

ODA Loan

Ex-ante Evaluation for Japanese ODA Loan

1. Project

Country: The Republic of Iraq (hereinafter referred to as Iraq)

Project: Baiji Refinery Upgrading Project (E/S)

Loan Agreement: October 14, 2012

Loan Amount: 2,676 million yen

Borrower: The Government of the Republic of Iraq

2. Background and necessity of the Project

(1) Development achievements and issues (present situation) in the oil sector in Iraq

The oil sector in Iraq is the largest key industry that accounts for approximately 68% of GDP and roughly 91% of national government revenue, which means it is the only resource for obtaining foreign money in Iraq. Crude oil reserves of 143.1 billion barrels have been identified, but a great deal of the reserves has been unexploited, thus leaving great potential for development. However, due to repeated conflicts and economic sanctions, current production remains at 2.4 million barrels a day. Furthermore, equipment capacity degradation at 14 refinery plants has been serious due to the war damage and facility deterioration. The rate of operation hovers low at levels of 60 ~ 75%, and refining capacity per day is 580,000 barrels in total even at three major refineries. Therefore, the domestic shortage of gasoline amounts to 40,000 barrels a day, which means Iraq has a large gap between supply and demand in oil products for people's living. Thus, although Iraq is an oil producing country, it has to import oil products from other countries: its related expenditures add up to as much as 5 billion dollars a year. It is thus an urgent issue for Iraq, which is in need of massive reconstruction, to have investments in the oil refining sector to earn foreign money through increased production of oil products as well as to prevent foreign currency outflows due to importing oil products. However, the fact is that Iraq is unable to lure sufficient investments from the private sector owing to high risks such as unstable political and security conditions.

(2) Development policy in the oil sector in Iraq and the meaning of this Project

The National Development Plan (2010 ~ 2014) compiled by the Iraqi government in 2010 emphatically aims for increased productivity and competitiveness in oil products through giving overriding priority to investments in the oil sector and introducing technologies that satisfy the existing international environmental regulations. This Project is to construct a refinery importantly consisting of a Fluid Catalytic Cracking (FCC) unit at Baiji Refinery, an existing

large oil refinery in Iraq. Thus, it will contribute to improving the production efficiency of the existing refinery, reducing environmental load, and transferring related technologies. At the same time, it will lead to prevention of foreign currency outflows by satisfying domestic demand through increased production of oil products, and will eventually contribute to increases in crude oil production and export of oil products in the future.

(3) Assistance policies and achievements of Japan and JICA in the oil sector

One of the aid priority areas in the assistance policy for Iraq both of the Japanese government and of JICA is “infrastructure development for economic growth,” and priority issues include the strengthening of infrastructure in the oil and gas sector. JICA delineates “output capacity development in oil and gas production” as a cooperation program: it has implemented two ODA loan projects, the “Crude Oil Export Facility Reconstruction Project” and the “Basrah Refinery Upgrading Project (E/S)”. The total amount agreed for these two projects is approximately 52.1 billion yen. As identified above, this Project is consistent with the development policy of Iraq and also with the aid priority area of the Japanese government and JICA. Hence, it is very necessary and relevant for JICA to implement this Project.

3. Project profile

(1) Objectives

The Project is to construct a new refinery consisting of a fluid catalytic cracking unit (FCC complex) at the existing Baiji Refinery in the Governorate of Salahuddin in the northern part of Iraq. The construction will increase productivity, thereby upgrading the quality of oil products, narrowing the supply-demand gap, reducing environmental load, transferring related technologies, and eventually contributing to economic and social reconstruction in Iraq.

(2) Project site/target area

The Governorate of Salahuddin

(3) Outline of the Project

1) Construction of an FCC complex

2) Consulting service (bidding support; implementation management/coordination; etc.)

With this loan, part of the work including front-end engineering design (FEED) for this Project will be carried out as engineering service (E/S). The outline is as follows:

(1) FEED, etc.

F/S review, basic design, licensor selection support, EIA formulation support, etc.

(2) Licensor’s design work

- (4) Total Project costs (engineering service expenses including FEED)
7,960 million yen (including an ODA loan of 2,676 million yen)
- (5) Implementation schedule
October 2012 ~ December 2016 (51 months); The completion of the project will be the completion of the FEED work.
- (6) Implementation structure
- 1) Borrower: The Government of the Republic of Iraq
 - 2) Project executing agencies: The Minister of Oil (MOO) and the North Refineries Company
 - 3) Operations management and maintenance system: Same as 2)
- (7) Environmental and social considerations, poverty reduction, and social development
- 1) Environmental and social considerations
 - (1) Classification: Category B
 - (2) Reasons for the classification: This Project provides an engineering service loan and does not fall under Category C in the Japan Bank for International Cooperation Guidelines for Confirmation of Environmental and Social Considerations (established in April 2002). Hence, it is classified as Category B.
 - 2) Poverty reduction: N/A
 - 3) Social development: N/A
- (8) Schemes and partnerships with other donors: N/A
- (9) Other special issues:
This loan is provided to the engineering service (E/S) related to part of the basic design and its support in the abovementioned Project. It will contribute to the smooth implementation of this Project.

4. Outputs of the Project

- (1) Quantitative outputs
These are planned to be confirmed at the time this Project is implemented.
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5. External conditions and risk control

Rapid deterioration in security in Iraq

6. Evaluation results of past similar projects and lessons learned
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- (1) Evaluation results of similar projects

There is a lesson learned from the ex-post evaluation of past completed ODA loan projects stating that in some cases, completion of the Project's target facilities only will not necessarily produce the expected effects when the Project's target facilities are closely related to other existing facilities.

(2) Lesson for this Project

For designing this Project, collaboration is essential in terms of raw materials and utility equipment at the existing Baiji Refinery. It is essential to confirm sufficiently within E/S the operational conditions of the existing facilities.

7. Plan for future evaluation

(1) Indexes to be used in the coming evaluation

These will be set at the time this Project is implemented.

(2) Time of the evaluation in the future

Two years after the Project Completion