The team conducted interviews in English when possible and used independent translators brought with us from Jordan for Arabic interviews. The Team collected extensive data from Iraqi civilians, clinic and hospital staff, government officials, representatives and program officers of a number of United Nations agencies, and staff of non-governmental organizations.

The report also draws on the analysis and interpretation of existing data, including published and unpublished documents from universities and non-governmental organizations. In addition, the Team had access to a number of confidential United Nations documents that have not been commented on previously. The CESR Research Team encountered foreseeable logistical and time con-

straints related to the political circumstances. In view of the current political and security situation in Iraq, the Team was somewhat restricted regarding the questions we could pose to those we interviewed. Nevertheless, we were afforded an unusual degree of access to health, nutrition, and infrastructure sites – including hospitals, clinics, food distribution points, water and sewage treat-

ment plants, and electrical generation installations.

For the public health sector, a convenience sample of 12 district and referral level hospitals was performed in urban and peri-urban regions. Given the limited time for travel, the desired method of cluster sampling was

not possible. A survey was conducted at each site visited using a standard data collection tool. The Research Team also visited ambulance dispatch sites and primary care clinics to obtain information regarding the primary health and emergency care system.



Jason Florio, Corbis/Sygma

The Research Team in Iraq consisted of six experts in public health, nutrition, emergency medicine, epidemiology, environment, and water and sanitation. They were part of a larger CESR mission that discussed pos-

sible alternatives to war with the Government of Iraq. Background research and interviews with relief agencies and United Nations staff in New York were conducted by CESR's New York staff. 

TABLE 1: Research Team Meetings in Iraq and Amman, Jordan

UNITED NATIONS	NON-GOVERNMENTAL ORGANIZATIONS	GOVERNMENT OFFICES
Food and Agriculture Organization (FAO)	CARE	Ministry of Electricity
United Nations Development Program (UNDP)	International Crisis Group	Ministry of Health
United Nations Children's Fund (UNICEF)	International Rescue Committee	Ministry of Trade
World Food Program (WFP)	Islamic Relief	
World Health Organization (WHO)		



Robert Huber/Lookat Photos

3

*Immediately after the Gulf War,
a three-fold rise in under-five mortality rate
among Iraqi children was documented.*

Public Health and Preventive Medicine

Before the Gulf War, Iraq had an extensive national health care network that was well-integrated with the medical care system focused on curative services. Primary health care services were available to 97% of the urban population and 71% of the rural population.¹⁸

The combination of infrastructural damage (electrical, water and sanitation) during the Gulf War and the impact of sanctions have seriously affected Iraq's public health capacity. Approximately one-third (300 out of 929) of all primary health care centers are in urgent need of rehabilitation.¹⁹

MAJOR PUBLIC HEALTH INDICATORS

Childhood malnutrition: According to UNICEF, the rates of childhood malnutrition in South and Center Iraq increased steadily between 1991 and 1996 (Table 2). Among children under five, chronic malnutrition rose from 18.7% to 32%, underweight children increased from 9.2% to 23.4%, and acute malnutrition increased from 3% to 11%.²⁰ With the introduction of the OFFP, these indicators have improved. For example, a preliminary survey of Iraqi children, conducted in February 2002, found that chronic malnutrition has dropped to 23.1%, underweight children decreased to 9.4%, and acutely malnourished children decreased to 4%.²¹ These levels are only modestly above what they were in 1991.²²

TABLE 2: Trends in nutritional status of children under five years in South and Center of Iraq

MALNUTRITION TYPE	INDICATOR	AUGUST 1991	AUGUST 1996 MICS I	SEPTEMBER 2000 MICS II	FEBRUARY 2002
Chronic (stunting)	Low Height for Age	18.7%	32%	30%	23.1%
Underweight	Low Weight For Age	9.2%	23.4%	19.5%	9.4%
Acute (wasting)	Low Weight for Height	3.0%	11.0%	7.8%	4%

Source: UNICEF/Iraq, *Working with Children to Build a Better Future*, 2002.

NOTES: MICS = Multiple Indicator Cluster Survey, CSO/UNICEF; February 2002 data reflects integrated nutrition status of under 5 years of age and breastfeeding/complementary feeding practices at household level, Iraqi Ministry of Health, CSO and UNICEF.

18 U.N. Portrait.

19 UNICEF, "Health Briefing Iraq South/Center Iraq," annexed to "Working with Children to Build a Better Future" (2002).

20 UNICEF, "Overview of Nutritional Status of Under-fives in South/Central Iraq," (November 2002).

21 UNICEF, "Working with Children to Build a Better Future," (2002).

22 Smith, M.C. and Zaidi, S. "Nutritional status of children in Iraq after the Gulf War," 51(3) *Nutritional Reviews* 74 (March 1993).

Infant and child mortality and morbidity: Immediately after the Gulf War, a three-fold rise in the under-five mortality rate among Iraqi children was documented.²³ In 1999, the Iraqi Ministry of Health, UNICEF and WHO conducted a new study which determined that under-five mortality of children had increased from 56 deaths per thousand for the period 1984-1989 to 131 deaths per thousand for the period 1994-1999. For the same period, infant mortality increased from 47 deaths per 1000 live births to 108 deaths per 1000 live births (Table 3).²⁴ In the absence of any new surveys, it is estimated that child and infant mortality remains over two times the level recorded in 1990.

The CESR Research Team found that the incidence of some major childhood diseases may have declined recently. Facility-based reports from the Ministry of Health, cited by UNICEF, indicate that the number of cases of diarrhea in children under five years old fell by 19% between 1998 and 2001.²⁵ This improvement is attributed to a better food supply (from both an increase in the caloric content of the government-distributed ration and increased local food production) and a 30% increase in the availability of potable water.²⁶

Vaccine-preventable diseases: Vaccine-preventable diseases of children appear to be under reasonable control. The rapid and massive response to an outbreak of polio-

myelitis in 1999 has resulted in the apparent elimination of the disease from the country, with no cases being reported, despite intensified surveillance, since 2000. Cases of measles are reportedly at a relatively low level (the Ministry of Health reported 4,088 cases in 2001).²⁷ Vaccination coverage for other diseases is less than optimal: the UNICEF Multiple Indicator Cluster Survey of 2000 found that fewer than 70% of children less than two years old had received a third dose of DPT vaccine, and only 81.8% were fully vaccinated against polio. Measles vaccination coverage was 78.1%, although the report suggests that mothers' verbal reports of vaccination contributed to this figure – only slightly more than one-half of the children had a written record of measles vaccination.

Although no vaccines are currently subject to sanctions, health authorities continue to report periodic shortages due to interruptions in supply. Refrigeration problems have been encountered and some shipments of BCG vaccine have had to be refused. According to a WHO official, an inconsistent supply of vaccines (and other medicines and supplies) can contribute to a lack of confidence in the public health system. The current emphasis is on measles vaccination – a nation-wide campaign is being planned in order to increase measles vaccination coverage in older children. The WHO reports that 44% of measles cases occurring in 2001 were in children between the ages of 5 and 14 years old.

TABLE 3: Iraq Child and Infant Mortality: Current estimates 1960-1998

YEAR	UNDER 5 MORTALITY RATE	INFANT MORTALITY RATE
1960	171	117
1970	127	90
1980	83	63
1990	50	40
1995	117	98
1998	125	108

Source: UNICEF (1999)

Control of Communicable Diseases: During the past ten years, there have been outbreaks of typhoid fever, cholera, measles, diphtheria, and poliomyelitis. And most recently, important increases in the occurrence of both cutaneous and visceral leishmaniasis (kala-azar) have been reported. These diseases are easily treated by improved hygiene and by vector control through pesticides. The occurrence of these outbreaks is attributable to the deterior-

23 International Study Team, Ascherio, A., Chase, R., Cote, T. et al., "Effect of the Gulf War on Infant and Child Mortality in Iraq," *New England Journal of Medicine*, 327:931-36 (1992).

24 UNICEF, "Situation Analysis of Children and Women in Iraq," (1999).

25 UNICEF, "Overview of Nutritional Status of Under-Fives in South/Centre Iraq," (November 2002).

26 Both the quantity and the quality of drinking water influence the incidence of diarrheal diseases. While the quantity of water available on a per capita basis seems to have increased, there are indications that a large proportion of water samples being tested have unacceptably high coliform counts. See Water section below.

27 The number of measles cases reported by the Ministry of Health (MOH) has fluctuated greatly over the past few years. The overall trend has been downwards, although the 2001 figure represents a substantial increase from the dubious report of 726 cases in 2000. In general, reports of disease incidence are difficult to interpret – the number of measles cases reported by the MOH for the years 1998-2000, for example, is reported differently by UNICEF Iraq. Compare UNICEF, "Working with Children to Build a Better Future" (2002) with WHO "Communicable Disease Profile – Iraq (Draft)," (2003). An assessment of the Iraq Health Information System would help assess the accuracy and representativeness of existing health statistics – in the meantime, one should interpret these figures cautiously.

ration of living conditions, and especially to the water and sanitation systems. It is clear that conditions remain rife for future water-related and insect vector-related outbreaks.

THE PRIMARY HEALTH CENTER NETWORK

Primary Health Care (PHC) or Maternal and Child clinics are the principal mode of access to basic health care for the vast majority of Iraqi citizens. There are far fewer functioning PHC clinics now than there were before. According to UNICEF, there are 929 PHC centers remaining out of a pre-Gulf War network of 1,800.²⁸ Of these, 300 are in urgent need of physical rehabilitation.²⁹

The CESR Research Team visited five PHC centers in Basrah, Mosul, and Saddam City, a poor neighborhood of Baghdad. At the centers, we interviewed a number of treating physicians, dentists, and lab technicians. For the two Baghdad clinics, we were accompanied by Dr. Niema Saeed Abid, Deputy Director of Preventive Health in the Iraq Ministry of Health. These PHC clinics serve catchment areas of between 100,000 to 150,000 people, and offer a broad range of services to an average of 100-150 patients a day. The PHC clinics provide basic services: health education, antenatal care, birth registration, vaccination, treatment for common illnesses.

By far the most important diseases seen at these clinics are childhood diarrhea and acute respiratory infections (ARI). There is a distinctly seasonal occurrence of these conditions, with ARIs seen during the colder months and diarrhea increasing significantly during the summer. Clear protocols exist for the treatment of these

conditions, and guidelines adapted by the Ministry of Health from WHO materials were posted on the walls of each clinic. The observations of the CESR Research Team were that these guidelines were, for the most part, being followed.



Jason Florio, Corbis/Sygma

Following the Gulf War, the PHC clinics experienced significant hardships owing to the lack of medications and basic medical supplies. In recent years, since the implementation of the OFFP, the situation has improved. PHCs

now generally have access to basic medicines and supplies, with occasional interruptions of stocks, but much of their equipment is in disrepair and laboratory and dental capacity is restricted.

A major change in the health system has been a shift from fully subsidized service provision to a partial fee-for-service system.³⁰ Prior to 1991, all health services provided to the Iraqi public were free of charge. In 1998, the Ministry of Finance piloted an experimental user fee program in which patients were asked to pay a small fee (250 dinars, approximately US\$0.12) for clinic or hospital visits, lab tests, and prescriptions. Formalized in 1999, government hospitals and primary health clinics now operate this user fee system in order to generate revenue for building maintenance and to supplement the income of health staff. The physicians at the PHC clinics draw approximately a quarter of their salaries from the Ministry of Finance; user fees are used to pay the rest. Accordingly, there is significant decentralization of budgetary authority, with each PHC Center functioning relatively independently.

28 UNICEF, "The Situation of Children in Iraq," (February 2002).

29 UNICEF Iraq, "Working with Children to Build a Better Future," (2002).

30 UNICEF, "The Situation of Children in Iraq," (February 2002).

The CESR Research Team's survey of 12 District and Referral Hospitals and 5 clinics indicate the widespread adoption of user fees. They apparently have had a positive effect on the financial state of primary health centers and, according to physicians we interviewed, the system has been well accepted by the public. Furthermore, access to services and utilization rates do not seem to be affected – free services are available to those who cannot afford to pay. There is no formal means testing and exceptions (and there are reportedly few) to the fee-for-service scheme are granted at the discretion of the clinic director.

Most physicians and dentists keep private practices in the afternoons and it is now permissible to practice privately without holding a government post. According to those we interviewed, most of their income is derived from their private practices.

THE PRIMARY HEALTH CARE SYSTEM'S PREPAREDNESS FOR WAR

The CESR Research Team found that a small number of the PHCs have prepared emergency plans in case of war. All of the clinics we visited had generators, and they have stockpiled fuel. Small stockpiles of medicines and other supplies are kept by the Ministry of Health in a central store. One clinic, in Mosul, had set up three committees: (1) first aid for the wounded; (2) furniture/physical plant preservation; and (3) fire fighting. It was not clear whether their plans were comprehensive or to what degree they could be implemented. For the most part, there was an air of resignation among the staff – they were continuing on with their daily routines, expecting the worst, but hoping for the best.

Other preparedness exercises have been taking place. In December 2002, WHO officials from Geneva and the Regional Office in Cairo held a training course on Public Health in Complex Emergencies during which select district level health personnel were training as

In response to a CESR Research Team's question about her biggest fear in the event of a war, Dr. Najat, a PHC physician in Mosul told us: *"Yes, we are not afraid, we are working rationally and normally, we are adapted to this situation."*

But when asked how she explains the situation to her children, Dr. Najat's eyes filled with tears and her usual effervescence subsided. One of her colleagues, Dr. Qazaz, filled the awkward silence which ensued by explaining *"[W]e are not brave, but we are used to it. Since the 1980s they have [experienced] bombing," referring to the combination of the Iran/Iraq and Gulf Wars.*

"master trainers" in disease surveillance and communicable disease control in emergencies. The training, which reviewed the leading causes of morbidity and mortality in times of conflict and developed specific procedures for notification and response for Iraq, was well received. These trainers, upon return to their districts, have been organizing local training for district staff. The draft document, "Communicable Disease Profile – Iraq (2003)," has been prepared by WHO as a primer to accompany these courses.

A confidential document prepared by the United Nations in anticipation of another conflict indicates that 30% of children under five [i.e. over one million] will be at risk of death from malnutrition. Plus, there is a significant risk of a measles outbreak among children. It also indicates that 910,000 severe to moderately malnourished children and 700,000 pregnant and lactating women will need immediate assistance.³¹ The United Nations admits that its own capacity to deliver basic services remains well below the critical level required.

31 U.N. Contingency Plan; UNICEF Humanitarian Action, "Iraq Donor Update," (January 14, 2003).



Jason Florio, Corbis/Sygma

Medical Care Services

Prior to 1990 Iraq boasted one of the best medical care systems in the Arab world. It had large hospitals in urban centers with state-of-the-art facilities.³² Iraq's health care system had a well-developed network of primary health centers, district hospitals, and tertiary referral hospitals.³³ Specialty surgical care, laboratory testing, and comprehensive treatment options were available to the Iraqi population at most levels of health care.³⁴ Twelve medical schools produced well-trained medical officers, many of whom obtained subspecialty training in the United States and Europe to bring state-of-the-art medical care to Baghdad.³⁵

The Iran-Iraq War (1980-88), the Gulf War (1991), a repressive regime, and the subsequent twelve years of United Nations sanctions have had a profound effect on Iraq's health system. The first six years of sanctions, compounded by the effects of the damaged electrical,

water, and sewage infrastructure, led to the effective isolation and marginalization of Iraq. A well documented decline in the health status of Iraqi citizens ensued.³⁶

Recent modification of the OFFP has afforded some relief in the provision of basic health services.³⁷ However, these modest improvements in health statistics belie the vulnerability of Iraq's health system. Restrictions imposed by sanctions and the bureaucracy of the OFFP have severely constrained the development of the health sector, and left Iraq's health system in a state of chronic disrepair.³⁸ Iraqi health providers face mounting public health threats with limited resources and little hope for substantive improvement.³⁹ Simply put, the lingering effects of the Gulf War and on-going sanctions have gradually ground the curative capacity of the Iraqi health system into obsolescence.

THE CURRENT CAPACITY OF THE MEDICAL SYSTEM

CESR's Research Team surveyed 12 district hospitals and referral centers in urban and peri-urban Baghdad, Basrah, Faw, Mosul, Ab Al Khasaid, Kirkuk, Tikrit, Beiji, Karbala, and Kut. We found that outside of Baghdad, most referral hospitals and district hospitals are overcrowded, ill-equipped, and poorly maintained.

- **Lack of equipment:** 92% of hospital directors (or representatives) surveyed by the Research Team indicated that they had major restrictions in the availability of basic medical equipment. The lack of equipment severely limited the ability to render tertiary care to critically ill patients, trauma patients, and individuals transferred from Primary Health Centers. In addition, 83% of Hospital Directors told CESR that they had a limited supply of drugs, many of which were nearing their expiration dates.
- **Decline in surgical care:** The inability to provide intra-operative and post-operative care was a major constraint for most hospitals surveyed. Only one major referral center had access to ICU ventilator

32 ICRC, "Activities on Behalf of Iraqi Civilians" (1999-2000).

33 Swann, David and Khadir, Amir, "Dying for Peace in Iraq – Disaster Preparedness on the Brink of War," Calgary, Alberta / Iraq, (December 17, 2002) [hereinafter "Swann (2002)"].

34 CESR Interviews with United Nations personnel (January 2003).

35 CESR Interviews with United Nations personnel (January 2003).

36 International Study Team; Ascherio, A., Chase, R., Cote, T. et al., "Effect of the Gulf War on Infant

and Child Mortality in Iraq," *New England Journal of Medicine*, 327:931-36 (1992); UNICEF, "The Situation of Children in Iraq," (February 2002).

37 UNICEF, "Overview of Nutritional Status of Under-fives in South/Centre Iraq," (November 2002).

38 ICRC, "Activities on Behalf of Iraqi Civilians," (1999-2000).

39 CESR Interviews with Iraqi physicians (January 2003).

support and cardiac monitoring and pulse oximetry. In prior surveys, the World Health Organization found that persistent equipment shortages led to a decline in the number of major surgical operations to about 40% of pre-sanctions rates.⁴⁰

- **Reductions in lab services:** CESR found a general inadequacy of hospital services. Compared to 1990, reductions in laboratory services and hospital support services seriously affect the functioning of district and referral hospitals. The lack of essential laboratory equipment and chemicals and radiology equipment prevents necessary testing and treatment.⁴¹
- **Inadequate electrical and water supplies:** Hospitals and health facilities depend on an electrical system and a water system which do not meet minimum requirements and which are likely to be further damaged and interrupted in the anticipated conflict.⁴² International relief organizations, including the Red Cross, CARE, Médecins du Monde and Première Urgence have attempted to refurbish water

PROFILE: THE SADDAM PEDIATRIC HOSPITAL IN BAGHDAD

The Saddam Teaching Hospital is one of the busiest pediatric referral centers in Baghdad. Because of the sanctions regime, the hospital has contended with a lack of access to medications and equipment, interruption in the flow of supplies, and bureaucratic delays that have compromised its quality of patient care. This decline is best described by a medical resident interviewed by CESR's Research Team:

"This used to be a modern hospital, with excellent facilities. We used to have many opportunities to study abroad and learn new approaches. Now I have no access to the literature, and no chance to learn new treatment techniques. I am completely isolated."

systems and re-equip hospitals, but these efforts are ad hoc at best.⁴³

EMERGENCY MEDICINE AND TRAUMA CARE

The Iraqi medical system is poorly equipped to address its current emergency health needs, much less those required in war. We found that there is little capacity for rapid surgical intervention, trauma care, or resuscitation in either the pre-hospital or immediate hospital settings. Hospitals have limited ability to triage and resuscitate critically ill medical patients or severely injured trauma cases. In the 12 hospitals surveyed by the CESR Research Team, only two (17%) had the supplies and expertise to accomplish even basic resuscitations. In the event of war, it is almost certain that the emergency care system will be overrun with civilian casualties. Few physicians with emergency and trauma training have either the skills or the supplies to care for a large number of traumatic injuries. Other limitations in the Iraqi emergency and trauma care system include:

- **Blood Banking and Surgical Capacity:** The Ministry of Health maintains blood supplies in centralized urban blood banks. Urban hospitals have ready access to blood supplies, but many district hospitals have no storage capacity and have no ready access to blood products for transfusion.⁴⁴ In the event of a traumatic injury requiring transfusion, patients must be transferred to the nearest referral center. This is a risky practice in times of peace, and can cripple the surgical capacity in times of conflict.
- **Emergency Medical Services (EMS):** The Ministry of Health has recently distributed 900 new ambulances throughout the country to improve basic emergency transport, but this remains at one-half of the country's present needs.⁴⁵ A hospital-based EMS system exists in Baghdad, but the Research Team found that most of pre-hospital and ambulance support is inadequate both in and outside of Baghdad. This system is only partially functional in times of relative calm, and it will be easily over-

40 WHO, "The Health Conditions of the Population in Iraq Since the Gulf Crisis," (March 1996).

41 WHO, "The Health Conditions of the Population in Iraq Since the Gulf Crisis," (March 1996).

42 Save the Children (UK), "The Humanitarian Implications of Military Actions Against Iraq," (April 2002)

43 Swann (2002).

44 CESR Interviews with Iraqi physicians (January 2003).

45 Swann (2002).

whelmed in the event of a military conflict with a significant number of civilian casualties.

DRUGS AND MEDICAL SUPPLIES

Severe shortages of medications and supplies peaked in the mid 1990s. Since the adoption of the OFFP, widespread shortages have been averted. But several supply problems remain. The Research Team found that the distribution of medications and supplies to hospitals and primary health care centers is often interrupted and inconsistent. Medical staff consistently reported to us that there were frequent shortages of certain antibiotics, chemotherapeutic agents, and cardiac medications. Pharmaceutical and medical supply interruptions undermine the standardization of medical practice and routine care of patients.



Robert Huber/Lookat Photos

Certain drugs (20% of essential drug lists) and much electronic and imaging technology continue to be restricted by the Sanctions Committee. The Ministry of Health has increased its storage capacity for essential drugs and supplies. While this is helpful in times of relative peace, it is an insufficient measure to accommodate treatment needs in the event of war. Health supplies valued at US\$450 million are currently in the OFFP pipeline but have not yet been delivered to Iraq.⁴⁶ It is unclear as to how and when these medicines will

be delivered if there is a military conflict. UNICEF estimates that there will be shortages of essential drugs – especially antibiotics – within one month of the onset of a conflict.⁴⁷ United Nations agencies presume that they will need a new United Nations Security Council resolution to release these medical supplies.

MEDICAL MANPOWER: THE DECLINE OF MEDICAL EDUCATION

The CESR Research Team found that physicians and medical professionals throughout Iraq aspire to medical excellence, but are limited by an “intellectual boycott” that has left them without access to current literature, specialty training, or access to advanced training. Professional development has been stifled by the economic climate, sanctions, and restrictions on foreign travel by Iraqi health professionals. Medical personnel have no outside contact, no access to current medical literature, and no exchange of up-to-date medical information. They are isolated and their skills are antiquated.

The lack of educated health professionals and the decline of the society’s medical culture have far-reaching implications for Iraqi health care providers and are ultimately damaging to the future of Iraqi health care.

THE DECLINE OF THE MEDICAL WORK FORCE

Iraq’s economic collapse has transformed the medical work force. The system has seen a steady decline in the number of practicing medical professionals due to an emigration of health workers.⁴⁸ Physicians, dentists, and other health professionals collect meager government salaries of US\$10-\$20 per month in an inflated economy. Health professionals are unable to pay for transportation to and from work, to keep their children in school, and to buy clothing for their families. We noted that physicians have turned to operating kiosks and taking other jobs that pay a living wage. Large numbers of doctors and dentists have dropped out of the medical profession to find better paying employment;

46 United Nations Office for the Coordination of Humanitarian Affairs, “Integrated Humanitarian Contingency Plan for Iraq and Neighboring Countries,” Confidential, Working Draft (January 7, 2003).

47 United Nations Office for the Coordination of Humanitarian Affairs, “Integrated Humanitarian Contingency Plan for Iraq and Neighboring Countries,” Confidential, Working Draft (January 7, 2003).

48 UNICEF, “UNICEF Humanitarian Action: Iraq Donor Update,” (January 14, 2003).

many have become United Nations food distribution monitors.⁴⁹

This downward transformation, combined with worsening work conditions, has discouraged entry into the health professions, raising serious questions about the future of health care in Iraq. Private practice now has replaced much of the free medical care widely available prior to 1990. Patients have reduced access to care, incomplete investigations, and more expensive treatment options.⁵⁰

THE MEDICAL SYSTEM IN THE EVENT OF WAR

The CESR Research Team found the health system of Iraq to be in a state of chronic decline.

Primary public health services, while seeming to function adequately, are hampered by interruptions in drug supplies, lack of availability of vaccines, and deteriorating equipment. Hospitals, formerly able to provide

“Professionals of all types, across the board, have been dispossessed. . . They’ve been locked away for 12 years and cannot re-emerge.”

– NGO Representative

sophisticated care, are now ill-equipped to care for the patient population. Emergency services and trauma care are not well-developed and could not bear the brunt of the additional stress that would be imposed by a conflict situation.⁵¹ Many district hospitals have no ready access to blood products for transfusion, which can be dangerous for civilian casualties.

Further declines in the basic public health infrastructure of the country, especially in food distribution, water supply, and sanitation, would result in an increase in patient load that would overwhelm the public health and curative health systems.⁵² 



Jason Florio, Corbis/Sygma

49 CESR Research Team correspondence with CARE, Margaret Hassan, Iraq Country Director, Baghdad, (January 2003).

50 Swann (2002).

51 U.N. Contingency Plan.

52 U.N. Contingency Plan.

4

In the event of a war, 30 percent of children under five would be at risk of death from malnutrition.

The CESR Research Team interviewed United Nations and Iraqi government officials responsible for the monitoring and implementation of the Iraqi government's near-universal food distribution system in Central and Southern Iraq. We also spoke with Iraqi civilians and workers at retail food distributors, food warehouses, and ration shops in Baghdad, Mosul, Kut, and Basrah.

THE SITUATION BEFORE THE GULF WAR

Prior to 1990, Iraq had one of the highest per capita food availabilities in the region. It imported large quantities of food, which met up to two-thirds of the Iraqi population's food requirements. The government subsidized the prices of imported goods through an overvalued exchange rate.⁵³ The subsidy for wheat flour was maintained by the Ministry of Trade. In the late 1980s daily food energy availability was 3,200 kilocalories per day, on a par with industrialized nations. A nutritional survey of children aged 0 to 8 years in the Baghdad area in 1989 found their distribution of weight and height to be similar to that in the International Reference Population.⁵⁴ Reflecting the excellent nutritional status of the population, the infant mortality rate had declined from about 120 per thousand live births in 1960 to 40-50 by the late 1980s.

THE SITUATION AFTER THE GULF WAR

Within six weeks of the commencement of United

Nations-imposed sanctions, the Iraqi government replaced the general subsidy on wheat flour with a food rationing program. The government relinquished its monopoly on imports and allowed the private sector to import food.

Following the Gulf War and the imposition of sanctions, food imports fell, real wages fell, and the purchasing power of families plummeted. The collapse of income meant that families depended heavily on the food ration for their subsistence, but it provided only partial protection against hunger.⁵⁵ "From August 1990, onwards, therefore, there was a dual market for staple food – one with highly subsidized prices and rationed quantities, and the other an unregulated open market. Much of the Iraqi population has continued to rely on a combination of these sources."⁵⁶ This food ration system remains in place today. It has functioned efficiently and improved over time.

The rations system works as follows. Each year, every family receives a ration sheet listing its individual entitlement. Every family member (adult, or child over age 1) receives the same ration.⁵⁷ Every family is registered with a local retailer (usually a local shop) close to their home from whom the ration must be purchased. Each month the family submits its monthly ration sheet in addition to a nominal fee of 250 dinar (or US\$0.12) per family member in exchange for its monthly allotment.

53 Gazdar, Haris, "Pre-Modern, Modern and Postmodern Famine in Iraq," Institute of Development Studies Bulletin, (October 2002) (hereinafter Gazdar (October 2002)).

54 "National Child Health Survey," Baghdad, Iraq, Ministry of Health, (1990).

55 Dreze, J. and Gazdar. H., "Hunger and Poverty in Iraq," World Development, 20 (7) pp. 921-945 (1991).

56 Gazdar, (October 2002).

57 Infants are allocated baby formula separately.

There are 46,000 food retailers in South and Central Iraq. Retailers make a small income from distributing the ration. Many are also local neighborhood food shops.

Although the government ration system was instrumental in preventing the onset of massive starvation, this system itself remains severely stressed. Between 1991 and 1998, nutritional status declined and Iraq's infant mortality rate increased to above 100 per thousand. The OFFP, which began operating in 1996, allowed oil sales to finance imports of food and other essential humanitarian needs. Since the adoption of the OFFP the Government of Iraq administers the system in the South and Center of Iraq for 21 million people, and the United Nations administers it in the three Kurdish governorates of Dohuk, Erbil, and Sulaimaniya for 3 million people.

The size of the food rationing system under the OFFP has to be appreciated – it is by far the largest government food distribution in the world. Every six months US\$1.25 billion is derived from Iraqi oil sales, which is spent on the distribution of food by the Government of Iraq for its 24 million citizens. Of these, 16 million persons (about 60% of the population) are fully dependent

on the food ration. This, while highly significant, has only served to reduce, rather than end, civilian suffering in Iraq.⁵⁸

The basic ration nominally provides a minimum food basket for all Iraqi families and lasts approximately three weeks a month, with milk and legumes being more rapidly consumed than wheat and rice. The composition of the ration has changed over the years (Table 4). By 1995, as foreign exchange became more and more constrained, the ration was able to provide only about one-third of the food energy and protein (1,093 kilocalories per person) as compared to 1987-1989. The ration, largely composed of carbohydrates and essential for survival, has remained deficient in a number of minerals and vitamins, especially vitamins A and C, and in animal proteins.⁵⁹

The Research Team found that a lot of work is required to weigh out the allocations, and the sheer quantity to be taken away by a family with several members is notable. The weight of a single person's ration for one month is approximately 20 kilograms. This is even greater when double rations are provided as we observed in January 2003.⁶⁰

TABLE 4: Changes in the Composition of the Public Food Ration Over Time (1993-2003)

Amount Distributed per Person per Month (in kg/caput/mo)

	1993	1995	1996 (Dec. OFFP starts)	1997	1999 (Dec OFFP cap is lifted)	2003 (2 portions distributed per month)
Wheat Flour	9.00	6.00	7.00	9.00	9.50	9.00
Rice	2.25	1.25	1.25	2.50	2.50	3.00
Sugar	1.50	0.50	0.50	2.00	2.00	2.00
Tea	0.08	0.10	0.10	0.15	0.15	0.20
Cooking Oil	0.50	0.63	0.75	1.00	1.25	1.50
Pulses	---	---	---	1.00	1.00	1.50
Iodized Salt	---	---	---	0.150	0.150	.10
Baby Milk (<1 yr)	1.80	1.80	1.80	2.70	3.60	3.60
Kcal/day	1654	1093	1295	2030	2150	2,470
Protein/day	45.6	26.9	27.5	45.4	50.0	60.2

NOTE: (with Table 3): The 1997 ration under SCR 986 has had a variable composition due to non-availability of certain items. From 1999 onwards some small quantities of additional milk/cheese products and weaning food for babies were also available. Non-food items of soap and detergent are also supplied.

58 It should be noted that the Iraqi government was offered an earlier version of the Oil-for-Food Program with a cap of US\$1.6 billion per six months. However, it held out against any deal in the hope that sanctions might be lifted altogether. By 1996, the Government of Iraq faced an imminent "macroeconomic meltdown" and it agreed to the terms of OFFP. (Gazdar, 2002).

59 FAO, "Report of Crop, Food Supply and Nutritional Status: Assessment Mission to Iraq," TCP/IRQ/4552 (July – September 1995); FAO, "Evaluation of the Crop, Food Supply and Nutritional Status: Assessment Mission to Iraq" TCP/IRQ/6713 (August, 1997).

60 The government of Iraq has been providing double rations since October 2002.

In January 2003, the CESR Research Team found the market value of the ration to be 12,000 dinars – 50 times the amount paid for it. This is a somewhat smaller value than ascribed by UNICEF (2002) which found the value of the ration received to be US\$24.50. Such calculations, however, are dependent on fluctuations in both the food prices and the exchange rate. Whatever the actual values the ration system represents, it consists not only of the physical provision of food on a regular basis, but also of a considerable income subsidy.

The CESR Research Team visited a number of warehouses in Central and Southern Iraq. Warehouses are responsible for the distribution of all foods in the food basket except wheat flour, which is distributed by a similar mechanism directly from the flour mill. The food ration system is fully computerized. The WFP monitors the system in the South and Center and are fully responsible for distribution in the North.

Officials from the United Nations indicated that as much as 90% of the OFFP foodstuffs enter the country through Umm Qasr. According to the Iraqi Minister of Trade, the portion entering through Basrah has been reduced in recent months because of highly increased insurance rates. The CESR Research Team had no means of verifying either of these assertions, but remains concerned that the interruption of food imports in the event of war will disrupt the Iraqi food distribution system.

FOOD DISTRIBUTION AND NUTRITIONAL STATUS IN THE EVENT OF WAR

In the event of hostilities, the Iraqi food distribution system is likely to be disrupted. The refugee camp analogy is pertinent to the current Iraqi food security situation. Like refugees, Iraqis are currently dependent upon a United Nations–overseen food import system which is distributed by a central authority to all inhabitants.

The Government of Iraq is preparing for war by distributing two months of rations at each monthly distribution. The CESR Research Team learned that the Iraqi government has issued advanced rations to the Iraqi civilian population since October 2002. As of January 2003, the Government of Iraq was issuing April and May rations. Governmental officials we spoke with could not tell us what steps they would take when this year's ration coupons are exhausted, which is expected to occur in July 2003. Some poor families sell part of their rations to purchase other necessary items.

UNICEF-sponsored Community Child Care Units (CCCUs) and the UNICEF Targeted Nutrition Program (therapeutic milk and high protein biscuits), which are intended to treat malnutrition, are unlikely to be able to work effectively in a conflict environment. Finally, older children should not be forgotten. In the FAO 2000 Mission, 37% of school children aged 12-15 years in a poor area of Baghdad were found to be malnourished.⁶¹ These were children who had spent almost their whole life under sanctions-induced poverty. Further disruption of the food supply would have a significant negative impact on their well-being.

The past several years' amelioration of malnutrition indicates that the measures taken in the areas of water, sanitation, and food availability are at last working but that children remain highly vulnerable. War, with its likely disrupting effects on food availability and on the quality of water and sanitation, could precipitate widespread malnutrition again throughout Iraqi society especially in the South and Center.⁶² Indeed, the United Nations estimates that "in the event of a crisis, 30 percent of children under five would be at risk of death from malnutrition."⁶³ 

61 FAO, "Assessment of the Food and Nutrition Situation: Iraq," TCP/IRQ/8924 (2000).

62 U.N. Contingency Plan.

63 U.N. Contingency Plan.

5

Prior to the Gulf War, Iraq was described by the United Nations as a high middle-income country with a modern social infrastructure.

The CESR Research Team investigated the essential public health infrastructure – electrical plants, water treatment, and wastewater facilities in Mosul, Tikrit, Kirkuk, Baghdad, Kerbala, Kut, Basrah, and Faw.

Prior to the Gulf War, Iraq was described by the United Nations as a high middle-income country with a modern social infrastructure. Iraq used a combination of hydroelectric, thermal, and gas turbine generators which provided an installed capacity of 9,500 megawatts (MW). At that time the reserve capacity was estimated to be 40%.

Potable (safe) drinking water was available for residents in 95% of urban areas and 75% of rural.⁶⁴ In 1991, Iraq had a system of 218 water treatment plants, 1,191 mobile compact treatment plants primarily for rural use, 51 pumping stations, and hundreds of thousands of kilometers of pipe.⁶⁵

The generation and transmission of electricity was critical to the normal functioning of most elements of the Iraqi health and public health systems. The population had access to a well-developed public health and sanitation infrastructure. With the exception of some isolated rural communities, the entire society had become highly

dependent upon the national electricity grid – telecommunications, industry, agriculture, education, housing, health, water, and wastewater.

THE GULF WAR AND ITS IMPACT

Electrical generating capacity and key transmission facilities were targeted in the Gulf War.⁶⁶ The Allied forces destroyed four of the country’s five hydroelectric plants and crippled nearly all the electrical production facilities.⁶⁷ Iraq was relegated from a modern, energy-dependent society to “a pre-industrial age.”⁶⁸ Several water treatment facilities in the South and Center were also targeted.⁶⁹

The targeting of electricity affected water-purification and sewage-treatment facilities, creating a serious public health catastrophe.⁷⁰ Given the erratic electrical supply, hospitals and health care centers were unable to meet the growing public health problem, including the treatment of patients with communicable diseases.⁷¹ The “cold-chain” (refrigeration) was broken, rendering already difficult-to-replace vaccines and medicines ineffective.⁷² The vicious circle of poor hygiene, contaminated water, poor nutrition, and lack of medicines left children vulnerable to diarrhea and dehydration.⁷³ The Iraqi civilian population suffered unduly from the deliberate targeting of civilian infrastructure.

64 UNICEF, “The Situation of Children in Iraq,” (February 2002).

65 UNICEF, “The Situation of Children in Iraq,” (February 2002).

66 International Study Team, Ascherio, A., Chase, R., Cote, T. et al., “Effect of the Gulf War on Infant and Child Mortality in Iraq,” *New England Journal of Medicine*, 327: 931-36 (1992); Human Rights Watch, “Needless Deaths in the Gulf War,” (November 1991).

67 Human Rights Watch, “Needless Deaths in the Gulf War,” (November 1991).

68 United Nations, “Report on humanitarian needs in Iraq in the immediate post-crisis environment by a mission to the area led by the Under-Secretary-General for Administration and Management,” (Ahtisaari Report) (March 10-17, 1991) S/22366 (March 20, 1991).

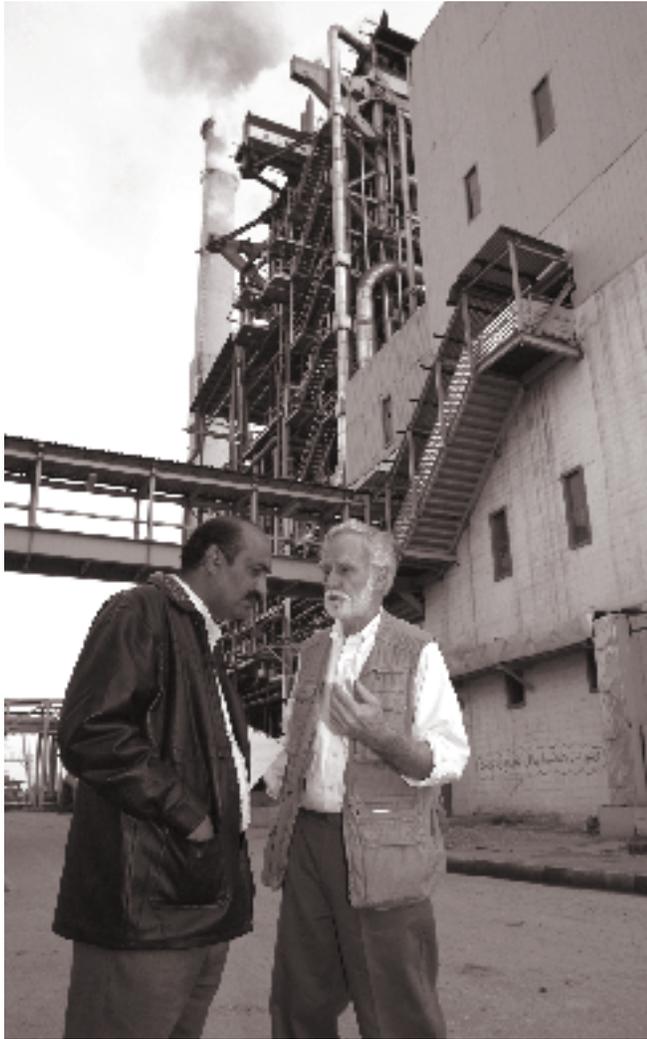
69 Human Rights Watch, “Needless Deaths in the Gulf War,” (November 1991).

70 Harvard Study Team, “Special Report: The Effect of the Gulf Crisis on the Children of Iraq,” *New England Journal of Medicine*, 325: 977-980 (1991).

71 Harvard Study Team, “Special Report: The Effect of the Gulf Crisis on the Children of Iraq,” *New England Journal of Medicine*, 325: 977-980 (1991).

72 Human Rights Watch, “Needless Deaths in the Gulf War,” (November 1991).

73 Harvard Study Team, “Special Report, The Effect of the Gulf Crisis on the Children of Iraq,” *New England Journal of Medicine*, 325: 977-980 (1991); International Study Team, Ascherio, A., Chase, R., Cote, T. et al., “Effect of the Gulf War on Infant and Child Mortality in Iraq,” *New England Journal of Medicine*, 327: 931-36 (1992).



Jason Florio, Corbis/Sygma

The country has yet to fully recover from the effects of that damage.⁷⁴ Much of Iraq's electrical infrastructure was damaged in 1991 and its small reserve of spare parts was consumed in repairing the damage from the Gulf War. Access to potable water declined to an unmeasured number.

THE CURRENT STATUS OF THE ELECTRICAL INFRASTRUCTURE

A number of factors have contributed to the chronic decline of the electrical capacity of the country under the sanctions, including aging infrastructure, delays, difficulties in obtaining spare parts, poor maintenance, and the exodus of trained professionals due to lack of government financial incentives.

74 UNDP, "Living Conditions in Iraq," (September 2002).

75 CESR Interviews (January 2003).

76 UNDP, "Sectoral Briefing Paper: Status of Electrical Sector" (January 12, 2003)(hereinafter UNDP, "Sectoral Report" (2003).

77 United Nations Security Council Resolution 1409. "Goods Review List" Res. (May 14, 2002).

Coordinated attempts have been made to repair the stressed electrical system. The UNDP has been working with the Iraqi National Department of Electricity to rehabilitate many failing power generators.⁷⁵ Orders for spare parts for this sector have been denied or delayed during much of the life of the OFFP.⁷⁶ In 2002, spare parts began to be imported with the passage of U.N. Security Council Resolution 1409, which eased the sanction system by adopting an itemized list of permitted imports.⁷⁷ Even after a determined rehabilitation partnership between the government of Iraq, international NGOs, and the UNDP, the generation capacity is only about 4000 MW or 43% of installed capacity.⁷⁸

In many parts of the country the electrical systems remain unreliable. On site visits, the CESR Research Team found generators that are still not operational, such as one of two that supply electricity to the Kirkuk Unified Water Treatment Plant.⁷⁹ Spare parts for this plant have been on order for more than a decade. In Baghdad, a primary source of electricity, the G.E. generator in the South Baghdad Power Station is over thirty years old. It currently operates at 50% efficiency.⁸⁰ Much of it has been slowly dismantled for spare parts. Baling wire is used to hold injectors open because no other parts could be cannibalized. When parts were ordered, the Sanctions Committee repeatedly returned the request pending additional technical information, leading to a delay of over four years. These spare parts have yet to arrive.⁸¹

Because there is no commercial protection for any of the contracts under the Sanctions Committee, when a replacement part does arrive after years of delays, it may be the wrong part and the Government of Iraq has no recourse. The CESR Research Team saw large pieces of new equipment still in the crates after two years, unused for lack of a specific adaptor that the manufacturer failed to include. Two new power plants in Salah Al Din and Al Shimal, worth an estimated US\$81 million, have been awaiting Sanctions Committee approval of necessary components for more than a year. Other problems have

78 UNDP, "Sectoral Report" (2003).

79 CESR Interview with Engineer Nihad Hadi, ICRC (January 2003).

80 CESR Interviews with Iraqi Engineers (January 2003).

81 CESR Interviews with United Nations staff (January 2003).

been caused by delays in the letters of credit, technicians of foreign suppliers refusing to come to Iraq, and cancellation of contracts by vendors.⁸² These observations were confirmed by multiple international NGOs.

Blackouts currently average 12-14 hours per day in some urban neighborhoods.⁸³ Nationally, power cuts have been reduced from an average of 15 hours per day in 2001 to 9 hours per day in 2002.⁸⁴ These power outages adversely affect all aspects of daily life including the health system. NGOs and United Nations agencies have noted that large vaccine deliveries in Iraq were lost because of lapses in the cold chain (refrigeration).⁸⁵ Hospitals experience power failures and fluctuations which damage medical equipment and interrupt important medical procedures such as x-rays or surgery.⁸⁶ Hospitals, water treatment plants, and sewage pumping stations all have back-up generators but they are designed only to operate several hours at a time. Many of these back-up generators do not have significant fuel storage capacity for sustained operation, and almost all of them function at considerably less power than is required for normal operating conditions.⁸⁷

Residents do not always sit idly by waiting for electricity. There is a brisk market for smuggled generators. When power is cut or fails in a commercial area at night, life

goes on. In the Al Khadra suburb of Mosul, we observed hundreds of wires from individual homes converge on a trailer-size building in the Adan neighborhood which provided back-up electricity. Built with a 1980 Detroit Diesel truck engine, the generator supplies 400-500 homes for an average of 13 hours per day when the national grid is down or fails. Residents themselves paid for the equipment, support the operators, and pay for the delivery of diesel fuel that totals 2000 Iraqi dinars (US\$1) per ampere; most families use three amperes per month. One resident told us, "It's not much power per family, but it keeps our refrigerator cold and my children no longer depend upon candles to study."

The United Nations estimates that the total cost of rehabilitating the generation capacity as well as the transmission infrastructure of Iraq's electrical system is US\$20 billion.⁸⁸ Since the OFFP was implemented in 1996, slightly more than US\$3 billion has been approved and funded for rehabilitation of the overloaded electrical sector. For reasons previously mentioned only US\$2 billion (or approximately 67%) of the requests have arrived in Iraq. An additional 99 projects valued at US\$360 million currently await funding. Very few funds have been available or allocated to repair the fragile transmission infrastructure.⁸⁹

THE UN SANCTIONS COMMITTEE AND REBUILDING IRAQ'S INFRASTRUCTURE

The United Nations Security Council's 661 Committee reviews every item that is sent to Iraq. The United States and the United Kingdom have subjected hundreds of contracts, particularly those involving the repair of electricity, telephones, water treatment, and medicines, to elaborate scrutiny and have delayed their approval.

Last year the United States blocked contracts for water tankers under the pretext that they might be used to haul chemical weapons. However, UNMOVIC (the arms inspection team) had no objections to them because of their liners. These purchases were blocked even though gastrointestinal diseases linked to the lack of access to clean water are a major cause of childhood mortality.

As of September 2001, nearly 200 humanitarian contracts worth US\$25 million had been blocked by the United States using the claim that they might have a "dual use" (civilian and military) and nearly US\$1 billion of medical equipment for which all information had been sought and provided were still on hold.

Source: Gordon, Joy, "Cool War," Harper's Magazine, (November 2002).

82 UNDP, "Sectoral Report," (2003).

83 CESR Interview with Engineer Sami Yusuf Jagou, Department of Electricity, Kirkuk (January 2003); UNDP Sectoral Report, (2003).

84 UNDP, "Sectoral Report," (2003).

85 CESR Interviews with United Nations staff (January 2003).

86 CESR Interviews with hospital staff (January 2003).

87 CESR Interviews (January 2003).

88 U.N. Portrait.

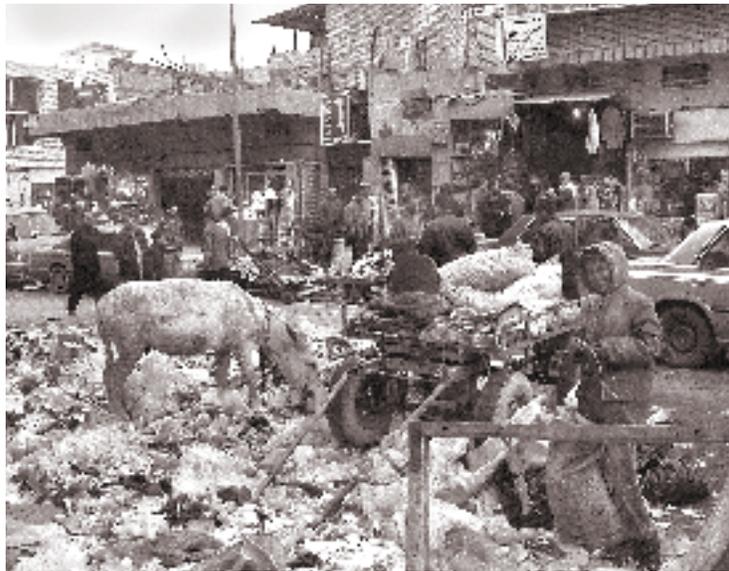
89 UNDP, "Sectoral Report," (2003).

CURRENT STATUS OF WATER AND SEWAGE TREATMENT FACILITIES

By 1999, according to UNICEF, the water system was repaired to the extent that urban access to potable water was estimated at 94% and rural access at 45.7%. According to a confidential United Nations report issued in January 2003, only 76% of the population in the South and Center of Iraq has access to potable water: 92% of the population living in urban areas and 44% of the population living in rural areas.⁹⁰ However, the Research Team considers these numbers to refer to access to water, though not necessarily *potable* water, since much of the water in large sections of Iraq is not of drinkable quality.

Over the decade 1990-2000 potable water quantity (availability) decreased dramatically from 330 to 150 liters per person per day in Baghdad and from 180 to 65 liters per day per person in rural areas. According to a recent

United Nations multi-agency report, the deterioration of water facilities has been halted resulting in improved access to safe water. The amount available in urban areas is now estimated to be 197 liters per person per day compared with 166 liters in 1997.⁹¹ In rural areas, homes are not connected to municipal water. Water distribution is by truck or donkey cart and is as infrequent as once per day or once per 10 days, with as little as 20 liters delivered to each household.⁹² The national output of potable water is currently at only at 50% of pre-Gulf War levels.⁹³



Terry J. Allen

Much of the treated water is lost through broken mains and pipes, which also allows for drinking water contamination by sewage. The CESR Research Team observed these breaks in all the cities that we visited. Water treatment plant directors with whom we spoke estimated that 30-40% of treated water is lost in transmission.⁹⁴

The rehabilitation of the water and sewage treatment system is practically impossible under the sanctions, even under the improved OFFP framework. United Nations agencies have determined that over 25% of

all water samples are highly contaminated.⁹⁵ According to UNICEF, 70% of water currently distributed has turbidity exceeding 10 units, and occasionally 25, when the standard is less than one.⁹⁶ Turbidity, or cloudiness, is a gross measure of effective water filtration. Although counts of fecal coliform and other bacteria are not measured regularly, water treat-

ment plant managers interviewed by the CESR Research Team stated that they are rarely within acceptable limits. In some areas, especially in the southern provinces, raw untreated water is added to meet increased demand, particularly in the summer.⁹⁷

CESR Research Team members interviewed engineers at the Baghdad and Basrah water treatment plants who stated that they were producing water at 50% and 80% of design capacity, respectively, because electricity is intermittent.⁹⁸ Municipal water treatment is not possible without electricity. As described earlier, both of

90 U.N. Contingency Plan.

91 U.N. Portrait.

92 U.N. Portrait.

93 UNICEF, "Water and Sanitation Briefing Iraq South/Centre," annexed to "Working with Children to Build a Better Future," (undated 2002).

94 CESR Interviews with water treatment plant staff (January 2003).

95 U.N. Contingency Plan; UNICEF, "Briefing Water and Sanitation Iraq South/Centre," annexed to "Working with Children to Build A Better Future," (2002).

96 UNICEF, "The Situation of Children in Iraq," (February 2002).

97 GOI/UNICEF, "Programme Review 1990-2000, Sector Review Report: Water and Environmental Sanitation," (2000).

98 CESR Interviews (January 2003).

these water treatment plants have back-up generators and can continue pumping during the daily power outages, but at greatly reduced capacity. In addition, the plants have diesel fuel for only a few days operation without electricity.

Another impediment to the provision of clean water is the availability of spare parts, operating materials, and chlorine. In interviews with CESR Research Team members, workers at both plants acknowledged that to meet water demand untreated or partially-treated water was occasionally added to the main supply.⁹⁹ The principal reason for these two plants operating at a reduced output is the lack of replacement parts and spares. Pumps and motors run by cannibalizing parts. Plant personnel interviewed by the CESR Research Team complained that the Sanctions Committee takes years to approve spare parts because replacement pumps and filters are often denied as “dual use” (for civilian and military purposes).

The CESR Research Team learned that an additional barrier to sanitation plant functioning is the decline in trained staff. Between 1990 and 2000, the number of employees in the General Corporation for Water and Sewage fell from 20,000 to 11,000 and the average seniority level fell from 20 to 9 years.¹⁰⁰

Municipal sewage treatment is incomplete and sewage often bypasses the plant completely. Plant managers at both the Baghdad and Basrah main sewage treatment facilities told the CESR Research Team that because of main pump or other failures the plant could not operate and that over time at least 50% of plant sewage inflow was shunted directly into the adjacent river. Official estimates state that 500,000 tons of raw sewage enter the national waterways daily for the entire nation.¹⁰¹ This figure may be an underestimate. In Mosul, Iraq’s second largest city, with 3 million people, wastewater workers estimate that there are 200 liters of wastewater per per-

son per day. Using this figure, 600,000 tons of sewage per day is discharged into the Tigris River from Mosul alone. They also point out that an unknown percentage of city residents are not connected to municipal sewage and use septic tanks or open drainage.

THE INFRASTRUCTURE IN THE EVENT OF WAR

The targeting of the electrical sector in a military intervention will be catastrophic for the health, water, and sanitation sectors. The CESR Research Team believes that there is an imminent risk – during and post-conflict – to the Iraqi water and sewage treatment systems. The United Nations estimates that if there is a conflict, only 39% of the population would have water and sanitation services, and only on a rationed basis depending on the availability of fuel and if the local treatment facilities have stand-by power generation capacities.¹⁰² If electrical power fails, sewage will back up in the system and rise onto the streets and into people’s homes. Indeed, the sewage system is likely to entirely collapse. In Baghdad, where the sewage system serves four million people, this poses a severe public health hazard.

Water and sanitation systems and equipment are fragile, vulnerable, and cannot operate without electricity. Having functioned for a decade without capital investment, maintenance, and spare parts, their operation is ‘jury-rigged’ and unsustainable. In the event of another military attack which disables the electrical supply they are unlikely to recover and would not function until they were replaced.

Currently, at least half of Iraq’s drinking water does not meet WHO quality standards and the incidence of waterborne disease, particularly in rural areas, continues to increase. Illness and death rates of children reflect poor water quality and are worsening even without war. Military damage of water treatment facilities will guarantee large-scale epidemics of waterborne illness. 

99 CESR Interviews (January 2003).

100 CESR Interviews (January 2003); UNICEF, “Briefing Water and Sanitation Iraq South/Centre,” annexed to “Working with Children to Build a Better Future,” (2002).

101 GOI/UNICEF, “Programme Review 1990-2000, Sector Review Report: Water and Environmental Sanitation,” (2000).

102 U.N. Contingency Plan.

6

If military forces are involved in relief, then humanitarian principles governing civilian/military interaction may be eroded.

A military intervention in Iraq is likely to lead to a humanitarian crisis that far exceeds the capacity of the United Nations agencies, NGOs already in Iraq, and the Red Cross/Red Crescent movement.¹⁰³ The international relief agencies are unprepared.¹⁰⁴ For the reasons described below, the CESR Research Team is concerned that the humanitarian effort may inappropriately duplicate existing functional, though vulnerable, Iraqi public health, food, and infrastructure systems in a chaotic fashion that could exacerbate the human suffering in post-war Iraq.

Iraq is different from other recent humanitarian crises in two distinct, and important, ways. First, few NGOs are currently operational in the region. There are fewer than 10 NGOs currently providing services inside of South and Center Iraq, and the projects they run are small.¹⁰⁵ The NGOs which are preparing humanitarian operations have no recent history or experience in Iraq or, with few exceptions, even in the region. It will take time for them to establish themselves, perform needs assessments, bring in appropriate supplies and equipment, and become fully operational. Furthermore, their ability to prepare for the effective delivery of humanitarian relief has been further compromised by their inability to obtain necessary licenses from the United States

State Department and the Treasury Department.

Second, unlike the places where recent large-scale relief efforts have taken place, Iraq has functioning systems in most sectors. The health system is compromised and in need of rehabilitation, but functional. The food distribution system is a complex but efficient system – a majority of the population depends on it – and would be virtually impossible to replace. Water, sanitation, and electrical systems – while severely compromised – need reinforcement and support. Because most of the population has relatively easy access to existing facilities, and because the Iraqi professional cadre is reasonably knowledgeable and competent, a post-war humanitarian intervention should consist of support rather than hands-on service provision.

A common sentiment heard within Iraq was expressed by the manager of an international NGO who said:

“This isn’t Afghanistan – there is a functioning government system that, politics aside, makes, for example, the food distribution system the best in the world. The [US Government] should support and reinforce the existing system instead of developing a parallel system of international NGOs who will take forever to mount a parallel infrastructure.”¹⁰⁶

103 Military scenario is discussed in Appendix A.

104 U.N. Contingency Plan. Although agencies have engaged “in a discreet planning and preparedness effort for several months . . . [t]he Current response capacity of the U.N. System remains well below the critical requirement established through the inter-agency planning process.”

105 CESR Interviews in Baghdad (January 2003).

106 CESR Interviews in Baghdad (January 2003).

HUMANITARIAN RESPONSE PLANS OF THE UNITED NATIONS, NGOS AND ICRC

The United Nations Agencies: The United Nations asserts that their efforts will be supplemental and limited to strategic emergency interventions, and it “emphasize[s] that humanitarian needs of the Iraqi population as a whole can be met only by national and local authorities.”¹⁰⁷ In addition, the United Nations has noted that access to war-affected civilians will be “severely limited for the duration of the conflict.”¹⁰⁸

Within Iraq, the United Nations agencies have begun to draw up a preparedness plan under the overall coordination of UNOCHI, the United Nations Office for the Coordination of Humanitarian Assistance in Iraq. Under the proposed management scheme, lead agencies have been assigned to each sector¹⁰⁹:

- **Food assistance** – World Food Program (WFP)
(WFP Estimates that 10 million or 40% of the population in the South and Center and 34% in the North would be highly food insecure.)
- **Health** – World Health Organization
(with support from UNICEF)
(WHO estimates 100,000 to 500,000 civilian casualties.)
- **Nutrition** – UNICEF and WFP
(UNICEF is planning to assist 910,000 severely to moderately malnourished children and 700,000 pregnant and lactating women.)
- **Water and Sanitation** – UNICEF
(UNICEF is planning to provide emergency services for up to 6.9 million persons.)
- **Refugees and asylum seekers** – UNHCR
(UNHCR is preparing for 600,000 refugees.)

Each agency has drawn up a preparedness plan for activities in its sector.¹¹⁰ (See Appendix C for details).

While complaining about shortages in funding for



Robert Huber/Lookat Photos

humanitarian operations, the United Nations agency plans do not raise any questions regarding the future of the OFFP. As mentioned in earlier sections of this report, the OFFP serves as the humanitarian lifeline for most Iraqis. How, if at all, will currently approved items worth US\$10.9 billion in the OFFP administrative process be delivered and distributed?¹¹¹ Will the OFFP continue in post-war Iraq? If so, how and in what form will it continue and who will administer the distribution of humanitarian goods? Since the United Nations is best poised to coordinate humanitarian relief through existing systems, the United Nations agencies and the Office of the Iraq Programme need to raise and receive answers about the OFFP by member states of the Security Council.

¹⁰⁷ U.N. Contingency Plan.

¹⁰⁸ U.N. Contingency Plan.

¹⁰⁹ U.N. Contingency Plan.

¹¹⁰ United Nations, “Versoix II”, Draft, Ramada Park Hotel, Geneva, (January 12-13, 2003).

¹¹¹ There is no specific time period for delivery. Each OFFP phase is 180 days and currently the program is in its XIII phase which ends in June 2003.

The Non-Governmental Organizations: The NGO community is not prepared and many are concerned that access inside Iraq will be limited by the United States Department of Defense (DOD).¹¹² Few NGOs currently operate in Iraq and those that do operate on a small scale. Over the past months, many NGOs have started to prepare for a humanitarian crisis in Iraq after a military conflict. An important element of the planning efforts is the Humanitarian Operations Centre (HOC) in Kuwait City, established by the DOD and staffed largely by civilians. Although United States military forces have articulated that they “do not plan to play a direct role in humanitarian assistance” unless there is a clear-cut need or unless they are asked to intervene, they will undoubtedly be in communication with both the United Nations agencies and the NGO community.¹¹³ In addition, it is inevitable that the earliest relief effort will be run by the military, with little participation by the NGO community.

Both the United Nations and international relief NGOs assume that the delivery of humanitarian assistance after security is re-established will require interaction with United States military authorities.¹¹⁴ The DOD has prepared a “classified” humanitarian proposal, which it has not shared with NGOs.¹¹⁵ The CESR Research Team, like the American NGOs, is perplexed by the United States administration’s secrecy concerning the humanitarian response, given that the administration has been remarkably open about its military plans.

The relationship between humanitarian relief agencies and military operations is complex. Staff of all NGOs interviewed by the Research Team felt strongly that humanitarian relief principles articulated in the IASC Principles on Military-Civilian Relations and the Principles Guiding Humanitarian Action (such as independence and neutrality in delivery of aid) should be strictly respected (Appendix C).¹¹⁶ For the past sev-

THE UNITED STATES MILITARY PLANS TO PROVIDE HUMANITARIAN ASSISTANCE

President Bush in his State of the Union address on January 28, 2003, promised not only to drop bombs on the Iraqi people, but also to bring food, medicine, and supplies. This vision was reiterated by the Commander of American forces in the Persian Gulf when he said “the military would take much of the responsibility for providing food and medicine to the Iraqi people from the first day of any war.” (NY Times, 2/11/03). The United States military plans to airdrop prepackaged rations, several times the quantity of the 2.4 million rations dropped in Afghanistan.

These military plans must respect humanitarian principles set forth in the Principles Guiding Humanitarian Actions, the Geneva Convention, and its Protocols. These principles all seek to protect the rights of civilians to receive aid in an impartial, neutral, and independent manner. Under this framework, there is a clear separation between humanitarian and the political, military, or economic actions carried out by governments during a conflict and ensuing humanitarian crisis. Military operations need to be distinct from humanitarian activities, especially at the height of hostilities. Civilians should not associate humanitarian organizations with military objectives.

At the time of the writing of this report, CESR believes that there is tremendous potential that the United States Department of Defense may compromise these basic humanitarian principles of impartiality, neutrality, and independence during the conflict in Iraq.

Sources: Schmitt E. and Shanker, T. “U.S. Military Set to Provide Aid to Iraqi People in the Event of War.” NY Times (February 11, 2003); Grossman, E.M. “Humanitarian Crisis in Iraq Could Fast Undercut War Aims,” Inside the Pentagon (February 6, 2003); Principles Guiding Humanitarian Action; Protocol Additional to the Geneva Conventions of August 12, 1949 (Protocol I) and Protection of Victims of Non-International Armed Conflicts (Protocol II). Protocols I and II of the Geneva Conventions have been ratified by the vast majority of States. Provisions guaranteeing access to humanitarian aid are considered part of customary international law and therefore binding on all States regardless of ratification.

112 CESR Interviews in New York (December 2002 and January 2003).

113 United Nations, “Versoix II”, Draft, Ramada Park Hotel, Geneva, (January 12-13, 2003).

114 United Nations, “Likely Humanitarian Scenario.” (December 10, 2002).

115 CESR Interview in Washington, D.C. (February 2003).; Schmitt E. and Shanker, T. “U.S. Military Set to Provide Aid to Iraqi People in the Event of War.” NY Times (February 11, 2003).

116 CESR Interviews in Iraq, Jordan, and the United States (December 2002 and January 2003).

eral years, many United States-based NGOs have been participating in simulation exercises and coordination and training activities with the Department of Defense. Given the lack of openness of the military in the past few weeks, the value of these joint activities, has been called into question by many of those interviewed by the CESR team.

At the time of writing this report, a consortium of American-based NGOs had received grants of almost \$2,000,000 to establish a joint office in Amman, Jordan.¹¹⁷ Other NGOs are undoubtedly gathering on the borders or making plans at their headquarters to participate in a post-conflict relief effort. Several United Nations representatives and one NGO interviewed by the Research Team expressed concern that the United States military and/or either the Department of State or the USAID Office of Foreign Disaster Assistance will control the flow of funds to NGOs, as well as actual access to post-war Iraq. NGOs deemed “friendly” to the United States would be allowed to operate in Iraq, while those more critical of United States policy would be disadvantaged. This policy is of grave concern to European-based NGOs. To date, the European Community Humanitarian Office (ECHO) has not been forthcoming with funds for relief preparedness. There is speculation that they will not do so, for fear of being perceived as sanctioning a military intervention. Finally, it is conceivable that the NGOs will not be major actors in an Iraqi relief scene. If, indeed, the Department of Defense is in charge (and a reconstruction office has already been established in the Pentagon), it may prefer to work with private contractors over which it can exert greater control, instead of with the “pesky” NGO community.

The International Committee of the Red Cross (ICRC): The International Committee of the Red Cross is functionally the lead agency of the Red Cross move-

ment in Iraq. ICRC has had a continuous presence in Iraq for twenty years, and plans to stay, as the monitor of international humanitarian law, throughout any conflict period. ICRC has numerous large scale projects, and has pre-positioned significant assets in Iran, Jordan, Kuwait, and Syria. They also have fuel and trucks pre-positioned in Iran.

ICRC is operating as independently as it can in Iraq. It is obviously reluctant to cooperate with the US military humanitarian operations center in Kuwait, with the possible exception of information exchange, but it is also wary of working closely with the United Nations agencies. As an ICRC employee put it: “In Iraq, the United Nations means sanctions.”¹¹⁸ In any event, ICRC will find its management and coordination functions difficult to handle – in Iraq, in addition to the usual national Red Cross/Red Crescent societies that provide humanitarian assistance in emergencies, large contingents from Middle Eastern Red Crescent societies are expected to want to play a role in providing post-conflict assistance.

Iraqi Red Crescent Society (IRCS): Within Iraq, the Iraqi Red Crescent Society appears to be the primary coordinating organization. The IRCS has sub-offices in each of the eighteen governorates. The IRCS has been delegated authority by the Government of Iraq, from which it claims total independence, to serve as the “agent” for the international NGOs. An NGO planning to work in Iraq submits its plan to IRCS for discussion and approval, and IRCS then forwards it to the government for final approval. Permits to work in Iraq are granted by the Ministry of Foreign Affairs and can take time to be approved. IRCS also facilitates the work of international NGOs by obtaining travel permits and other necessary documents. There is skepticism, though, that the IRCS will continue to be an effective player in a post-war Iraq, at least in the short term.

¹¹⁷ Save the Children, International Rescue Committee, International Medical Corps, Mercy Corps, and World Vision International.

¹¹⁸ CESR Interviews (January 2003).



Robert Huber/Lookat Photos

HUMANITARIAN INTERVENTION IN THE EVENT OF A WAR

In essence, there will be three streams of humanitarian assistance in a post-conflict Iraq: the international NGO community (funded to a large degree, it is assumed, by the United States Government), the United Nations family of agencies, and the Red Cross/Red Crescent movement.¹¹⁹ The potential for duplication of effort, for inappropriate activities, and for a chaotic, rather than a coordinated relief effort, is great.

Because the relief effort is likely to be dominated by the United States Government, there is concern that some basic principles will not be respected – foreign policy interests may be placed ahead of humanitarian ones.

In addition, if military forces are heavily involved in relief operations, and there are strong indications that they will be, the principles governing civilian/military interaction may be eroded. This was certainly the case after the first Gulf War and in Afghanistan. It is not only principles that are at risk – when soldiers engage in humanitarian “missions”, civilian relief workers may become targets of reprisals.

Perhaps most worrying at this point is the secrecy with which the United States Government seems to be guarding its plans for relief and reconstruction. The inability of the humanitarian community to prepare, given its relative lack of knowledge and of experience of the region, is likely to delay the ability to mount an effective

119 ECHO, the European Community Humanitarian Office, is currently the largest funder of NGO programs in Iraq. They have no representative in Baghdad, however, and the Research Team could not ascertain their plans for post-conflict rehabilitation programs.

THE 1991 GULF WAR AND A POSSIBLE WAR SCENARIO

The precedent of the 1991 Gulf War, when the United States military bombed civilian infrastructure including electricity grids, and food, agricultural, and water treatment facilities,¹ suggests that any new military attack on Iraq would have a devastating impact on civilians. Even if not intentionally targeting civilian infrastructure, the great number of missiles that will be launched will certainly disrupt and possibly destroy many civilian services. According to news reports, the United States intends to launch “3,000 precision-guided bombs and missiles in the first 48 hours of the opening air campaign.”² This will include between 300 to 400 cruise missiles daily at Baghdad, more than the entire number of cruise missiles launched during the 43-day Gulf War.³ Baghdad is a city of roughly 4 million people; its population density in 1987 was 13,566 people per square mile and is certainly higher today. Lobbing 300-400 cruise missiles daily at Baghdad would correspond to an average of more than one missile hitting the city every five minutes.

The potential for massive civilian and military casualties is great due to:

- the sheer scale of such an operation involving hundreds of thousands of troops,
- the United States’ enormous firepower advantage,
- urban warfare in densely populated urban centers such as Baghdad and Basrah,
- and possible use of weapons of mass destruction by both sides⁴.

There are several calculations estimating civilian deaths: MedAct estimates a “range from 48,000 to 261,000 for a conventional conflict and additional deaths from post-war adverse health effects could total 200,000.”⁵ The World Health Organization estimates 100,000 direct and 400,000 indirect casualties and anticipates that “as many as 500,000 people could require treatment to a greater or lesser degree as a result of direct or indirect injuries.”⁶ While these figures remain estimates in the absence of a direct conflict, the humanitarian vulnerabilities of Iraqi civilians have been well documented by this and other reports, including confidential United Nations documents. In the event of war, military planners will not be able to claim ignorance of the possibility of a humanitarian catastrophe in Iraq.

1 Several studies, including the Ahtisaari Report, the Harvard Study Team, the International Study Team, and Human Rights Watch, documented the immediate damage as a result of the Gulf War.

2 NYT, “War Plan Calls for Precision Bombing Wave to Break Iraqi Army,” (February 2, 2003).

3 CBS/AP, “Iraq Faces Massive U.S. Missile Barrage,” (January 24, 2003); Christian Science Monitor, “US mulls air strategies in Iraq,” (January 30, 2003).

4 Arkin, W.A., “The Nuclear Option in Iraq,” L.A. Times, (January 26, 2003).

5 MedAct, “Collateral Damage: the health & environmental costs of war on Iraq,” (November 2002)

6 UN Report, “Likely Humanitarian Scenarios” Para 23. CASI (December 10, 2002).

APPENDIX B

PRINCIPLES GUIDING HUMANITARIAN ACTION

HUMANITY

Human suffering is to be addressed wherever it exists. The dignity and rights of all victims must be respected and protected.

IMPARTIALITY

The provision of humanitarian assistance is based on needs assessments carried out by the U.N., ICRC, and NGOs, following recognized standards, without discriminating by ethnicity, nationality, race, gender, religion, class, or political opinion.

NEUTRALITY

Humanitarian action takes place without engaging in hostilities or taking sides in political, religious, or ideological controversies. Aid has an independent status beyond political or military considerations and should be viewed as such.

Source: Mackintosh K. The principles of humanitarian action in international humanitarian law. HPG Report 5. Overseas Development Institute. London, UK, March 2000.

PROTECTION

The fundamental right of all persons to live in safety and dignity, as well as the right to reside in the location of their choice, including return, must be affirmed and protected, and is an integral part of humanitarian action.

INDEPENDENCE

Humanitarian organizations endeavor not to act as instruments of government policy. Humanitarian agencies formulate their own policies and strategies and will not implement any policy of any government, except insofar as it coincides with their own policy.

TRANSPARENCY AND ACCOUNTABILITY

Humanitarian agencies will implement activities transparently. Organizations are accountable to the people they assist and to those from whom they accept resources.

INTERAGENCY STEERING COMMITTEE PRINCIPLES ON MILITARY-CIVILIAN RELATIONS

1. Decisions to accept military assets must be made by humanitarian organizations, not political authorities, and based solely on humanitarian criteria.
2. Military assets should be requested only where there is no comparable civilian alternative and only the use of military assets can meet a critical humanitarian need. The military asset must therefore be unique in nature or timeliness of deployment, and its use should be a last resort.
3. A humanitarian operation using military assets must retain its civilian nature and character. The operation must remain under the overall authority and control of the humanitarian organization responsible for the operation, whatever the specific command arrangements for the military asset itself.
4. Countries providing military personnel to support humanitarian operations should ensure that they respect the code of conduct and principles of the humanitarian organization responsible for that deployment.
5. The large-scale involvement of military personnel in the direct delivery of humanitarian assistance should be avoided.
6. Any use of military assets should ensure that the humanitarian operation retains its international and multilateral character.

UNITED NATIONS PREPAREDNESS

This section summarizes key findings of the following confidential document, obtained by CESR from U.N. field staff in Iraq: United Nations Office for the Coordination of Humanitarian Affairs, “Integrated Humanitarian Contingency Plan for Iraq and Neighboring Countries,” (January 7, 2003). All quotations below are taken from this U.N. document.

I. HUMANITARIAN CONTEXT

Several factors differentiate the current situation from that in 1991. Of particular concern are “high levels of existing vulnerability and the dependence of most of the population on GOI for their basic needs.”

- WFP estimates that 80% of average household income is spent on the food ration, and that 60% (16 million) of the population rely on the ration for their daily subsistence needs.
- Under-five mortality in Central and Southern Iraq remains at 136 per 1000 live births (2.5 times the level recorded in 1990).
- 50% of pregnant women are anemic and, as result, more than 30% of infants are low birth weight.
- Improvement in malnutrition rates since 1996 is highly fragile; an estimated 4.4 million children under five and one million women are highly vulnerable. “In event of a crisis, 30 percent of children under five would be at risk of death from malnutrition.”
- There is a significant risk of a measles outbreak (current vaccination coverage is 80%).
- Basic health infrastructure is not fully restored and cannot be relied upon to provide full support to the population in the event of a crisis. There exist shortages of basic drugs and vaccines.

“It should be emphasized that humanitarian needs of the Iraqi population as a whole can be met only by national and local authorities.” Efforts by U.N. agencies will be supplemental and limited to strategic emergency interventions.

“The collapse of essential services in Iraq could lead to a humanitarian emergency of proportions well beyond the capacity of UN agencies and other aid organizations.”

II. SCENARIOS AND PLANNING ASSUMPTIONS

In its discussion of various military scenarios and humanitarian planning, the UN assumes a medium-impact scenario: military engagement of two to three

months. “Large scale ground offensive supported by aerial bombardments, there would be considerable destruction of critical infrastructure and sizeable internal and external population movements. Access to war affected civilians would be severely limited for the duration of the conflict.”

Northern governorates are likely to remain relatively free of conflict; high-intensity conflict will most affect the central areas (those closest to Baghdad). Urban areas will be the hardest hit, including the cities of Baghdad, Mosul, and Kirkuk – with a total population of 9.2 million.

The possibility of an attack by Iraqi forces on Kurds and Shi’as is considered limited as external forces will intervene to protect respective populations. The U.N. suggests that a major risk of civil unrest exists, and would likely result in high levels of casualties and a breakdown in law and order.

“Military conflict would result in significant disruptions of critical infrastructure in South and Center of the country. The capacity of the Government and other assistance providers to deliver basic services and to conduct relief operations would be severely limited.”

The U.N. assumes:

- Damage to the transportation grid, including roads, bridges, vehicles, railways, and ports. The port of Umm Qasr will be unavailable due to damage or military blockade.
- Disruption of essential services, caused by damage to electrical generating plants and transmission and distribution networks.
- Damage to the food distribution network and to food stocks held by OFFP.
- Damage to the water and sanitation systems resulting from damage to electricity. This will limit the availability of potable water and increase the risk of waterborne disease.
- General government incapacitation, damage to ministries, and loss of staff.

If military intervention proceeds from North and South then these areas would be immediately affected. Local facilities could provide services for a short period of time, but will be unable to replenish stocks. At the current rate of consumption, supplies of vaccines and medicine are sufficient for four months only. “UNICEF expects shortage of essential drugs, especially antibiotics, to occur within one month of the onset of crisis.”

III. HUMANITARIAN PREPAREDNESS AND RESPONSE

At the first indication of hostilities, all United Nations internationally-recruited staff are to be evacuated to Cyprus, which will become the hub for future operations. National staff in the North, Center and South may be able to conduct certain relief operations. The United Nations assumes that it will have access to the following regions after a conflict:

- Southern Iraq (including Basrah, Muthana, Kerbala, Najaf, Qadisiyah, Thi Qar, and Maysan) approximately 30 days after conflict begins.
- Central Iraq (including Ninewa, Tameem, Salahudeen, Al-Anbar, Babil, Wasit, and Diyala) approximately one to three months after conflict begins.
- Baghdad Governorate and city three or more months after conflict begins.

Goods Already in the OFFP Pipeline

\$2.5 billion of food supplies and \$450 million of health supplies are already in the OFFP pipeline. The UN Security Council will have to pass a new resolution to allow delivery of these goods under amended rules.

Internal Distribution of Existing Stocks

The North will be immediately cut off because it is supplied from Mosul and Kirkuk. In the South, a military attack would result in a more or less immediate breakdown. In Central areas, an aerial bombardment would instantly disrupt distribution.

Population Movement and Refugees

UNHCR estimates up to 1.45 million refugees and has established a preparedness target for 600,000 persons subject to availability of resources.

The United Nations assumes that most people will remain in their homes, but expects a medium- to large-scale movement into rural and areas bordering Turkey and Iran. This will result in an increase in the number of civilian casualties “due to the presence of landmines

on the border with Iran and in some areas around the dividing line.” There is currently no mine awareness education in the South and Center of Iraq. The urban population, according to the United Nations, is unprepared to handle the dangers of mines and unexploded ordnance in rural areas.

Food Insecurity

WFP estimates that 10 million people—or 40% of the population in the Center/South and 34% in the North—will be highly food insecure. WFP can initially respond to 4.9 million, including 300,000 refugees. This is to be

Anticipated Refugees

IRAN allow refugees to cross border, but establish camps close to border (258-900k)

TURKEY no border crossing, camps inside Iraq (136-270k)

JORDAN official position remains no refugees, but some degree of flexibility (34-50k)

SYRIA permitted to cross border (20-60k)

SAUDI ARABIA no border crossing (18-20k)

KUWAIT permitted to cross border (34-50k)

“determined by the level of access, available resources and operational capacity.” UNICEF is also planning to assist 910,000 severely and moderately malnourished children and 700,000 pregnant and lactating women. It is also planning to provide health support to up to 4.7 million people.

Estimated Casualties

The World Health Organization is estimating 500,000 casualties distributed in the following manner:

South – 100,000

Center – 200,000

Baghdad and surrounding area – 200,000

U.N. Response

U.N. agencies are facing severe funding constraints that are preventing them from reaching even minimum levels of preparedness. “The current response capacity of the U.N. system remains well below the critical requirement established through the inter-agency planning process.”

BIBLIOGRAPHY

- Ascherio, A., Chase, R., Cote, T. et al., "Effect of the Gulf War on Infant and Child Mortality in Iraq," *New England Journal of Medicine*, 327: 931-36 (1992)
- Caritas Internationalist "On the Brink of War: A Recipe for a Humanitarian Disaster, Report from the Caritas Internationalist Visit to Iraq," (October 31, 2002).
- Carnegie Endowment for Peace "A Brief History of Iraq's Nuclear Weapon Program - Part I, II, and III," (August-September 2002).
- CASI, "Sanctions on Iraq, Background, Consequences, Strategy, Proceeding of the Conference Hosted By CASI, November 13-14, 1999".
- Dreze, J. and Gazdar. H., "Hunger and Poverty in Iraq," *World Development*, 20 (7) pp. 921-945 (1991).
- Epstein, Susan, "Iraq's Food and Agricultural Situation During the Embargo and the War," 91-199 Cong. Res. Serv. Rep. (February 26, 1991).
- FAO "Agriculture in Iraq: Briefing Notes," (May 2002).
- FAO, "Report of Crop, Food Supply and Nutritional Status: Assessment Mission to Iraq," TCP/IRQ/4552 (July – September 1995).
- FAO, "Evaluation of the Crop, Food Supply and Nutritional Status: Assessment Mission to Iraq," TCP/IRQ/6713 (August, 1997).
- FAO, "Assessment of the Food and Nutrition Situation: Iraq," TCP/IRQ/8924 (2000).
- Garfield, Richard. "Morbidity and Mortality among Iraqi Children from 1990 Through 1998: Assessing the Impact of the Gulf War and Economic Sanctions," (July 1999).
- Garfield, Richard & Peter Pellet (October 6, 2002) "Potential Humanitarian Impact of War with Iraq," DRAFT for the *Lancet*, (October 6, 2002).
- Gazdar, Haris, "Pre-Modern, Modern and Postmodern Famine in Iraq," *Institute of Development Studies Bulletin*, (October 2002).
- Gordon, Joy. "Cool War," *Harper's Magazine*. (November 2002)
- Government of Iraq/Ministry of Health and UNICEF/Iraq, "Nutritional Survey of Children Under Two Attending Routine Immunization Sessions at Primary Health Centers in Iraq," (November 1999).
- Government of Iraq/Ministry of Health and UNICEF/Iraq, "Programme Review 1990-2000, Sector Review Report: Water and Environmental Sanitation," (2000).
- Harvard Study Team, "Special Report, The Effect of the Gulf Crisis on the Children of Iraq," *New England Journal of Medicine*, 325: 977-980 (1991).
- Human Rights Watch, "Needless Deaths in the Gulf War," *Middle East Watch*, New York, (1991).
- ICRC, "Activities on Behalf of Iraqi Civilians" (1999-2000).
- Indyk, Martin and Pollack, Kenneth, "Lesson from a Future War with Iraq" Iraq Memo #4, Brookings Institution, (November 4, 2002).
- International Crisis Group "Iraq Background: What Lies Beneath," ICG, (October 1, 2002).
- International Study Team, "Health and Welfare in Iraq After the Gulf Crisis: An In-Depth Assessment." International Study Team, Boston (1991). [<http://www.cesr.org/iraq/docs/ist1991report.pdf>]
- Kaysen, C., Miller, S., Malin M., Nordhaus, W., Steinbruner J., "War with Iraq: Cost, Consequences, and Alternatives," *American Academy of Arts and Sciences*, (2002).
- MEDACT (2002) "Collateral Damage and Environmental Costs of War in Iraq" (2002).
- Middle East Reports, "Why Another War?," (October 2002).
- Office of the High Commissioner for Human Rights for the meeting of the Executive Committee on Humanitarian Affairs, "The Human Rights Impact of Economic Sanctions on Iraq," (September 5, 2002).
- O'Hanlon, Michael, "Overthrowing Saddam: Calculating the Costs and Casualties" Iraq Memo #1, Brookings Institution, (October 9, 2002).
- Oxfam Water Assessment (Sherlock), (October, 2002).
- Oxfam Borders Assessment, (December 11-17, 2002).
- Public Interest Lawyers (CND), "Proposed Use of Force against Iraq – Issues of International Humanitarian Law and 'War Crimes,'" (January 2, 2003).
- Resource Center, "Health Conditions of the Population in Iraq since the Gulf Crisis," (March 1996).
- Rogers, Peter, "Iraq: Consequences," Oxford Research Group, (October 2002).
- Save the Children UK, "The Humanitarian Implications of Military Action Against Iraq," (April 9, 2002).
- Smith, M.C. and Zaidi, S. "Nutritional status of children in Iraq after the Gulf War," 51(3) *Nutritional Reviews* 74 (March 1993).
- Swann, David and Amir, Khadir, "Dying for Peace in Iraq – Disaster Preparedness on the Brink of War," (December 17, 2002).
- The Economist, "Economist Intelligence Unit – Iraq," (1996).
- United Nations, "Report on Humanitarian Needs in Iraq in the Immediate Post-Crisis Environment by a Mission to the Area led by the Under-Secretary-General for Administration and Management," (Ahtisaari Report) (March 10-17, 1991) S/22366 (March 20, 1991).
- United Nations, Untitled -- Emergency Preparedness Report, (undated).
- United Nations Office for the Coordination of Humanitarian Affairs, "Integrated Humanitarian Contingency Plan for Iraq and Neighboring Countries," (January 7, 2003).
- United Nations Office for the Coordination of Humanitarian Affairs, "EPCS - Portrait of Iraq," (strictly confidential), (January 7, 2003).
- United Nations Office of the Iraq Program, "Oil-for-Food Programme: In Brief," (January 2003).
- United Nations, "Portrait of the Current Socio-Economic Developmental Situation and Implications in Iraq Based on Specified Scenarios," (January 20, 2003).
- United Nations, "Versoix II," Draft, Ramada Park Hotel, Geneva, (January 12-13, 2003).
- United Nations, "Likely Humanitarian Scenarios," (strictly confidential), (December 10, 2002).
- United Nations, "Report of the Second Panel Established Pursuant to the Note by the President of the Security Council of 30 January 1999, concerning the Current Humanitarian Situation in Iraq," (March 30, 1999).
- United States of America Defense Intelligence Agency, "Iraq Water Treatment Vulnerabilities," (January 1991).
- UNAIDS/UNICEF/WHO, Epidemiological Fact Sheets on HIV/AIDS and Sexually Transmitted Infections – Iraq, 2002 Update.
- UNDP/UNDESA & UNOHCI, "Electricity Sectoral Working Group Sectoral Briefing to the Diplomatic Community, Status of Electricity Sector," (January 12, 2003).
- UNDP, Country Brief for Iraq, (August 2002).
- UNDP, "Living Conditions in Iraq," (September 2002).
- UNDP, "Sectoral Briefing Paper: Status of Electrical Sector," (January 12, 2003).
- UNDP, Human Development Report, (July 2002).
- UNICEF, "UNICEF Humanitarian Action: Iraq Donor Update," (January 14, 2003).
- UNICEF, "Household Food Security in Iraq: Some Food for Thought" (undated), posted on CASI website.
- UNICEF IRAQ, "Working with Children to Build a Better Future," Baghdad, (2002).
- UNICEF, "Nutritional Survey 2002, Overview of Nutritional Status of Under-Fives in South/Centre Iraq," (February 2002).
- UNICEF, "The Situation of Children in Iraq," (February 2002).
- UNICEF, "Situation Analysis of Children and Women in Iraq," (1999).
- UNICEF, "Child and Maternal Mortality Survey: Preliminary Report, Iraq," (July 1999).
- United States Military, "Displaced Civilian (DC) Camp Operations," (November 11, 2002).
- US Department of State, "Background Note: Iraq," (December 2001).
- WHO Iraq, "Communicable Disease Profile in Iraq – Draft for Comments," (2003).
- WHO, "The Health Conditions of the Population in Iraq Since the Gulf Crisis," (March 1996).

RESEARCH TEAM BIOGRAPHIES

MISSION STEERING COUNCIL

Roger Normand (Coordinator) is co-founder and Executive Director of the Center for Economic and Social Rights (CESR), where he oversees policy, program and outreach, and directs projects in the Middle East and Central Asia. In recent years he has led human rights fact-finding missions to Iraq, Israel and Palestine, and Afghanistan. He is also an adjunct professor at the Columbia School of International and Public Affairs. In 1991, he helped organize the International Study Team missions to Iraq, the first independent investigation of the impact of war and sanctions on Iraq's civilian population.

Hans von Sponeck is a 36-year veteran of the United Nations and former Assistant Secretary General. He joined the UN Development Program in 1968, and worked in Ghana, Turkey, Botswana, Pakistan and India, before becoming Director of European Affairs. He was appointed the UN Humanitarian Coordinator for Iraq in October 1998, overseeing roughly 500 international staff, as well as 1,000 Iraqi workers. His responsibilities included directing all UN operations in country, managing the distribution of goods under the "Oil-for-Food" program, and verifying Iraqi compliance with that program. Mr. von Sponeck resigned this position in February 2000 to protest of current international policy toward Iraq, including sanctions. Since that time he has made numerous visits around the world, especially in Europe, to brief governments and parliaments about resolving the Iraq crisis.

RESEARCH TEAM

Elisabeth Ryden Benjamin, a public health lawyer, is founder and Supervising Attorney of the New York Legal Aid Society's Health Law Unit. She has conducted health and human rights assessments to Iraq for the Harvard Study Team, International Study Team, and the International Human Rights Law Group. She is Vice-President of the Board of Directors of the Center for Economic and Social Rights.

Charles Clements, a public health physician, is CEO and President of WaterWorks, an American NGO that assists communities to resolve problems with potable water and sanitation in Mexico and the U.S. He has extensive experience dealing with conflict and humanitarian issues and is former President of Physicians for Human Rights (PHR) and prior to that was Director of Human Rights Education of the Unitarian Universalist Service Committee (UUSC).

Michael McCally, a public health physician, is Professor in the Department of Public Health and Preventive Medicine at the Oregon Health and Sciences University, Portland, Oregon where he is director of the Center on Environmental Health Policy. Dr. McCally is President-elect of Physicians for Social Responsibility and was Treasurer of International Physicians for the Prevention of Nuclear War when it won the Nobel Peace Prize in 1985.

Peter Pellett is an Emeritus Professor of Nutrition at University of Massachusetts in Amherst. He has conducted numerous health assessments throughout the Middle East, and was team leader of three FAO missions to Iraq. He has also done research in Iraq on behalf of WHO and UNICEF.

Michael VanRooyen, is Associate Professor and Vice Chairman of Department of the Emergency Medicine and Director of the Center for International Emergency, Disaster & Refugee Studies at Johns Hopkins University. He has worked extensively in disaster relief and humanitarian assistance in over thirty countries, including recent crises in Bosnia, Sudan, Rwanda, Somalia, Congo, and Honduras.

Ronald Jay Waldman is a Professor of Clinical Public Health at the Mailman School of Public Health of Columbia University. He has extensive experience working in complex emergencies in Somalia, Rwanda, Bosnia, Albania, Congo, and Afghanistan. Dr. Waldman is the immediate past Chairman of the International Health Section of the American Public Health Association.

LOGISTICS TEAM

Ramzi Raymond Kysia is a peace activist and writer whose essays have appeared in numerous publications, including the Houston Chronicle, San Diego Union-Tribune, and Counterpunch Magazine. Ramzi has worked in Iraq for six months with EPIC, Voices in the Wilderness and the National Network to End the War against Iraq.

Sarah Leah Sally Whitson is a corporate lawyer and chair of the Government Affairs Committee of the New York Arab-American Anti-Discrimination Committee. She participated in the Harvard Study Team and International Study Team assessment missions to Iraq.

RESEARCH SUPPORT TEAM IN NEW YORK

Hadi Ghaemi is a researcher, documentary filmmaker and a former Professor of Physics at City University of New York. He has worked as a consultant with CESR and was a member of the fact finding mission to Afghanistan.

Sarah Zaidi, PhD in Population and International Health, is co-founder and director of CESR. She has designed and participated in assessment missions to Afghanistan, Ecuador, the US-Mexico border, Haiti, and has participated in six assessment missions to Iraq.

LOGISTICS SUPPORT TEAM IN NEW YORK

Ayliz Baskin is a Turkish human rights activist. Prior to joining CESR, she was consulting with the Center for Sustainable Human Rights Action. She designed and implemented the Turkey program at Lawyers Committee for Human Rights and worked for the United Nations Development Program. She is interested in the Kurdish question and protection of human rights defenders.

Jacob Park is Outreach Coordinator for the Rights in Conflict Program of the Center for Economic and Social Rights. Previously, he worked for the Middle East and North Africa Program of the Lawyers Committee for Human Rights.

PHOTOGRAPHERS

Terry Allen is a journalist whose articles and photography have been published by the Boston Globe, The Nation, Salon.com, New Scientist, and In These Times. She is currently editor of Amnesty Now, which reaches 300,000 Americans and features some of the world's best reporters and photographers.

Jason Rodger Florio is a New York-based photographer working with Sigma Agency. His work focuses on capturing the humanity of people in war, including most recently Afghanistan. His work has been widely published in the US and Europe.

Robert Jean Huber is a New York-based photographer working with Lookat Agency since 1996. His social-documentary medium and large format color work focuses on aspects of leisure culture and group behavior. He has recently been focusing on the rise of Christian groups in the USA. His work has been widely published in the US and in Europe.

