

1. Name of the Project

Country: Republic of Iraq

Project: Water Supply Sector Loan Project in Mid-Western Iraq

Loan Agreement: March 31, 2010

Loan Amount: 41,274 million yen

Borrower: The Government of the Republic of Iraq

2. Background and Necessity of the Project

(1) Current State and Issues of the Water Supply Sector in Iraq

The long-term economic sanctions and conflicts had been devastating the economic and social environment of Iraq. However, after the Iraq War in 2003, the country is finally undergoing reconstruction and development with the support from the international society.

Before the Gulf War in 1991, the water supply sector in Iraq was relatively in better condition compared with its neighboring countries. However, the economic sanctions and conflicts following the war led to lack of maintenance causing the water sector operation to worsen significantly. In the attempt to tackle this agenda, development projects in water sector have been implemented in the capital Bagdad, Basrah, the Kurdistan region, and some other major cities. On the other hand, projects in the mid-western area have been hardly implemented due to the security situation following the Iraq War. Therefore, the current infrastructures are not enough to meet the demand of water supply in these areas. The development of facilities to correspond to the increase of water demand through population growth is an urgent issue.

(2) Development Policies for the Water Supply Sector in Iraq and the Priority of the Project

In the Third National Development Strategy by the Government of Iraq set in February 2007, the following four pillars for the post-war reconstruction and national development for 2007-2010 were announced; 1) Strengthening foundations of economic growth, 2) Revitalizing the private sector, 3) Improving the quality of life, and, 4) Consolidating the good governance security and stability in the country. Improving the accessibility of safe city water, reducing the leakage rate, and improving the water distribution network will lead to the improvement of the quality of citizens' lives which is mentioned in the third pillar.

(3) Japan and JICA's Policy and Operations in the Water Supply Sector

At the International Conference on Reconstruction in Iraq held in Madrid, Spain, in October 2003, the Government of Japan announced up to 5 billion US\$, that consists of 1.5 billion US\$ in grant aid in reply to the emergency reconstruction demand of Iraq, and up to 3.5 billion US\$ in ODA Loans to meet middle-term reconstruction demand. Since "Improving the quality of life" is one of JICA's priority areas of the reconstruction assistance to Iraq, water supply sector assistance matches JICA's assistance strategy. Prior to implementation of the Project, ODA Loans projects were provided for the *Basrah Water Supply Improvement Project* in 2008 and the *Water Supply Improvement Project in Kurdistan Region* in 2009.

(4) Other Donors' Activity

Donors including the World Bank, UNICEF, UNDP, United States, Great Britain, and Korea have positioned the water supply as one of the priority areas for assistance, and have implemented various projects for the construction/rehabilitation of the water purification plant, the development of water distribution facilities, and the provision of chemicals to water purification plants. However, assistance to the Mid-Western area including the target area of the Project has been limited until now.

(5) Necessity of the Project

Rehabilitation and expansion of water intake facilities and water purification plants in the Mid-Western area should increase the water supply in the area. The Project is consistent with the trend and policy of assistance of the Government of Japan and the assistance strategy of JICA. Therefore, the necessity and the relevance of JICA's assistance for the Project are high.

3. Project Description

(1) Project Objectives

The objective of the Project is to improve water treatment facilities and water supply condition and to contribute to the economic and the social reconstruction of the target areas through rehabilitation and expansion of water purification plants and water intake facilities as well as the provision of facilities including water distribution facilities in Ninawa, Anbar, and Salah El Din governorates in Mid-Western Iraq.

(2) Project Site/Target Area

Governorates of Ninawa, Anbar, Salah El Din

(3) Project Components

1) Procurement of equipment, construction, etc

Rehabilitation and construction of new water intake facilities, water purification plants, and water distribution facilities in governorates of Ninawa, Anbar, and Salah El Din.

2) Consulting services (procurement support, construction management, training, etc)

(4) Estimated Project Cost (Loan Amount)

55,822 million yen (Loan amount: 41,274 million yen)

(5) Schedule

The planned implementation schedule of the Project is from March 2010 to June 2019 (112 months in total). The completed facilities will be transferred in June 2018. Project completion is defined as the transfer of the facilities.

(6) Project Implementation Structure

1) Borrower: The Government of the Republic of Iraq

2) Executing Agency: Ministry of Municipalities and Public Works (MMPW)

3) Operation and Maintenance System: Same as 2)

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

1) Environmental and Social Consideration

a) Category: B

b) Reason for Categorization: The Project is categorized into Classification Category B, because it does not correspond with the vulnerable area to the environmental impact as stipulated in “Japan Bank for International Cooperation Guidelines for Confirmation of Environmental and Social Considerations” (established April 2002).

c) Environmental Permit: Environmental Impact Assessment (EIA) reports as related to the Project have been prepared based on the domestic law of Iraq, and the environmental permits for Ba’shiqa-Hamdaniya district of Ninawa and Haditha district of Anbar have already been approved by the Ministry of Environment of each governorate in August, 2009 and in July, 2009, respectively. As for Baije-Siniya district of Salah El-Din, an environmental permit will be approved in April, 2010.

d) Anti-Pollution Measures: Sludge generated due to the water purification shall be collected and dried, and be treated appropriately at the waste disposal sites of 3 governorates owned by the Ministry of Municipalities and Public Works. Additionally, measures for the relaxation of dust such as spraying of water shall be taken during the construction. The consultation service shall include the establishment of environmental monitoring plans and relaxation measures.

e) Natural Environment: The Project site is not located in nor surrounded by any sensitive areas such as national parks. It is not likely to have an adverse impact on the natural environment, either.

f) Social Environment: 40,000m² of land acquisition in Ba’shiqa-Hamdaniya of Ninawa governorate is required in the Project, which shall take place according to necessary procedures in Iraq. The amount of compensation shall be determined through a discussion by the evaluation committee which includes landlords and acquirers. Additionally, the Project does not require relocation of residents.

g) Other / Monitoring: The Executing Agency shall monitor the air quality (dust and airborne particulate), water quality (SS and turbidity), waste during the construction work as well as the quality of water and sludge during its operation.

2) Promotion of Poverty Reduction: None.

3) Promotion of Social Development (e.g. Gender Perspective, Measure for Infectious Diseases including HIV/AIDS, Participatory Development, Considerations for Persons with Disabilities, etc.): None.

(8) Collaboration with Other Donors: None.

(9) Other Important Issues: None.

4. Targeted Outcomes

(1) Performance Indicators (Operation and Effect Indicator)

Indicator	Target areas	Baseline (Actual Value in 2009)	Target (2020) 【Expected value 2 years after project completion】

Time of water supply (hr/day)	Ba'shiqa-Hamdaniya district	12	20
	Haditha district	12	20
	Baije-Siniya district	12	20
Water supply volume (m ³ /day)	Ba'shiqa-Hamdaniya district	23,000	149,000
	Haditha district	18,000	78,000
	Baije-Siniya district	36,000	131,200
Number of subscribed households✘	Ba'shiqa-Hamdaniya district	13,495	57,200
	Haditha district	7,537	17,800
	Baije-Siniya district	5,464	36,200

✘The number of subscribed households are accounting for the official subscribers registered to the Ministry of Municipalities and Public Works, and do not include illegal users.

(2) Internal Rate of Return

The Financial Internal Rate of Return (FIRR) and Economic Internal Rate of Return (EIRR) in the Project should not be estimated because reliable data is difficult to obtain in the current domestic situation of Iraq, and prospect of the rise in the water rate for appropriate internal rate of return is unknown at the present moment due to low charge of the water rate with government subsidies.

5. External Factors and Risk Control

Deterioration in the security situation, etc.

6. Lessons Learned from Past Projects

From the ex-post evaluations in the past, it was learned that the development of related facilities which is not included in the Project is necessary since it may impact the effectiveness of the Project. Although affects to the effectiveness of the Project is considered to be low since the Project is aiming to develop water treatment facilities comprehensively and includes the water purification, distribution, and water supply, it must be sufficiently considered.

7. Plan for Future Evaluation

(1) Indicators to be Used

- 1) Time of water supply (hr/day)
- 2) Water supply volume (m³/day)
- 3) Number of subscribed households (households)

(2) Timing: Two years after the completion of the Project.