

Ex-Ante Evaluation (for Japanese ODA Loans)

1. Name of the Project

Country: The Republic of Iraq

Project: Baghdad Sewerage Facilities Improvement Project (E/S)

Loan Agreement: March 17, 2009

Loan Amount: 2,141 million Yen

Borrower: The Government of the Republic of Iraq

2. Background and Necessity of the Project

After receiving significant damage economically and socially due to the long-term economic restrictions and conflict, Iraq has been reconstructed with support from international society after the war.

Although most of the sewer systems in Iraq were well maintained into the 1980s, repeated conflicts such as the Iran-Iraq War, the Gulf War, the Iraq War and following economic sanctions started in the middle of that decade led to a lack of proper maintenance and management. Insufficient maintenance of infrastructure causes environmental and health problems and deteriorates conditions significantly.

Although the percentage of the nation's population having access to a sewer system with treatment facilities in 2000 was 28.4%, the figure had dropped to 9% in 2007 as a consequence of the Iraq War. With sewage treatment capacities dropping between 10 to 50% of the originally planned amount, it is estimated that 50% of the waste water collected is discharged into rivers without any treatment. Of particular concern are the existing treatment facilities in Baghdad, which are nearly non-operational; It is estimated that 75% of the waste water produced there is channeled untreated to the Tigris River. Deteriorating sewer facilities leads to the introduction of untreated sewage into water service pipes, polluting the ground water and causing serious environmental and health problems. Given these circumstances, the rehabilitation and improvement of sewer service infrastructures is an urgent task in Iraq.

On the 3rd National Development Strategy announced by the Government of Iraq in February 2007, the government sets the goals on swage system include expansion of sewer treatment plants throughout Iraq (including the expansion of sewerage services to Baghdad and a newly expanded area in Basra), creating a master plan regarding sewer system development in major cities, improving maintenance and management capacities at the sewerage facilities.

At the International Conference on Reconstruction in Iraq held in Madrid in October 2003, Japan announced to provide a maximum of 3.5 billion USD in ODA loans to address medium-term reconstruction demand; in addition to 1.5 billion USD in grant aid for urgent reconstruction in Iraq. JICA has set its direction to provide assistance for

the improvement of water services and the environment surrounding urban sanitation services for the improvement of quality of life as one of its Priorities and Points of Concern. Supporting this Project with an ODA loan is, therefore, necessary and relevant.

Although the necessity and urgency of the Project are both high, security situation of the project site and evaluation on the potential for Project implementation, as well as determination of priorities within the scope of the project is necessary; hence JICA provides an ODA loan for engineering services (E/S) of the project.

3. Project Description

(1) Project Objectives

The project aims to expand sewer treatment plants and replace aging pump stations at the Karkh District in Baghdad. The resulting improvement in water quality of the Tigris River and alleviation of polluted water will improve sanitation and the environment, further contributing to the socioeconomic reconstruction of the country.

This Japanese ODA loan will fund studies and design work undertaken for engineering services in advance of the actual construction work to promote the smooth implementation of the Project.

(2) Project Site/ Target Area

The Karkh District of Baghdad

(3) Project Components

1) Main project (to be determined based on the results of E/S studies)

(i) Expansion of sewer treatment plants in the Karkh District

(ii) Repair of pump stations (9 locations)

2) Consulting Services

This ODA loan targets the operations regarding 1) above as follows:

(i) Creation of bidding documents (e.g. Detailed design, F/S complementary investigation, environmental impact test.)

(ii) Training (e.g. Maintenance and management training, CCTV monitoring training, sewer system hydraulic simulation training.)

(4) Estimated Project Cost (Loan Amount)

2,312 million Yen (Loan Amount: 2,141 million Yen)

(5) Schedule

April 2009 - January 2012 (34 months in total)

(6) Project Implementation Structure

1) Borrower: The Government of the Republic of Iraq

2) Executing Agency: The Mayorality of Baghdad (MOB)

3) Operation and Maintenance/Management System: Same as 2)

(7) Environmental and Social Consideration/ Poverty Reduction/ Social Development

1) Environmental and Social Consideration

(i) Category: B

(ii) Reason for Categorization:

The Project is classified into Category B as the Project is an ODA loan for engineering services, and the Project itself does not fall into Category C according to the *JBIC Cooperation Guidelines for Confirmation of Environmental and Social Considerations* (enacted in April 2002).

(iii) Other/ Monitoring:

The executing agency shall examine appropriate monitoring methods for sludge disposal and odor control on the engineering services.

2) Promotion of Poverty Reduction: None in particular

3) Promotion of Social Development (e.g. Gender Perspective, Measure for Infectious Diseases including HIV/AIDS, Participatory Development, Consideration for the Handicapped): None in particular

(8) Collaboration with other Donors:

USAID is implementing repair work on the existing water treatment plants in Karkh District; therefore, the Project looks for cooperation in the exchange of information and the demarcation of the target sites.

(9) Other Important Issues: None in particular

4. Target Outcomes

(1) Performance Indicators (Operation and Effect Indicators)

To be set when implementing the Project.

(2) Internal Rate of Return

To be set when implementing the Project.

5. External Factors and Risk Control

e.g. Deterioration in the security situation.

6. Lessons Learned from Past Projects

Ex-post evaluation of similar projects in the past has shown that: 1) necessity of careful screening on the feasibility of project implementation outside the scope of ODA loans; and 2) actions to facilitate procedures to prevent delays are necessary for land acquisition. The conditions of the existing sewer system and sewer treatment plants which to be repaired with funds from Iraq and funds from USAID; and the conditions for acquiring lands are needed to be investigated in the E/S..

7. Plan for Future Evaluation

(1) Indicators to be Used: To be set when implementing the Project.

(2) Schedule: To be set when implementing the Project.