



UNEP in Iraq

Post-Conflict Assessment, Clean-up and Reconstruction

United Nations Environment Programme

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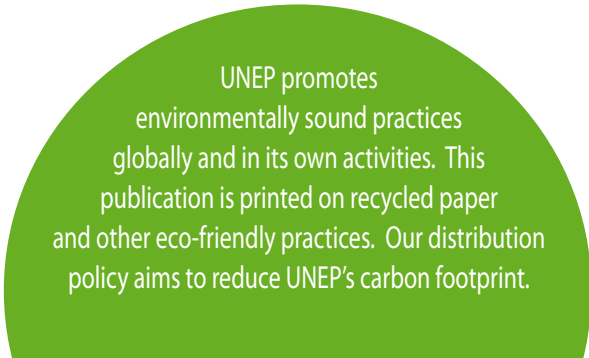
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1 Introduction

The United Nations Environment Programme (UNEP) is the specialized body within the United Nations organization (UN) with a specific mandate to address environmental concerns. In 1999, UNEP established the Balkans Task Force to study the environmental consequences of the conflict in Kosovo. Since then, UNEP has undertaken post-conflict environmental assessments in Serbia, Montenegro, Macedonia, Albania, Afghanistan, Liberia, the Occupied Palestinian Territories, Lebanon and Sudan.

In February 2003, as the coalition forces planned their invasion of Iraq, UNEP initiated a desk-based environmental surveillance to monitor the conflict as it occurred. This resulted in the publication of the *Desk Study on the Environment in Iraq* in April 2003. Since then, UNEP has undertaken a number of follow-up activities in Iraq.

1.1 Objectives of this Report

A wide range of activities were carried out by UNEP in Iraq between 2003 and 2006, primarily through the Post-Conflict and Disaster Management Branch (PCDMB) based in Geneva, Switzerland, and the International Environmental Technology Centre (IETC) based in Osaka and Shiga, Japan. Many activities continued into 2007 and beyond.

This report is an up-to-date compilation of the various activities undertaken by UNEP in Iraq between 2003 and 2006. Its objectives are the following:

1. To provide a complete description of the various activities undertaken by UNEP in Iraq between 2003 and 2006;
2. To make an objective assessment of the impacts of UNEP's intervention; and
3. To document the lessons learned by UNEP in implementing activities in a complex situation such as Iraq.

1.2 UNEP Activities in Iraq 2003-2006

UNEP was active in Iraq even before the 2003 conflict, but attention was particularly focused

on the environmental situation during the conflict and ensuing reconstruction period, and the establishment of the Ministry of Environment (MoEN) provided UNEP with a key counterpart institution in its capacity-building efforts.

To support the Ministry of Environment in Iraq in developing capacity for environmental governance, and to address some of the key priority environmental management issues, UNEP's interventions had the following key objectives:

1. Assess the existing environmental issues in Iraq that require focused attention from the ministry and support from the international community;
2. Assess the existing capacity within the Ministry of Environment and other ministries to address those environmental priorities;
3. Undertake field-based assessments of environmental contamination caused by conflict and by industrial activities;
4. Support the sustainable management of the Iraqi marshlands;
5. Re-link Iraq to regional and multilateral institutions dealing with environmental issues;
6. Re-establish cooperation between Iraq and its neighbours on issues relating to the environment;
7. Strengthen the institutional capacity of the ministry for environmental monitoring and information management;
8. Strengthen the institutional capacity in Iraq for responding to environmental emergencies; and
9. Mainstream environmental concerns into other activities undertaken by the United Nations in Iraq.

From February 2003, UNEP intervened in the following key areas:

1. Desk study on the Environment in Iraq (February-April 2003);

2. Post-conflict needs assessment (June-October 2003);
3. Capacity-building activities (March 2004-September 2006);
4. Environmental site assessments (July 2004-November 2005);
5. Institutional capacity assessment (January-December 2005);
6. Clean-up of contaminated sites (November 2005-December 2006);
7. Environmental mainstreaming within the UN Programme for Iraq (2005-2006);
8. Support to environmental management of the Iraqi marshlands (July 2004-continuing), including:
 - Strategy development and coordination;
 - Baseline data collection and analysis;
 - Capacity-building;
 - Pilot project implementation in drinking water provision, sanitation and wetland restoration; and
 - Awareness-raising;
9. Activities related to depleted uranium (June 2005-continuing).

The activities in each of these areas which ranged from training, the provision equipment and assistance to information management. Activities were planned and implemented with a view to helping Iraq recover from the damage its environment incurred through conflict, as well as to setting a basis for sustainable development.

When UNEP designed its Iraq programme in 2003, the assumption was that the security situation would gradually improve, allowing UNEP to establish a field office in Baghdad and deploy international teams within the country. However, the deteriorating security situation in Iraq prevented UNEP from fielding international staff there. Instead, a range of innovative solutions had to be put in place to deliver the project. A significant part of the project was implemented by providing adequate

training and equipment to Iraqi counterparts from government ministries. Substantial efforts also went into on-the-ground implementation of pilot projects. Capacity-building activities were undertaken from neighbouring countries such as Jordan, Syria, Egypt and Bahrain – and when required, from Switzerland, Kenya and Japan. For the marshlands project, training activities inside Iraq were carried out in cooperation with relevant ministries and local universities. To facilitate constant dialogue and domestic implementation, the marshlands project also appointed a National Coordinator and established a coordination mechanism with national, governorate and local institutions. Finally, international contractors working with local employees undertook the clean-up and hardware installation activities.

1.3 Other Publications from the Iraq Project

A series of individual reports were prepared during the course of the project.

1. *Desk Study on the Environment in Iraq* (2003);
2. *Environment in Iraq, Progress Report* (2003);
3. *Assessment of Environmental Hot-Spots in Iraq* (2005);
4. *Capacity-Building for Assessment of Depleted Uranium* (2008);
5. Reports on the Iraqi marshlands, including:
 - a. *Report of the UNEP Roundtable on Iraqi Marshland Management* (September 2004);
 - b. *Environmental Management of the Iraqi Marshlands: Phytotechnology for Wetland Management* (English and Arabic, 2005);
 - c. *Environmental Management of the Iraqi Marshlands: Water Quality Management – A Training Kit* (English and Arabic, 2005);
 - d. *Environmental Management of the Iraqi Marshlands: Sustainable Sanitation – A Training Kit* (English and Arabic, 2005);

- e. *Environmental Management of the Iraqi Marshlands: Community Level Initiatives – A Training Kit* (English and Arabic, 2005);
- f. *Environmental Management of the Iraqi Marshlands: ESTs for Drinking Water Provision – A Training Kit* (English and Arabic, 2005);
- g. *Environmental Management of the Iraqi Marshlands: EST Assessment Methodology and Implementation – A Training Kit* (English and Arabic, 2005);
- h. *Environmental Management of the Iraqi Marshlands: Wetland Management – A Training Kit* (English and Arabic, 2005);
- i. *Environmental Management of the Iraqi Marshlands: IWRM Policy Integration – A Training Kit* (English and Arabic, 2005);
- j. *Environmental Management of the Iraqi Marshlands: Marshland Information Network – A Training Kit* (English and Arabic, 2005);
- k. *Environmental Management of the Iraqi Marshlands: Wetland Remote Sensing – A Training Kit* (English and Arabic, 2005);
- l. *Back to Life* (information tool in English, Arabic and Japanese, 2005, 2006)

The present document draws from the activities reported on in earlier publications. Each of the reports listed above was reviewed with an eye to identifying how the individual activities contributed to UNEP's overall objectives of intervention. Such an analysis was not possible at the time the activities were undertaken. This current report, therefore, provides a significant insight into the overall success of UNEP's intervention in Iraq.

1.4 Funding for the Iraq Projects

The total cost of the original UNEP environmental assessment programme in 2003-04 was approximately USD 2.5 million. The UK Government agreed to fund 50 percent of the total amount (GBP 717,146/approximately USD 1.2 million), while the Government of Germany agreed to fund EUR 100,000 (approximately USD 122,000) towards capacity-building activities related to disaster management.

In July 2004, the Government of Japan (through the Iraq Trust Fund) supported UNEP's continued involvement in Iraq in two areas: USD 4.7 million was provided in support of the entire capacity-building related activities, while USD 11 million was granted for activities relating to the restoration and management of the Iraqi marshlands. In addition, the UK and Italian Governments made allocations to support donor coordination for the Iraqi marshlands in 2005.

In September 2005, the Iraq Trust Fund provided further support of USD 905,000 for the clean-up of two severely contaminated sites.

In 2006, the Government of Italy and the Government of Japan made additional bilateral allocations of approximately USD 880,000 and USD 1 million to continue the Iraqi marshlands project into its second phase. In 2007, the Government of Japan pledged approximately USD 900,000 for the third phase of the marshlands project towards 2008.

1.5 Key Partners for the Iraq Project

A number of institutional partnerships were forged throughout the implementation of the project. Key partners were:

1. The Iraqi Ministry of Environment (MoEn);
2. The Iraqi Ministry of Water Resources (MOWR);
3. The Centre for the Restoration of Iraqi Marshlands (CRIM); and
4. The United Nations Office of Project Services (UNOPS).

In addition, the Iraqi marshlands project has cooperated extensively with local community groups, non-governmental organizations (NGOs) and Iraqi universities.

1.6 Security Situation in Iraq during 2003-2006

The security situation in Iraq changed considerably during the period of implementation of UNEP projects. In July-August 2003, it was possible to obtain security clearances to travel into the country. After the bombing of the UN office and

consequent loss of staff members, however, the UN decided to withdraw from Iraq.

The security situation impacted the UNEP operations in the following ways:

1. Terrorism claimed lives of some Iraqi government officials associated with the project, while others resigned from their positions citing security concerns. The focal point for the marshlands project and other high-level officials within the Ministry of Municipalities and Public Works were killed in terrorist attacks that targeted the Deputy Prime Minister inside the ministry premises in early 2007. Such loss of human life is tragic and devastating, and destroys the much-needed human and institutional capital to rebuild Iraq. UNEP operations were put on hold while the ministry regrouped and appointed new personnel. While activities were continued with new resolve, such violent loss of dedicated individuals and colleagues inevitably had psychological impacts on personnel associated with the project.
 2. Implementation of field activities incurred delays due to security problems. Work hours were often shortened to enable personnel movement during safer time periods. Border closings, curfews and other restrictions also impeded the movement of equipment into Iraq and impacted personnel movement for installation.
 3. Some projects had to be modified and adapted in design and delivery to minimize time and efforts inside Iraq. For example, to shorten the time needed for installation, water treatment equipment was delivered in prefabricated containers that were then installed in the field to minimize further need for shelter constructions and security provisions. All meetings and training that required participation of international staff had to be undertaken outside Iraq. As operations progressed into 2005 and 2006, even road travel between Baghdad and Amman became dangerous. The unit cost of delivery of training increased substantially, resulting in a proportional reduction in the total number of people who could be trained for some projects, while other projects shortened the number of training days by concentrating lectures and scheduling for longer training hours per day.
 4. UNEP experts could not travel to Iraq to supervise the national experts undertaking various assessment activities. This however, may have had a positive outcome as it led to national experts taking more ownership of the process.
 5. The mobility of the national experts inside Iraq was also greatly restricted. Consequently, some experts could not make full use of the various skills imparted to them for some projects.
 6. The completion of various tasks in and around the Baghdad area could not be verified, even for contractual purposes. Exemptions had to be made in regards to this.
 7. Installation and commissioning of some equipment took a disproportionate amount of time, due to the difficulty experienced by some suppliers' technicians in gaining access to ministry premises.
- Working under such difficult security conditions, it is a testament to the dedication of the Iraqi nationals involved, and the flexibility of the project management team, that the project achieved all of its stated objectives.

2 Country Background

2.1 Orientation

This chapter presents the basic geographical, geo-political and socio-economic background information to provide a context for the environmental issues discussed in the subsequent chapters. This information is not intended to be fully

comprehensive, but sources are given for readers wishing to obtain further details.

Iraq currently has 18 provinces or governorates. Since 1970, three of the northern governorates (Dahuk, Sulaymaniyah and Erbil) have been officially designated as a Kurdish autonomous region, with a separate elected legislature. This region came under UN and coalition protection after the 1990-1991 Gulf War, to prevent the Iraqi regime from taking military action against the Kurds.

MAP 1: Iraq and Neighbouring Region



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