



# Food, Culture & Society

An International Journal of Multidisciplinary Research

ISSN: 1552-8014 (Print) 1751-7443 (Online) Journal homepage: <https://www.tandfonline.com/loi/rffc20>

## Food Security and Food Sovereignty in Iraq

The Impact of War and Sanctions on the Civilian Population

Mustafa Koc, Carey Jernigan & Rupen Das

To cite this article: Mustafa Koc, Carey Jernigan & Rupen Das (2007) Food Security and Food Sovereignty in Iraq, *Food, Culture & Society*, 10:2, 317-348, DOI: [10.2752/155280107X211467](https://doi.org/10.2752/155280107X211467)

To link to this article: <https://doi.org/10.2752/155280107X211467>



Published online: 29 Apr 2015.



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Mustafa **Koc**

Ryerson University

Rupen **Das**

Humber College

Carey **Jernigan**

Ryerson University

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# Food Security and Food Sovereignty in Iraq .

THE IMPACT OF WAR AND SANCTIONS ON  
THE CIVILIAN POPULATION

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## ABSTRACT

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This paper examines the impact of war and sanctions on food security in Iraq from 1990 to 2006. Iraq provides an important example of a country that went through an almost complete “exclusion” from the global economy under sanctions (in 1990–2003) and is now undergoing coercive “integration” into the global economy by force, a process that began with the US-led invasion in 2003. It is argued here that both war and sanctions have negative impacts on food security and have contributed to a dramatic decline in the nutritional and health status of vulnerable segments of the Iraqi population. While sanctions (exclusion) were intended to marginalize the Iraqi regime and weaken its political support, they instead increased civilians’ dependence on the state and impeded recovery from the 1990–91 Gulf War. The 2003 invasion (coercive inclusion) also worsened living conditions. This paper demonstrates that the total collapse of a state can create major political turmoil and lead to increasing violence, in turn triggering a decline in food security and allowing major changes in food sovereignty that may continue to shape Iraq for years to come.

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## Introduction

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### MEMBERSHIP STATUS AND THE GLOBAL ECONOMY

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The last quarter of the twentieth century was marked by two major developments, both of which had major consequences for the international political order. The first was the global economic crisis in the mid-1970s; the second was the collapse of state-socialist regimes in the Soviet Union and its satellites. Although not directly related, these developments both had significant impacts on national and regional development strategies, the global economy and political order (Amin 2006; Therborn 2006).

The crisis in the mid-1970s resulted in a significant increase in third-world debt and raised questions about the effectiveness of Fordist accumulation strategies and the welfare state model in advanced industrial countries. These pressures inspired strategies aiming to restructure financial and industrial capital and to intensify global economic relations. Justified through a hegemonic, neoliberal discourse, subsequent changes led to an increasing gap between rich and poor both on a social (class) and spatial (regional) scale. The situation intensified after the end of the Cold War (in the late 1980s) with integration of post-Soviet satellites into the global economy, further changes in global development and geopolitical priorities, and new patterns of movement of capital across the globe.

Far from being universally integrative, the new global movement of capital has been selective, ignoring large territories, ethnic communities, nations, cities and neighborhoods (Conway and Heynen 2006; Ghosh and Guven

2006; Kennedy and Danks 2001; Perrons 2004). The resulting networks include islands of integrated communities and large peripheries of marginality. These peripheries are no longer necessarily formed along the north–south axis, but also at the community level (spatial as well as social) around the globe (Frieden 2006; Geyer 2006).

Within the neoconservative discourse that emerged as a justification for the new global order, defining otherness and boundaries of “membership” appears as important as defining universal freedoms for capital. Conditions of integration and exclusion in the global economy, foreign aid, free trade partnerships, preferential status with international agencies and financial organizations, and investment possibilities all seem tied to the politics of membership. Nations, ethnic and regional minorities within nations, and even cities compete for global membership status.

Being the “other” comes with its costs, and one of the harshest penalties in the current system is exclusion from the global economy. International sanctions (which had only partial effect during the Cold War because of an inability to secure global compliance) have become a formidable arsenal in the post-Cold War era. Accordingly, there has been a dramatic increase in the use of economic sanctions to put pressure on uncooperative states such as Yugoslavia, Iraq and Afghanistan. Despite humanitarian and ethical concerns (Brzoska 2003; Colonosmos 2004; Drezner 2003; Gordon 1999; Heine-Ellison 2001; Marks 1999; Miles and Morin 2000; Sidel 1999; Weiss *et al.* 1997), sanctions are used to exclude states from the global economy and ensure the submission of rebel regimes (Cortright and Lopez 2000) as a less costly alternative to war (Davidsson 2004; Elliott 1998; Hawkins and Lloyd 2003; Welch 2002). In addition, in Yugoslavia and Iraq, sanctions have been used to weaken the target regimes’ resistance to military intervention. Exclusion through sanctions was followed by “coercive integration” through conquest.

This paper examines the human toll of geopolitical strategies involving sanctions and war, looking specifically at food security and food sovereignty in Iraq. Iraq went through a period of exclusion from the global market while under sanctions from 1990 to 2003, and then underwent coercive inclusion by force after the 2003 invasion. It is argued here that both sanctions and war have had negative impacts on food security and so contributed to a decline in the nutritional and health status of vulnerable segments of the Iraqi population. While sanctions (exclusion) were intended to marginalize the Iraqi regime and weaken its political support, they instead increased Iraqis’ dependence on the state and prolonged their agony (Alnasrawi 2001; Goss 2002; Harding 2004; Rawaf 2005). The occupation (coercive inclusion) in 2003, on the other hand, demonstrates that the total collapse of a nation-state in war can lead to major political turmoil and increasing violence, triggering a further decline in food security and allowing for major changes in food sovereignty that may continue to affect the country for years to come.

## CIVILIAN CASUALTIES OF SANCTIONS AND WAR

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The twentieth century was possibly the most murderous in recorded history. The total number of deaths caused either directly or indirectly by wars is estimated at 187 million (Hobsbawm 1995). Most observers agree that the majority of those killed were noncombatants and that more civilians died in twentieth-century wars than ever before (Downes 2003; Leitenberg 2001). Setting aside nuclear weapons (which have had limited battlefield use), cluster bombs, napalm, cruise missiles, depleted uranium shells, landmines and modern aviation technology made modern arsenals deadlier than ever. This weaponry has had a deadly impact in Iraq and elsewhere, not only on those directly targeted, but also on civilians far removed from the battlefields (Medact 2003). Military conflict thus creates both indirect and long-term casualties, and often kills more people by destroying their livelihoods, hopes, and means of survival than it does through direct violence (CDC 2003; Mason and Ogden 2001; Medact 2002; Messer 1990; Messer and Cohen 2001). Kiros and Hogan (2001) consider civilian-targeted warfare and famine to be the biggest public health threats of our time.

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## FOOD SECURITY AND FOOD SOVEREIGNTY

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In the post-Second World War era, food security has emerged both as a social objective and an analytical category to define a “condition in which all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life” (FAO 2006). While definitions of food security differ enormously (Koc and MacRae 2001; Leidenfrost 1993; Welsh and MacRae 1998), it is common to see reference to the “four As”: *availability* (sufficient supplies of food for all people at all times), *accessibility* (physical and economic access to food for all, at all times), *adequacy* (access to food that is nutritious and safe and produced in environmentally sustainable ways), and *acceptability* (access to culturally acceptable food which is produced and obtained in ways that do not compromise people’s dignity, self-respect or human rights) (Beaudry *et al.* 2004; CSFS 2006; Kalina 2001; Koc 2004). Ryerson’s Centre for Studies in Food Security emphasizes the need to add a fifth “A”—*agency*—focusing on program and policy development and implementation, and identifying the roles and responsibilities of, as well as cooperation and conflict among, various social actors as they influence food security (CSFS 2006).

At the World Food Summit 1996, food sovereignty was introduced as a complementary concept broadening the definition of food security to include:

the right of peoples to define their own food and agriculture; to

protect and regulate domestic agricultural production and trade in order to achieve sustainable development objectives; to determine the extent to which they want to be self reliant; to restrict the dumping of products in their markets; and to provide local fisheries-based communities the priority in managing the use of and the rights to aquatic resources. (People's Food Sovereignty Network 2001)

Signatories of the People's Food Sovereignty declaration demand that "governments must uphold the rights of all peoples to food sovereignty and security, and adopt and implement policies that promote sustainable, family-based production rather than industry-led, high-input and export oriented production" (People's Food Sovereignty Network 2001). Food sovereignty may include a broad range of conditions such as ensuring adequate remunerative prices for all farmers and fishers; developing local food economies based on local production and processing, and the development of local food outlets; banning the production of, and trade in, genetically modified seeds; and restricting trade liberalization and dumping practices to ensure the primacy of local and national developmental, social, environmental and cultural goals over global trade. In short, food sovereignty describes people's ability to control their own food systems and policy, and so is a key factor affecting food security.

#### FOOD SECURITY, SANCTIONS AND WAR

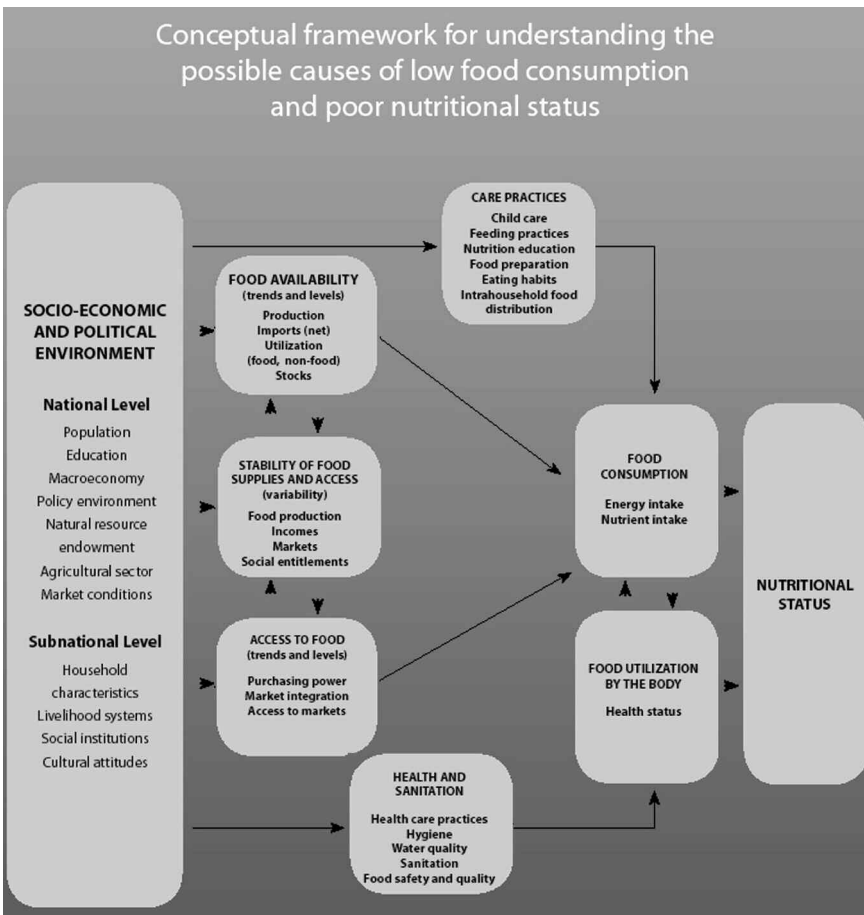
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Both sanctions and war influence the conditions for food security, limiting the availability of food or preventing civilians from acquiring related essentials such as farm implements, fertilizers, transportation equipment, spare parts, pharmaceuticals, or chemicals for sanitation, such as chlorine (Arya and Zurbrigg 2003; CASI 2004; Coti and Wipff 2001; Dreze and Gazdar 1991; Popal 2000). While some of these effects may be downplayed as "collateral damage," access to food, water and other services has been used indiscriminately throughout human history to weaken enemies physically and psychologically. Strategic targets include roads, ports, power plants, transformer stations, hospitals, factories, warehouses, and water and sanitation plants. The destruction of essential infrastructure affects people's ability to access, process, distribute and utilize food. For example, where sewage treatment plants have fallen into disrepair or been destroyed, discharge of untreated sewage into waterways can lead to a high incidence of diarrhea. This in turn limits people's ability to absorb nutrients from the food they eat (WFP Iraq Country Office and COSIT 2006). A collapse in the education system, on the other hand, can worsen unemployment for years to come, in turn having an impact on access to adequate food. Other factors influencing food security (ranging

from the state of healthcare to individual eating habits) and potential interactions are illustrated in Figure 1.

Food sovereignty, on the other hand, is affected where nations are either rendered too poor or stripped of the political power to control their own food systems and policies. International interests may take over.

Whether due to war or sanctions, the fallout of large-scale conflicts between nations is extremely costly. Involved governments often divert funds from social programs to support the ongoing war effort or to compensate for the loss of international trade. This leaves humanitarian programs with almost no support to relieve hunger where it is most desperately needed. Limited funding, a lack of professional and technical human resources, international political tensions, and increasing global demand for assistance also make it difficult for the United Nations and other international relief agencies to respond to emergencies in a timely and effective fashion. Citing the



**FIGURE 1:** Factors influencing food security in Iraq.  
Source: WFP Iraq Country Office and COSIT (2006: 10).

continuing conflict in Darfur, Hurricanes Katrina and Stan, and the tragic earthquake in Kashmir, for example, James Morris, Executive Director of the UN World Food Programme (WFP), complained that WFP operations were dangerously under-funded. By early 2006, the WFP's appeal for \$100 million to provide air support for UN relief operations in Pakistan was less than half funded, while its operation to feed some 10 million people in southern Africa was more than \$100 million short of the \$317 million needed by April 2006 (*Europaworld* 2006). Military spending, on the other hand, continues to expand.<sup>1</sup>

Of the many difficulties facing civilian populations within war-torn countries, famine is a serious but selective force. Privileged social classes and members of favored political parties or other groups are often able to cope more effectively than the poor and vulnerable. Regions with strong agricultural economies or more effective social services and infrastructure may also fare better. In other cases, local opponents of ruling regimes suffer most of the burden (Domestici-Met 2001; Moszynski 2004; Sen 1992; UNICEF 2003a,b 2005), such that hunger and starvation become a form of collective punishment for those out of favor (Downes 2003; Medact 2002; Messer 1990). Unequal distribution of food may also occur at the household level, where traditional entitlement practices dictate that the breadwinner be fed first, so that women and children get less of whatever is available (Bellows 2003; IST 1992, 2003; Sen 1995; WFP Iraq Country Office 2004).

Sometimes artificial famine conditions are directly caused by the blockage of food aid, burning of agricultural fields, or discrimination in the distribution of food, for example. Other times the impact is indirect, like when the weakening or total collapse of a government in conflict results in a decline in social service delivery and the maintenance of law and order. Because the authority of the state is often weakest in war-affected rural areas, panic-stricken populations may migrate or flee to the already over-crowded and under-resourced cities (Lefort 2001; Messer 1998; Sánchez-Montero 2001; Vidal 2001; WFP Iraq Country Office 2004). This worsens the food security situation in two ways. First, food availability decreases nationally with the loss of the agricultural workforce (which may also be depleted by the military draft, landmines or other violence). Second, food accessibility decreases through overcrowding in urban areas, where growing poverty exacerbates the situation. A similar rural-urban migration may occur under sanctions, when a lack of farm or food processing and distribution equipment makes agriculture no longer profitable.

A vacuum created by the collapse of government together with weak or speculative markets may be filled by warlords, racketeers or criminal elements, making economic recovery unlikely. In some cases, rationing as a means to ensure access to food becomes one of the last tools of legitimacy of a failing state structure.



Even when a new political order is established and war or sanctions have come to an end, recovery may be slow. Destruction of infrastructure and economic collapse ruin households' coping capacity as citizens are forced to deplete savings or sell off family valuables to purchase food, medicine and other necessities.

In summary, both wars and sanctions can create shortages and threaten the food security of all or parts of a population, as experienced in Iraq.

In the 1980s, Iraq was an oil-rich Middle Eastern nation run by a single party state, benefiting from rising oil prices and Cold War superpower tensions. Despite a terribly costly war with Iran that lasted eight years, Iraq remained a middle-income nation until its 1990 occupation of Kuwait, which coincided with the end of the Cold War order and the beginning of the end of the Baath regime in Iraq (IST 2003).

In this paper, we look at the food security of Iraqis prior to and following the 2003 occupation. We argue that living conditions, already damaged by the first Gulf War and thirteen years of economic sanctions, worsened with the 2003 invasion and ongoing occupation. This impact was predicted in the International Study Team's 2003 report, presented to the UN Security Council just before coalition troops entered Iraq.

#### ABOUT THE DATA

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This paper reflects on the findings of two International Study Teams (ISTs), various Iraqi and international organizations, and UN agencies. The IST is a group of independent practitioners, researchers and academics who examine the humanitarian impact of military conflict on civilian populations. In 1991, they released a report based on more than nine thousand independently conducted household interviews on the humanitarian impact of the Gulf War on Iraqi children (IST 1991). This report has since been acknowledged as one of the most comprehensive studies of the impact of war on a civilian population in our time.

A second international study team went into prewar Iraq, January 19–26, 2003. Their objective was to describe the status and vulnerabilities of children in Iraq by examining the likely humanitarian impact of a military conflict on civilians. The team also assessed the level of in-country preparedness to meet possible humanitarian challenges resulting from a war. This second IST, in which Dr. Mustafa Koc and Rupen Das took part, consisted of ten specialists in the areas of public health and medical care, child psychology, emergency preparedness, food and nutritional security, international humanitarian law, child rights, and gender. Their report was called *Our Common Responsibility: The Impact of a New War on the Children of Iraq* (IST 2003).

Limited information is available on Iraq following the 2003 invasion. The country now joins Afghanistan, Somalia, the former Republic of Yugoslavia and North Korea in having insufficient data to be ranked on the United Nations Development Programme's Human Development Index (UNDP 2005). Data collection and reporting are hindered by the collapse of the Iraqi state structure, slow recovery of the new-state apparatus, the ongoing violence, and a lack of trained personnel and financial resources. To make matters worse, the offices of various national and international agencies were raided or destroyed after the invasion. Some UN agencies terminated or severely limited their operations (e.g. UNHCR 2003, 2006). Lastly, information that was collected was not always made publicly available by the occupying powers (Burnham *et al.* 2006).

Despite these difficulties, two key reports have been released by the World Food Programme (WFP Iraq Country Office 2004; WFP Iraq Country Office and COSIT 2006) in cooperation with various Iraqi government agencies. Both are based on household food security surveys. The former was conducted in the later part of 2003 and the latter in 2005. Both set out to assess the food security situation of the Iraqi people.

In addition to these and a handful of other reports, anecdotal evidence provides some insight into post-occupation Iraq as experienced by individual observers. One such example is this statement by Dr. Haydar Salah, a pediatrician at the Basra Children's Hospital: "The mortality of children in Basra has increased by nearly 30 percent compared to the Saddam Hussein era. Children are dying daily, and no one is doing anything to help them" (IRIN 2006).

### **Food in Iraq, 1980–2003: Exclusion from the Global Market**

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After three armed conflicts and thirteen years of sanctions, Iraq is far from experiencing any type of security, let alone food security. It therefore provides an important example of the interaction between food systems and broader social, economic, and political events. In this section we review the food security situation in Iraq from 1990 to 2003, as influenced by changes in the nation's economy, infrastructure, health system, agriculture and public distribution system, and as reflected in childhood malnutrition rates.

### **FALL FROM GRACE**

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Just prior to the 1990–1 Gulf War, the UN described Iraq as a high-middle-income country, with a modern social infrastructure. Although the Iran-Iraq war caused more than 100,000 deaths and significant economic damage, Iraq's

health, education and other social programs continued to advance throughout the 1980s. Nearly all urban dwellers and 72 percent of rural residents had access to clean water. Ninety-three percent of the population had access to health services, and Iraq's medical facilities and public health system were well developed. Life expectancy, at sixty-seven years, was at a level equivalent to Brazil.

Following Iraq's August 1990 invasion of Kuwait and the subsequent Gulf War, economic and human development took a dramatic downturn. Table 1 lists Human Development Index (HDI) values for Iraq and neighboring countries from 1970 to 1998. (The HDI is a comparative measure of human development incorporating data on life expectancy, literacy, education, GDP and purchasing power. Higher values indicate a higher quality of life.) Up until 1990, Iraq fared relatively well. Oil revenues had perhaps compensated for the negative economic impact of the Iraq-Iran war. After 1990, however, Iraq quickly fell behind Iran, Jordan and Turkey.

**TABLE 1.** *Human Development Index, 1970–98*

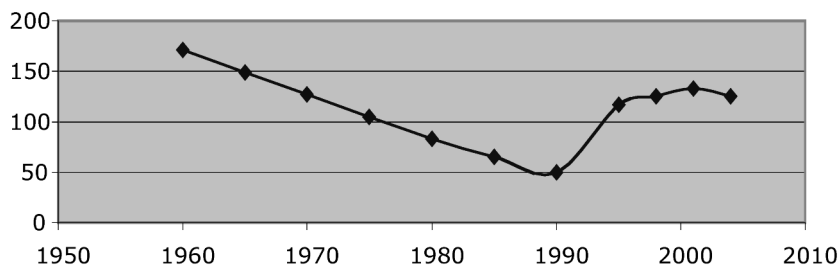
	<b>1970</b>	<b>1985</b>	<b>1990</b>	<b>1995</b>	<b>1998</b>
Iraq	0.489	0.661	0.759	0.538	0.583
Iran	0.464	0.695	0.66	0.758	0.709
Jordan	0.428	0.677	0.752	0.729	0.721
Turkey	0.492	0.712	0.751	0.782	0.732
Source	UNDP (1991)	UNDP (1991)	UNDP (1990)	UNDP (1998)	UNDP (2000)

A similar trend is evident in mortality rates of children under five years of age (deaths per thousand children per year). As illustrated in Table 2 and Figure 2, child mortality declined steadily throughout the region from 1960 to 1990. Rates remained low in Iran, Jordan and Turkey, but in Iraq, they increased dramatically after 1991, peaking in 2001 when the rate was more than three times greater than that of neighboring countries. Similarly, the infant mortality rate in 1990 was forty in Iraq and thirty-three in Jordan (UNICEF 2005). But by 1998, infant mortality had increased dramatically to 103 in Iraq while falling to thirty in Jordan (UNICEF 2000).

What caused this dramatic change in the wellbeing of Iraqis, and why has this dismal state of affairs persisted?

**TABLE 2. Mortality Rates of Children under Five Years of Age (Deaths per Thousand Children per Year), 1960–2004**

	1960	1990	1994	1996	1998	2001	2002	2003	2004
Iraq	171	50	71	122	125	133	125	125	125
Iran	233	72	51	37	33	42	42	39	38
Jordan	139	40	25	25	36	33	33	28	27
Turkey	219	82	55	47	42	43	42	39	32
Source	UNICEF (1998)	UNICEF (2005)	UNICEF (1996)	UNICEF (1998)	UNICEF (2000)	UNICEF (2002c)	UNICEF (2003b)	UNICEF (2004)	UNICEF (2005)



**FIGURE 2: Mortality rates of children under five years of age in Iraq, 1960–2004.**  
Source: UNICEF (1998, 1999, 2002c, 2005).

#### THE GULF WAR (1990–1)

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In August 1990, Iraq invaded neighboring Kuwait. The UN responded immediately by imposing economic sanctions. Then in January 1991, a US-led coalition liberated Kuwait and invaded Iraq, quickly defeating the Iraqi forces. The impact on Iraqi civilians was devastating. Khan (1991, as quoted in IST 1991: 2) writes: “a country on the verge of joining the ranks of developed industrial states was temporarily plunged into a pre-industrial era” (Khan 1991 in IST 1991: 2). Over a period of six weeks, coalition forces dropped more than 90,000 tons of explosives on Iraq. Around 50–70 percent of the bombs that were dropped missed their intended targets (IST 2003: 2). Civilian deaths during the Gulf War, the subsequent civil uprisings, and the Kurdish refugee crisis were estimated at between 40,000 and 80,000. The infant mortality rate increased 350 percent and more than 50,000 children died in 1991 alone. As many as 100,000 Iraqi soldiers were also killed (Arya and Zurbrigg 2003; IST 1991, 2003).

#### SANCTIONS

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Recovery from the 1990–1 conflict was not the only hurdle faced by the Iraqi people in the 1990s. The sanctions regime that had been imposed by

the UN in August 1990 (Security Council Resolution 661) was unprecedented in modern history. It continued for thirteen years until May 2003. During this time, Iraq experienced a deliberate de-development (Cortright and Lopez 2000; Drèze and Gazdar 1992; de Santisteban 2005). From 1990 to 1996, all imports and exports to Iraq were banned. Later, after the Oil for Food Programme (OFFP) was established in 1996, enough oil exports were allowed for the purchase of food and emergency supplies. Although some improvement occurred, the OFFP was problematic and was largely unable to ease the humanitarian crisis. Those who were working in Iraq at the time were all too aware of the negative impact that exclusion from the global economy was having on Iraqi civilians. Dennis Halliday (former UN Humanitarian Coordinator in Iraq), Hans von Sponeck (who served in Iraq as Assistant UN Secretary General), and Jutta Burghardt (Head of the World Food Programme in Iraq) all resigned in protest, claiming that the impact of the sanctions regime on the people of Iraq was intolerable (von Sponeck 2006). In the following sections we discuss the impact of the Gulf War and sanctions regime on selected aspects of Iraqi society.

#### **ECONOMY**

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From 1990, Iraq's economy was crushed. One Iraqi dinar bought US\$3 in 1989; by 2003, it had fallen to 1/6,000th of its prewar value (so that 2,220 Iraqi dinars bought only US\$1). Salaries did not keep up with inflation. In 2002, public servants only made between US\$3 and US\$6 per month. UNICEF estimated that 50 percent of Iraqi families were then living below the poverty line and working multiple jobs to make ends meet (IST 2003). Damaged infrastructure and lack of materials to repair broken machinery made economic recovery impossible.

#### **INFRASTRUCTURE**

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The war had resulted in a complete breakdown of civilian infrastructure. Bomb damage reduced postwar electricity to just 4 percent and the water supply in Baghdad to just 5 percent of prewar levels (CASI 1991). Sewage systems were paralyzed, with raw sewage backing up into homes and hospitals. Raw sewage from most of Baghdad's then four million inhabitants was pumped untreated into the Tigris river, southern Iraq's main source of drinking water. Oil refineries, food storage facilities, industrial complexes, sewage pumping stations, telecommunications facilities, roads, railroads and dozens of bridges were also destroyed (IST 2003).

With railroads, roads and bridges out of commission, a breakdown in food distribution resulted in countrywide food shortages, widespread malnutrition and, in some areas, pre-famine conditions (IST 2003). Simultaneously, drastic reductions in electricity, water and sanitation led to outbreaks of infectious diseases including cholera, typhoid, gastroenteritis, malaria, meningitis and measles. Mortality increased dramatically.

#### HEALTH

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In 2002, eleven years after the 1990–1 Gulf War, the death rate of children under five in Iraq was 2.5 times greater than it had been in 1990. Poor water quality, sanitation and environmental conditions compounded by malnutrition were the most significant factors contributing to a high number of deaths (IST 2003). Diarrheal diseases and acute respiratory tract infections accounted for 70 percent of child mortality. Other major health problems that children faced were nutritional anemia, vitamin A deficiency, iodine deficiency, malaria, leishmaniasis (kala azar) and measles. Malnutrition among mothers had led to an increase in the number of low birth weight babies from 4.5 percent in 1990 to 23.8 percent in 1998. Surveys also indicated that night-blindness, rickets, goiters and the prevalence of anemia among pregnant women had increased. By 2002, however, the World Health Organization (WHO) reported a decrease in the number of reported cases of both cholera and typhoid, outbreaks of which had occurred following the breakdown in electricity, water and sanitation after the 1990–91 Gulf War (IST 2003). However, more improvement was needed, and widespread malnutrition meant that the resilience of many Iraqis to disease was increasingly impaired. What contributed to the lack of food and nutrients?

#### AGRICULTURE

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Historically, Iraq had a significant food deficit and relied on imports even before the wars. This is reflected in the nation's economy. In 1989, the oil sector comprised 61 percent of the gross domestic product (GDP), services came in second with 22 percent, while industry accounted for 12 and agriculture for only 5 percent (IST 2003). This reliance on oil revenues, together with geographic conditions and climatic fluctuations, set limits to national self-sufficiency in food production. Iraq had to import over 70 percent of the foodstuffs it consumed. Later, under sanctions, drought conditions and an inadequate supply of fertilizers, pesticides, food processing equipment, spare parts and essential agricultural equipment (not to mention restrictions on food imports) made matters worse. In 2000, Iraq's production/import balance showed a wide discrepancy between need and domestic supply for wheat

(0.91), vegetable oil (0.075), sugar and sweeteners (0.07), and rice (0.040) (FAOSTAT 2003) (Table 3). A shortage of imported feedstuff, overgrazing and inadequate veterinary services also resulted in a decrease in livestock production, and similar declines were observed in fisheries (IST 2003).

**TABLE 3. Food Dependency in Iraq, 2000**

<b>Commodities</b>	<b>Domestic Production (metric tons)</b>	<b>Imports (metric tons)</b>	<b>Import Dependency (Imports as a Percentage of Total Production)</b>
Wheat	300,000	3,312,978	91.7
Vegetable oil	22,326	297,231	93.0
Sugar	2,065	299,898	99.3
Rice	40,020	1,010,618	96.2
Infant formula	0	24,500	100

Source: FAOSTAT (2003).

Efforts had been made to boost domestic agriculture, and in December 2002, Iraq finished construction of a fertilizer plant. It was hoped that a major part of the country's fertilizer needs could now be met (IST 2003). Regardless, Iraqi food production under sanctions was far from meeting national demand. Iraq's public distribution system therefore played an important (if inadequate) role in providing food for the population.

#### **PUBLIC DISTRIBUTION SYSTEM**

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Food support programs in Iraq began on a modest scale in the mid-1980s, offering food to approximately 1,000,000 civil servants at subsidized prices. Immediately following the imposition of the UN embargo in August 1990, a food rationing system was introduced for all Iraqi residents. In its initial phase, the program offered essential staples, roughly 1,093 kcal/person/day (UNICEF 2002b).

But as the 1990s progressed, rations could not provide Iraqis with the food that they required. In response to the rapid deterioration of socioeconomic conditions, the Oil for Food Programme was established by the Security Council on April 14, 1995. Some 3.3 billion barrels of Iraqi oil valued at US\$61.7 billion per year were exported under the program from December 1996 until 2002. Of the profits, 72 percent was allocated for humanitarian needs such as water and sanitation, health services, education, power, telecommunications and housing construction. This cut amounted to roughly US\$185/person/year or 51 cents/person/day (von Sponeck 2006).

Funds allocated for food through the OFFP were used to procure food internationally. In fact, the Iraqi government was not allowed to procure

domestically grown food under the OFFP, even when there were bumper crops. This ultimately worsened its food dependence on imported supplies (IST 2003).

Food aid under the OFFP amounted to approximately 410,000 metric tons per month, of which 350,000 metric tons was distributed through 430,000 merchants as part of the Iraqi government's public distribution system (PDS) in south and central regions. The majority of these merchants were members of the Baath Party (CASI 2002). The remaining 60,000 metric tons per month was distributed by the WFP in the country's north (IST 2003).

Just prior to the 2003 invasion, 24 million Iraqis received monthly rations amounting to approximately 2,215 kcal/person of energy and 49.4 grams of protein/person/day. This is only a little higher than the 2,100 kcal recommended in the Sphere Standards as an absolute minimum. The ration was low in vegetable protein and contained no animal proteins. Families received the monthly ration by paying 250 Iraqi dinars, approximately equivalent to US\$0.125. Shortages were often a problem. According to a report released by the Food and Agriculture Organization of the United Nations (FAO) and the WFP (2003), in April 2000, monthly rations typically lasted for just twenty-one days and milk powder for twelve days. This meant that families had to buy additional food at market rates, estimated at 21,966 Iraqi dinars. As many households did not have additional income, families often resorted to selling part of their ration, other household items, or family heirlooms to purchase necessities such as meat, medicines and clothing. On average, 72 percent of household income was spent on food (IST 2003).

In anticipation of a military intervention in 2003, the Iraqi government began distributing two months' worth of rations at a time. However, the quantities of pulses, dried whole milk and vegetable oil declined due to low domestic stocks. At the time of the IST's assessment, stocks of vegetable oil were sufficient to last one and a half months, while stocks of pulses and dried whole milk were not enough to cover even a month's ration (IST 2003).

In summary, while the PDS and OFFP had certainly made a difference for Iraqis under sanctions, malnutrition rates remained high, particularly among those who could not afford to supplement rations by purchasing food at the market.

#### MALNUTRITION

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From the onset of Gulf War and the subsequent sanctions, Iraqis went hungry. Between 1991 and 1996, acute malnutrition (wasting) rates increased from 3 to 11 percent, the prevalence of underweight children rose from 9 to 23 percent, and chronic malnutrition (stunting) rates increased from 18 to 32 percent (WFP Iraq Country Office 2004). Once the OFFP was underway,

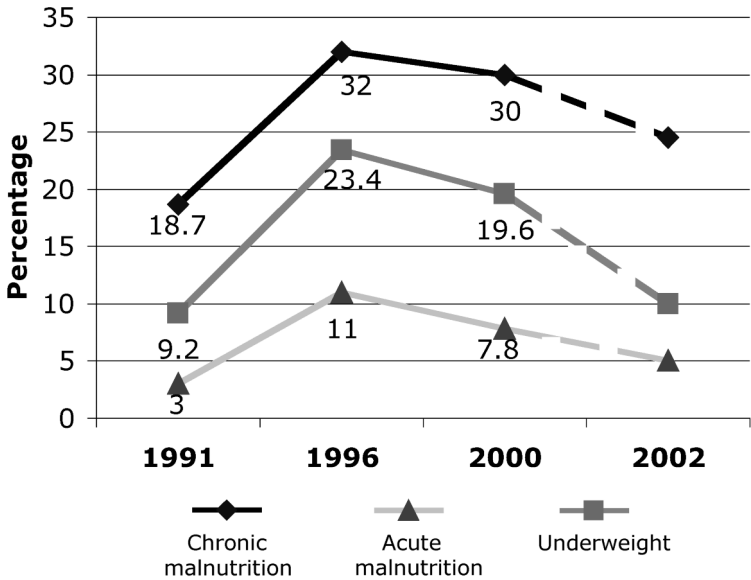


some improvements occurred. By 2002, malnutrition rates had declined to acute 4 percent, underweight 9 percent and chronic 23 percent. These trends are indicated in Table 4 and Figure 3.

**TABLE 4. Malnutrition of Iraqi Children in South/Central Iraq, 1991–2002**

Malnutrition	1991	1996	2000	2002
Acute	3	11	8	4
Underweight	9	23	20	9
Chronic	18	32	30	23

Source: UNICEF (2002a).



**FIGURE 3: Malnutrition of children in south/central Iraq (1991–2002).**  
Source: IST (2003: 12).

Alongside improved nutrition with the OFFP came a reduction in infant mortality rates. Previously, UNICEF had shown that figures rose from fifty per 1,000 live births in 1990 to 107 in 1999 (IST 2003). By the start of the 2003 war, however, infant mortality had fallen by just twenty-nine (Medact 2004). It is important to acknowledge, however, that the national average does not always reflect the situation of a society’s most vulnerable citizens.

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Throughout the 1990s, food insecurity and malnutrition (and programs to abate them) affected some segments of the Iraqi population more severely than others, and differently so with policy shifts over time. While children in south and central Iraq typically fared better than those in the north in 1984–9, the opposite was true in 1994–9. After the 1990–1 Gulf War, the mostly Kurdish-populated northern provinces were declared a no-fly zone for the Iraqi air force. Food rations for this area were managed by the WFP directly. The impact of this favorable status is evident in mortality rates of children under five, which declined by 10 percent in the north, while increasing by 134 percent in south and central regions (IST 2003; Table 5).

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**TABLE 5.** *Mortality Rates for Children under Five in North and South/Central Iraq, 1984–1999*

Region	Deaths/1,000 Live Births		
	1984–9	1994–9	Percentage Change
South/Central	56	131	+134
North	80	72	-10

*Source: IST (2003: 11).*

#### FOOD SECURITY AND FOOD SOVEREIGNTY IN IRAQ (1990–2003)

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In summary, the impact of the Gulf War and thirteen years of sanctions on Iraqi food security and food sovereignty was severe. The nation's economy, health system, infrastructure and domestic agriculture all suffered, and the trade embargo made repairs difficult. Although the PDS provided some nourishment, malnutrition rates remained high. Exclusion from the global economy also prevented Iraqis from purchasing food and related equipment as they saw fit (even under the OFFP) and as a result impinged on food sovereignty. In the end, just prior to the 2003 invasion, the United Nations Children's Fund (UNICEF) estimated that 18 million out of a population of 26 million Iraqis were food insecure (IST 2003). Such was the state of affairs when the second IST visited Iraq in January 2003.

#### 2003 International Study Team Predictions

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The 2003 IST assessment concluded that the children of Iraq had borne the brunt of the impact of degraded infrastructure under sanctions, as evidenced by high rates of malnutrition and disease. Although there had been some improvement with the OFFP, another war would further degrade the

wellbeing of the Iraqi people. A new war would significantly degrade whatever infrastructure had been rebuilt under sanctions, which would have ripple effects on water, sanitation, food distribution and health services. Additionally, the population on average had just enough food available to meet its immediate needs. In spite of the provision of extra rations, any break in the food pipeline would have a significant negative impact on the health of the Iraqi people (IST 2003).

### **Coercive Inclusion: The 2003 Invasion and Ongoing War**

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On March 20, 2003, a US-led coalition invaded Iraq in a pre-emptive strike that was seen as a violation of international law by much of the world community. Claims made at the time by the US government alluding to weapons of mass destruction in Iraq were never substantiated. Three years later, violence continues to escalate.

According to a spokesperson for the United Nations Refugee Agency (UNHCR), more than 1.5 million people are currently internally displaced in Iraq, while as many as 1.6 million have fled the country (Redmond 2006). Furthermore, a recent study—carried out by Burnham *et al.* (2006) of the Johns Hopkins Bloomberg School of Public Health and the School of Medicine at Al Mustansiriya University in Baghdad—estimates that 654,965 (CI: 392,979–943,636) Iraqis have died as a consequence of the war. Of this excess mortality, the vast majority of deaths—601,027 (CI: 426,369–793,663)—were the result of violence, typically gunfire.<sup>2</sup> However, the non-violent mortality rate also increased recently from 5.4 deaths per 1,000 people per year pre-invasion to 6.9 for the period between June 2005 and June 2006 (Burnham *et al.* 2006).

Overall, mortality has been increasing since 2003. The crude rate for the period between June 2005 and June 2006 was approximately 19.8, compared with 10.9 for May 2004 to May 2005, 7.5 for March 2003 to April 2004, and 5.5 pre-invasion (Burnham *et al.* 2006).<sup>3</sup> According to the Sphere Standards, a doubling of the crude mortality rate constitutes a humanitarian emergency (Sphere Project 2004). Burnham *et al.* (2006) conclude:

In Iraq, as with other conflicts, civilians bear the consequences of warfare ... [T]he combination of a long duration and tens of millions of people affected has made this the deadliest international conflict of the 21st century, and should be of grave concern to everyone. (Burnham *et al.* 2006: 1427)

In the following sections we review changes in Iraq's economy, infrastructure, health system, agriculture and PDS, which are foundational to food security, and then explore the impact of the present conflict on malnutrition and food

security. We end with a discussion on Iraqi food sovereignty and the impact therein of coercive inclusion into the global economy by force.

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## ECONOMY

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An increased mortality rate, particularly among men aged 15–59 years, reflects a loss of wage-earners for many households. However, war also restricts opportunities that are available for those who survive. When the FAO and WFP carried out the *Crop, Food Supply and Nutrition Assessment Mission to Iraq* in September 2003, they found that the most frequent reason for food insecurity was unemployment and chronic poverty (as reported by 34 percent of those surveyed). Unemployment after the invasion hovered at 60 percent, with many public servants suddenly out of work. Among the coping mechanisms that households adopted during this period were reduced food consumption (23 percent), selling assets (22 percent), borrowing money or incurring debt (15 percent), switching to cheaper foods (10 percent), or engaging in illegal activity or looting (1 percent) (FAO/WFP 2003).

Inflation made matters worse. More than a year after the invasion (in June 2004), the UN Office for the Coordination of Humanitarian Affairs (OCHA) reported that while markets were full of fresh fruit, vegetables and meat, these items were expensive. Most families could not afford to buy even the most basic items (IRIN 2004).

More recently, a 2005 survey estimated that 26 percent of heads of households were unemployed, as was 59 percent of the entire population aged 16–60 years. Meanwhile, only 14 percent of women in that age bracket were working at the time of the survey (WFP Iraq Country Office and COSIT 2006). Despite a series of “reconstruction” efforts, Iraq’s economy is still far from providing sufficient resources to support the population. Ongoing violence exacerbates the problem, discouraging the unemployed from re-entering the job market (WFP Iraq Country Office and COSIT 2006: 2).

## INFRASTRUCTURE

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Poor infrastructure remains a major concern in Iraq. Reductions in water and sewage treatment increase the risk of waterborne diseases, while the demise of power generation facilities and other infrastructure impedes economic activity, healthcare provision, and the distribution of food.

Prior to 1991, Iraq’s power generation capacity was 9,500 MW. The Gulf War reduced this to 900 MW, and it had been rebuilt to 3,500 MW just prior to the 2003 invasion (IST 2003). Still, only 75 percent of transmission lines were operable and there were almost no stockpiles of spare parts (IST 2003).

One month after the 2003 invasion, Iraq's power generation capacity was down to 200 MW, despite coalition forces' media claims that power plants had not been targeted and that the "lights stayed on in Baghdad." Following some rebuilding, generating capacity reached 3,831 MW by September 23, 2003, peaking at 4,600 MW in July 2004. However, there was still significant deterioration in transmission capacity as well as widespread looting of the copper in power cables (Iraq Investment and Reconstruction Task Force 2004). In addition, approximately 1,000 MW was lost on a daily basis because of scheduled infrastructure maintenance, 1,400 MW because of unexpected problems with aging equipment, and 600 MW because of sabotage, primarily attacks on fuel supply (Agence France-Presse 2005).

Sanitation infrastructure was also severely damaged. Even before the invasion, most water treatment facilities were operating at just 30–70 percent capacity. Similarly, 50 percent of sewage treatment plants were nonfunctioning, while those that were operating were doing so at only 33–48 percent capacity (IST 2003). After the invasion, the Coalition Provisional Authority (CPA) estimated that water, sanitation and municipal services were operating at 85 percent of (already low) prewar levels (CPA 2003a). Equipment, spare parts and supplies were still major concerns (CPA 2003b) and improvement was slow. One year later, in June 2004, 50 percent of sewage treatment plants were operable and only 11 percent of the population had proper sewage facilities. While 60 percent of the overall population and 90 percent of the urban population had access to potable water, the *amount* of water available was only one hour per day greater than it had been prior to the war (Iraq Investment and Reconstruction Task Force 2004).

In 2005, the WFP Iraq Country Office and Iraq's Central Organization for Statistics and Information Technology conducted a household food security survey in Iraq. They concluded:

Infrastructure plays a huge role in understanding the components of food security ... Drinking water affects dramatically the malnutrition rate and the utilization of food. Currently, the state of the water-sanitation infrastructure in Iraq is precarious and does not provide a healthy environment. (WFP Iraq Country Office and COSIT 2006: 45)

The study found that the maximum availability of water for Baghdad's five million inhabitants was now just 70 liters/person/day, 50 percent of prewar levels. Meanwhile, sewerage systems in cities in the center/south of the country served just over 25 percent of the population, septic tanks were used by 50 percent of the people, and the remaining 25 percent had no means of safe disposal of sewage. As a result, approximately 500,000 tons of raw sewage was discharged directly into fresh water bodies each day, 300,000 tons in Baghdad alone (WFP Iraq Country Office and COSIT 2006).

## HEALTH

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Inadequate water and sewage treatment has had a direct impact on the wellbeing of Iraqis. The WHO reported a cholera epidemic immediately following the invasion and also noted a three-fold increase in the percentage of hospital consultations that related to diarrhea (WFP Iraq Country Office and COSIT 2006). In 2005, the average incidence of diarrhea among Iraqi children was approximately fourteen times per year, more than once per month. The WFP/COSIT survey reports: "Given the living circumstances for the majority of the poor, it is unlikely that [an ill] child would be able to regain the weight and start growing normally within this short period" (WFP Iraq Country Office and COSIT 2006: 46). Not only does illness inhibit the absorption of nutrients, but malnutrition also increases the vulnerability of Iraqis to disease (WFP Iraq Country Office and COSIT 2006).

## AGRICULTURE

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According to the FAO/WFP 2003 assessment, the invasion had a limited impact on winter cereal crops (for which yield was 22 percent higher than in the previous year), but the sowing of summer cereal crops and industrial crops (including cotton and sunflower seeds) were affected (FAO/WFP 2003). The national capacity to produce fertilizer had also been seriously reduced as two fertilizer factories were out of commission. This raised concerns as to where an estimated 600,000 tons of fertilizer needed for cereals alone would come from (FAO/WFP 2003). National technical support structures were in such disarray that the FAO/WFP assessment mission estimated that it would take a long time to re-establish services regarding seeds, plant protection, and animal health and monitoring (FAO/WFP 2003).

## PUBLIC DISTRIBUTION SYSTEM

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With the economy in disarray and domestic agriculture providing little food for Iraqis, the PDS continued to play a key role in the food security situation post-invasion. According to the CPA, the food distribution network and supplies to the PDS were restored in June 2003 (USAID 2003, 2005). This meant that the PDS had been severely compromised for between two and a half to three months. Shortly after the PDS was revived, the FAO and WFP reported that the distributed rations had insufficient food diversity, lacking in protein and micronutrients. A 2003 survey found that while meal frequency had increased since 2002, approximately 25 percent of Iraq's population was still highly dependent on the PDS, while 11 percent was "extremely poor and food insecure despite the PDS" (WFP Iraq Country Office 2004).

As the insurgency progressed, in July 2005, the WFP reported that “a shortage of items in Iraq’s monthly food rations is starting to worry government planners” (IRIN 2005a). The shortage involved oil, tea, sugar, rice and washing powder in all the governorates.

Food shortages were exacerbated by shortages in water, electricity and fuel (such as gas, kerosene and petrol), so that food preparation became a challenge. Some of these were the result of a shortfall in funding or direct infrastructure damage, but a key reason was insecurity, with few trucking companies willing to operate in such a high-risk environment (IRIN 2005a).

In 2005, the PDS ration was valued at approximately US\$15. With 15 percent of Iraqis living in extreme poverty and spending less than US\$0.50 per day, the ration comprised around 50–100 percent of some households’ income. In addition, just over 4 million people (15.4 percent of the surveyed population) were food insecure in 2005, up from 11 percent in 2003. Were the PDS to be discontinued, a further 8.3 million people (31.8 percent of the population) would likely become food insecure (WFP Iraq Country Office and COSIT 2006).

A report in February 2007 indicated that due to budget cuts “only sugar, rice, flour and cooking oil remain[ed] from the original 12 foodstuffs provided by the former government. Other items such as lentils were removed from the list in May 2006.” Thirty-five-year-old Um Jamila, a mother of five, complained to reporters, “What food ration are you talking about ... The whole country has been stolen from us. If this goes on another six months, we will be just like any starving country” (Jamail and al-Fadhily 2007).

#### MALNUTRITION

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That the current conflict in Iraq has led to rising malnutrition rates has been widely reported in the press, particularly after Jean Ziegler, former UN Special Rapporteur on the Right to Food, announced in his 2005 report to the United Nations Commission on Human Rights:

The situation of the right to food in Iraq is also of serious concern ... More than a quarter of Iraqi children are suffering from chronic under nourishment, and acute malnutrition amongst Iraqi children under the age of 5 has almost doubled from 4 percent [before the war] to 7.7 percent. (Ziegler 2005)

Table 6 lists national averages for three measures of child malnutrition for 2002 (pre-invasion) and 2003 to 2005. Figure 4 displays the same statistics. They show that acute malnutrition and the percentage of underweight children in Iraq have both risen steadily since 2003, while chronic malnutrition has fluctuated.

TABLE 6. National Average Malnutrition Rates for Iraqi Children under Five, 2002–5

Malnutrition	2002	2003	2004	2005
Acute (%)	4	4.4	8	9
Underweight (%)	9	11.5	12	16
Chronic (%)	23	27.6	23	26
Source	FAO/WFP (2003)	WFP Iraq Country Office (2004)	COSIT (2005)	WFP Iraq Country Office and COSIT (2006)

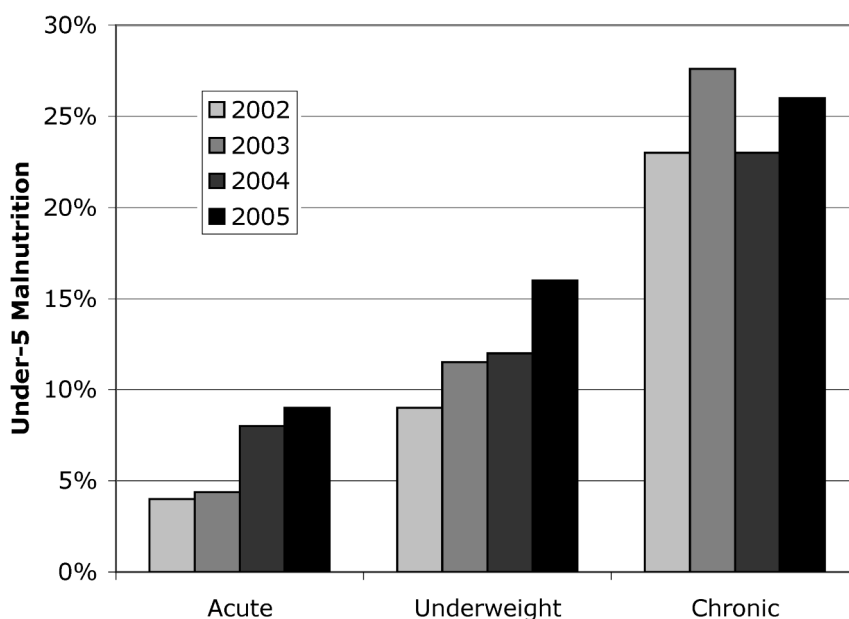


Figure 4: Malnutrition of Iraqi children under five, 2002–5.

Source: COSIT (2005); FAO/WFP (2003); WFP Iraq Country Office (2004); WFP Iraq Country Office and COSIT (2006).

While the trend displayed in Figure 4 is certainly of concern, it disguises important differences within the country. In 2005, for example, younger children were most affected by acute malnutrition, such that the highest rates (12–13 percent) were found in children less than 24 months old (WFP Iraq Country Office and COSIT 2006).

#### SOCIAL AND REGIONAL DISPARITY IN FOOD SECURITY AND MALNUTRITION

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Both the Baseline Food Security Analysis in Iraq in 2003 and the Food Security and Vulnerability Analysis in Iraq in 2005 acknowledged social and regional disparities in food security. Both concluded that poverty and



malnutrition were disproportionately concentrated in rural areas and in districts characterized by extreme poverty (Table 7), defined in the 2003 survey as districts where household expenditures averaged no more than US\$35 per month.

**TABLE 7. Characteristics of 'Extremely Poor' Districts in Comparison with National Averages, 2003**

	No. Districts	Malnutrition (%)			Poverty (%)	PDS Value / Total Income		Average Income (US\$)	
		Stunt-ing	Under-weight	Wast-ing	Extreme Poor	Average	Extreme Poor	Average	Extreme Poor
'High level of extreme poverty' typology	23	38.4	14.7	4.7	25.6	32.6	44.0	105.7	54.6
National average	5	36.8	27.4	13.0	25.7	38.4	52.2	112.7	56.1
	95	27.6	11.5	4.4	13.0	29.2	44.4	126.7	55.0

Source: WFP Iraq Country Office (2004: 24).

At a smaller scale, female-headed households, women in general, unemployed, unskilled or casual laborers, and illiterate citizens were typically poorer and more vulnerable to food insecurity than the rest in both 2003 and 2005 (WFP Iraq Country Office 2004; WFP Iraq Country Office and COSIT 2006). Extremely poor households lack the necessary purchasing power to supplement rations through market purchases and rely on the PDS as a main source of income. Malnutrition was highest in these households as the rations themselves did not provide adequate food. The WFP cautions that without social support mechanisms to assist the extremely vulnerable, the plans to introduce private retail marketing in Iraq and to reduce reliance on state subsidized imports will only worsen the conditions of the Iraqi people (WFP Iraq Country Office 2004; WFP Iraq Country Office and COSIT 2006).

#### FOOD SOVEREIGNTY POST-INVASION: RESTRUCTURING IRAQ'S FOOD SYSTEM

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Optimism displayed in the Western media immediately after the fall of the Baath regime in Iraq seems to have been replaced with realism and acknowledgment that there is not going to be a quick fix to the economic woes of the country and the suffering of the Iraqi people. A high number of Iraqis are currently unemployed and continue to rely on rations distributed through the PDS. Violence continues to escalate, removing hope of a quick economic recovery. While lack of data seriously hinders our ability to make predictions for the future, it is not an exaggeration to assume that child malnutrition will continue to rise in coming years.

Of particular concern to Iraqi food sovereignty is the fact that the nation's food systems and policies have thus far been largely redefined by the

occupying forces and transnational interests. It is clear that the model of governance introduced to Iraq following the invasion is paving the way for a globally integrated, market-oriented food system. Accordingly, an early joint report from the UN and World Bank testifies that from the beginning “economic liberalization and open markets” were considered priorities “to the country’s income, food security, and poverty reduction” (United Nations/World Bank 2003: 36). Furthermore, “free formation of prices in the economy and a liberal trade regime” were seen as crucial steps towards the development of a private market economy (United Nations/World Bank 2003: 9). Although there was early acknowledgement that “price liberalization” should be “accompanied by safety net systems to ensure that the adjustments are socially acceptable and that they protect the most vulnerable, including the children, youth, women and the chronic poor” (United Nations/World Bank 2003: 9), the specific nature of these “safety nets” is yet to be determined.

In the meantime, with the end of sanctions and an almost complete dependence on food imports, Iraq offers an attractive market for exporters. In his testimony before the House Committee on Agriculture, H.L. Schatz of the US Department of Agriculture (USDDA)’s Foreign Agricultural Service points out opportunities for foreign business in Iraq and briefly describes the role that his organization might play in securing it:

To meet current Iraq food needs, the government of Iraq, through MOT [Ministry of Trade], imports and distributes nearly a half million tons of key food items monthly. That requires about 500–600 trucks moving into the country daily ... We believe that there is much room for growth in the Iraqi market ... USDA’s Foreign Agricultural Service (FAS) used the Foreign Market Development Program to support the US Grains Council in its proposal to contract an Iraqi specialist to undertake work on behalf of all cooperators desiring to penetrate the Iraqi market ... Supporting and guiding market promotion activities will be a key focus for the USDA team that will staff the Embassy. (FAS 2004)

In addition to foreign investment and a series of “reconstruction” efforts, one of the most notable developments in terms of food security in Iraq is Order 81. Introduced by L. Paul Bremmer, former administrator of the Coalition Provisional Authority, as one of his last acts of administration, Order 81 was formerly named the “Patent, Industrial Design, Undisclosed Information, Integrated Circuits and Plant Variety Law.” Stated as a tool to help in the rebuilding of Iraq’s collapsed seed industry, the act included a plant variety protection (PVP) provision. As an intellectual property right, the PVP allows for patents for plant varieties, giving exclusive rights to plant breeders who discover or develop (or at least are the first to patent) specific varieties. Critics of Order 81 argue that the act is intended to prioritize the

commercial interests of private breeders (usually large corporations) while making matters worse for poor Iraqi farmers. Many seeds stocks were stolen or destroyed during the current and previous conflicts, but rebuilding stocks in the shadow of a PVP provision limits which segments of society are able to participate in (and profit from) the process. Farmers who do not have the ability to apply for PVP may be pushed to the periphery and prevented from saving seed varieties that others patent first (Focus on the Global South and GRAIN 2005).

Order 81 is just one of a hundred orders established by Bremer to govern the country until a new Iraqi government votes otherwise. Another of the more notable laws is the controversial Order 39, which lays down an overall legal framework for Iraq's economy by giving foreign investors rights equal to the Iraqis' in exploiting Iraq's domestic market.

Taken together, these laws, which cover virtually all aspects of the economy including Iraq's trade regime, the mandate of the central bank, and regulations on trade union activities, lay the basis for what appears to be the United States' greater objective of building a neoliberal regime in Iraq (Focus on the Global South and GRAIN 2005), an example of coercive inclusion into the global economy by force. Another act of the Bremer administration, removal of tariffs on import of foreign products, is also reported to be responsible for higher incidences of farms bankruptcies by making it very difficult for Iraqi farmers to compete (Jamail and al-Fadhily, 2007).

### **Conclusions: Iraq Today**

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When food security in Iraq is assessed in terms of the "five As" (availability, accessibility, adequacy, acceptability and agency), all indications are that it deteriorated for large portions of the population as a result of exclusion from the global market (under sanctions) and continues to deteriorate during coercive inclusion (via the current crisis). This is reflected in increasing malnutrition rates. While the availability of food has increased since the removal of the sanctions regime, access to it has been limited by extreme poverty, the destruction of infrastructure, the collapse of the economy, and continuing insecurity. Furthermore, the planned neoliberal restructuring of food and agriculture systems (as shaped by occupying powers) violates the nation's food sovereignty and leaves its future uncertain. Rising mortality will only make matters worse.

Much of the aftermath of the 2003 invasion in Iraq was predicted in the IST (2003) report. As onlookers, we are forced to ask ourselves: what could we have done, and what can we do now, to prevent further suffering on the part of Iraqi civilians? Is it true, as Ahmed Abdul Walled, a senior official

with the Iraqi Ministry of Trade, said in September 2005, “Millions of Iraqis are dying and require urgent action and support from the whole world, but politics and security issues have caused people to forget the poor and those desperate for food” (IRIN 2005b).

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### Notes

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- 1 The defense budget of the United States, the biggest spender globally, increased from \$288.8 billion in 2000 to \$441.6 billion in 2006. This amount does not include another \$300 billion approved by Congress for operations in Iraq and Afghanistan during this period. The US government’s poor emergency response to Hurricane Katrina in New Orleans suggests that humanitarian efforts are suffering because of lack of funding even while the military budget grows.
- 2 This increase is most pronounced in men aged 15–59 years, but women and children have also been affected. Of the deaths of children aged 0–14 years occurring post-invasion, 39 percent were attributed to violence and 20 percent specifically to air strikes, compared with 0 percent before the current war (Burnham *et al.* 2006).
- 3 While a smaller proportion of excess deaths were attributed to coalition forces in the most recent period, the actual number has steadily increased (Burnham *et al.* 2006).

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