

Ex-ante Evaluation

1. Name of the Project

Country: The Arab Republic of Egypt

Project: Environmental Pollution Abatement Project

Loan Agreement: May 15, 2006

Loan Amount: 4,720 million yen

Borrower: The Government of the Arab Republic of Egypt

2. Necessity and Relevance of JBIC Assistance

Greater Cairo, consisting of Cairo Governorate, Giza Governorate, and Qalyobia Governorate, and the Alexandria Area, consisting of Alexandria Governorate and Beheira Governorate, are two of the areas with the highest concentration of population and industries in Egypt. In particular, in the Qalyobia Governorate and the Alexandria Area there is a high concentration of petroleum, chemical, and textile industry factories and these factories are a major source of pollution.

The major causes of air pollution are the illegal incineration of solid waste, exhaust fumes from automobiles, emissions from factories, etc. Measures taken to reduce the amount of solid waste include the installation of private sector treatment systems, and a policy of shifting to the use of natural gas as a fuel has been adopted to reduce exhaust fumes. The major causes of water pollution are domestic wastewater, agricultural wastewater, and factory wastewater, etc. Regarding domestic wastewater, the sewerage access rate in urban areas has already reached more than 90% and regarding agricultural wastewater, there are to some extent limits to the restrictions that can be put on the use of agricultural chemicals and fertilizers. Meanwhile, concerning both air and water pollution caused by factories, the Egyptian Environmental Affairs Agency (EEAA) is carrying out inspections of factories (to verify their state of compliance with the emission standards set out in The Environmental Law (which came into force in 1994)). These factories cannot afford to make investments in environmental improvements, however, and do not have enough know-how about installing equipment for environmental improvement. To date, inspection by EEAA has failed to abate pollution.

The Egyptian Environmental Affairs Agency believes that at least US\$240 million needs to be spent on measures to combat pollution caused by factories in Greater Cairo and the Alexandria Area and that measures to tackle these sources of pollution need to be taken urgently.

This project is Phase 2 of the Two-Step Loan (EPAP1) for environmental improvements that the World Bank has been implementing since 1997. Phase 1 was implemented in Greater Cairo and the Alexandria, Suez, and Ismailia governorates but the target areas in Phase 2 are Greater Cairo (Qalyobia Governorate in particular) and the Alexandria Area, areas with a high concentration of factories which are emitting pollutants in excess of legal standards. The project aims at environmental improvements through the reduction of emissions of pollutants by factories in these areas by supporting the installation of equipment that will abate environmental pollution caused by emissions from factories,

factory wastewater, etc., in these areas. In addition, other donors including JICA, GEF, and the government of Finland will provide technical assistance, under which specific guidance will be given to end users as they install equipment, in an effort to ensure more effective pollution abatement. This technical assistance will also include capacity building of the executing agency.

In the Fifth Five-Year Plan for Socio-Economic Development (2002 – 2007), its current development plan, the Government of Egypt states that its policy is to place importance on both development and the environment, and in The First Five-Year Plan (2002 – 2007) of The National Environmental Action Plan of Egypt 2002/17 the reduction of industrial pollution in urban areas is presented as one of the major goals. In Japan's Specific Country Assistance Plan for Egypt environmental conservation is given as a major developmental issue for that country and in JBIC's Medium-Term Strategy for Overseas Economic Cooperation Operations, the abatement of negative impacts on the environment and environmental measures that enable both environmental protection and economic development are presented as challenges to be met, which is consistent with "support for global issues and peace-building" and "development of the socioeconomic infrastructure for sustainable growth." Furthermore, it is consistent with "support for human resources development" in the form of human capacity building through technology transfers, training, etc. Moreover "addressing environmental issues" is stipulated as a priority sector of assistance to Egypt so support for this project is consistent with the medium-term strategy.

Thus, JBIC's assistance for this project is highly necessary and relevant.

3. Project Objectives

The Project aims at abating pollutants emitted by factories in Greater Cairo (Qalyobia Governorate in particular) and the Alexandria Area by providing finance by way of local intermediary financial institutions to enable Egyptian firms to install pollution abatement facilities and equipment, thereby contributing to environmental improvement in the target areas.

4. Project Description

(1) Target Area

Greater Cairo (Qalyobia Governorate in particular) and the Alexandria Area

(2) Project Outline

JBIC, the World Bank, and other donors co-finance the funds necessary for the installation of equipment that will contribute to environmental improvements, and through re-lending scheme from the Government of Egypt, the borrower, to local intermediary financial institutions, and the financial institutions provide the funds to end users for the installation of environmental improvement equipment.

1) Outline of the Funding for the Entire Project

* Investment Component = approximately US\$113 million (13,334 million yen)

* Technical Assistance Component = approximately US\$9.6 million (1,137 million yen)

* Lake Mariut water quality improvement = approximately US\$7.9 million (926 million yen)

The Global Environmental Fund (GEF) is to provide grant for the last component

2) Two-Step Loans

(i) Eligible Companies

Financing is provided to any company, regardless of its size or field, etc., that installs environmental improvement equipment that the Egyptian Environmental Affairs Agency has determined contributes to emission reductions, after the intermediary financial institution has made the decision to provide loans to that company.

(ii) Sub-Loan Financing Conditions

Market interest rate

(iii) Technical Assistance Component

The consultants employed through the technical assistance component provided by donors will give advice about the installation of the equipment for emissions reduction to each of the end users. They will also strengthen institutional capacity. For example they will improve the monitoring capacity of the EEAA and improve the capacity of the intermediary financial institutions to make decisions regarding the providing of loans for environmental projects.

(3) Total Project Cost/ Loan Amount: 15,397 million yen (Yen Loan Amount: 4,720 million yen)

(4) Schedule

June 2006 – August 2011 (63 months)

(5) Implementation Structure

1) Borrower: The Government of the Arab Republic of Egypt

2) Executing Agency: Egyptian Environmental Affairs Agency (EEAA)

3) Operation and Maintenance System: A Project Management Unit (PMU) is to be established within the EEAA. The PMU will manage the technical aspects of the environmental improvement equipment (inspections at the time of equipment installation, monitoring of emissions reductions after installation, etc.) and jointly with the Apex Bank will manage funding aspects of the loan (monitoring of the disbursement and repayment of the sub-loans, management of the loans from each donor, etc.). Regarding the two-step loans, the Apex Bank and other participating banks will make the decisions of the loans and provide the financing to the eligible companies. The Apex Bank will report to the PMU concerning the overall state of funds provided, including the financing provided by the other participating banks.

(6) Environmental and Social Consideration

1) Environmental Effects/ Land Acquisition and Resident Relocation

(a) Category: FI

(b) Reason for Categorization

This project is classified as Category FI under the “Japan Bank for International Cooperation Guidelines for Confirmation of Environmental and Social Considerations” (established April 2002) because JBIC’s funding of the project is provided to a financial intermediary etc.; the sub-projects cannot be specified prior to JBIC’s approval of funding; and those sub-projects are expected to have potential impact on the environment.

(c) Others

In this project the EEAA will give due consideration to environmental and social aspects at the time of selection of a sub-loan, in accordance with JBIC’s environmental guidelines, etc. It can be concluded that appropriate consideration will be given to these issues because the EEAA has implemented EPAP1 in the same way with support from the World

Bank without any problems in the past and because in this project technical assistance is being provided for the capacity building of the EEAA and other institutions involved in the project.

2) Promotion of Poverty Reduction

None.

3) Promotion of Social Development (e.g. Gender Perspective)

None.

(7) Other Important Issues

* This project is co-financed with other donors, such as the World Bank.

5. Outcome Targets

(1) Evaluation Indicator (Operation and Effect Indicator)

Indicator	Target (2013 [2 years after completion of project])
Total number of sub-loans	50-75
Total value of sub-loans (million yen)	4,720
Emission standards clearance rate (%)	100

(2) Internal Rate of Return (Financial/ Economic Internal Rate of Return)

Not applicable

6. External Risk Factors

Reduced demand for sub-loans as the desire of end users to make new investments or take out new loans weakens due to economic recession and rapid fluctuations in the financial environment, etc., in Egypt.

7. Lessons Learned from Findings of Similar Projects Undertaken in the Past

From similar projects undertaken in the past the lesson has been learned that when Egypt's domestic interest rate in the market for loans to corporations rapidly falls, the interest rate of the sub-loan of the yen loan becomes relatively expensive and sometimes the end users do not take out the sub-loan. So in this project the interest rate of the sub-loan is based on the market rate and the participating banks and the end users make contracts individually. Furthermore, it is planned to regularly follow up on the interest rate level of the sub-loan and the state of progress of disbursement through progress reports, etc., and care will be taken to create a flexible implementation structure with a balance between the level of the lending rate of the sub-loan and the level of the lending rate in the financial markets.

8. Plans for Future Evaluation

(1) Indicators for Future Evaluation

(a) Total number of sub-loans

(b) Total value of sub-loans (million yen)

(c) Emission standards clearance rate (%)

(2) Timing of Next Evaluation

After project completion