

## Ex-ante Evaluation

<b>1. Name of the Project</b>
Country: The Republic of Albania
Project: Greater Tirana Sewerage System Improvement Project
(Loan Agreement: June 30, 2008; Loan Amount: 11,121 million yen; Borrower: The Government of the Republic of Albania)
<b>2. Necessity and Relevance of JBIC's Assistance</b>
In November 2001, under the title of the National Strategy for Socio-Economic Development (NSSED), the government of the Republic of Albania prepared its own version of the Poverty Reduction Strategy Paper (PRSP), which is the first in Central and Eastern Europe. The government followed this with the publication of the second NSSED in July 2004, and has been grappling to achieve “accelerated economic growth” and “poverty reduction” since then. As goals to be reached by 2015, the government has set forth the following as priority areas: organization and governance, private banking sector development, infrastructure development, human resources development, environmental conservation, comprehensive rural development, and urban development. In particular, the government regards transportation, water and society as key development sectors, and is striving to promote fiscal efficiency and decentralization so that efficient development and investment will be made in these key sectors in line with NSSED.
In the Strategy Paper “Albania - Water Supply and Sanitation Sector Strategy” (2007–2012) prepared in September 2003, the government set a goal of increasing the safe water supply rate to 98% and the access rate to health facilities to 94.7%, in both urban and rural areas, by 2015. In this strategy paper, the government also regards the following issues as important issues: (i) securing of safe water, introduction of sewage treatment systems and expansion of sewage treatment capacity; (ii) improvement of facilities’ cost recovery efficiency; and (iii) supply and management of water and sewerage services by local governments. Moreover, in order to promote fiscal efficiency and decentralization, which are considered the principal issues in the water supply and sewerage sector, based on the provisions of the Local Government Organization and Function Law (enacted in July 2000), in a cabinet meeting held in September 2007, the government approved a law authorizing the transfer of water supply and sewerage assets to local governments. This government approval will ensure the transfer of water supply and sewerage assets throughout Albania to local governments in the days to come.
Since democratization in the early 1990s, Albania has continued to register robust economic growth. In particular, with a population of about 800,000, the Greater Tirana Area has been developing rapidly driven by both concentration of capital in Albania and concentration of foreign investments. However, despite the surge in industrial and domestic wastewater triggered by the population growth that has accompanied economic development, the city’s sewage treatment system remains underdeveloped. Consequently, raw sewage pours into the soil and rivers flowing through Tirana, resulting in egregious deterioration of the environment and landscape. A glance at the state of river pollution in terms of BOD concentration shows that the BOD concentration is around 40 mg/l at midstream; however, at its peak, a BOD concentration of over 100 mg/l has been observed. When the volume of water in rivers decreases, raw sewage pours into them; thus making the state of river

pollution as bad as that of municipal sewer channels. Consequently, the sanitary conditions and living environment in the Greater Tirana Area are severely threatened. Thus, the project is highly relevant and necessary.

In JBIC's Medium-Term Strategy for Overseas Economic Cooperation Operations (April 2005), "a foundation for sustained growth" is set forth as a priority area, and there is emphasis on assistance for the promotion of economic growth through the building of economic and social infrastructure, including sewerage facilities. Moreover, JBIC is committed to proactively supporting efforts to resolve the water issue as part of its approach to "global issues." Furthermore, JBIC has adopted environmental measures, including the provision of sewerage systems, as a priority area for extending assistance to Central and Eastern Europe. Thus, JBIC's assistance to the project is both necessary and relevant.

### **3. Project Objectives**

This project aims to improve the quality of both groundwater and river water by constructing sewerage facilities in the Greater Tirana Area; thereby contributing to the improvement of the sanitary conditions and home environment of residents of the surround areas.

### **4. Project Description**

#### (1) Target Area

Greater Tirana Area

#### (2) Project Outline

- (a) Sewerage facilities: Construction of sewage treatment plants, sewage pipes and drains
- (b) Consulting services (detailed design, bidding assistance, construction monitoring and supervision, support to improve the capacity of operation and maintenance of sewerage facilities, etc.)

#### (3) Total Project Cost / Loan Amount

14,134 million yen (Yen Loan Amount: 11,121 million yen)

#### (4) Schedule

February 2008–December 2014 (83 months). Project completion is defined as when the capacity building is completed.

#### (5) Implementation Structure

- (a) Borrower: The Government of the Republic of Albania
- (b) Executing Agency: Ministry of Public Works, Transport and Telecommunications (MoPWTT)
- (c) Operation and Maintenance System: Water Supply and Sewerage Enterprise of Tirana (UKT)

#### (6) Environmental and Social Consideration

- (a) Environmental Effects / Land Acquisition and Resident Relocation
  - (i) Category: B

(ii) Reason for Categorization

This project is not likely to have significant adverse impact on the environment due to the fact that the project sector and project characteristics are not likely to exert impact and the project is not located in a sensitive area under the “Japan Bank for International Cooperation Guidelines for Confirmation of Environmental and Social Considerations” (established in April 2002). Thus, this project is classified as Category B.

(iii) Environmental Permit

The Environmental Impact Assessment (EIA) report concerning this project was approved by the Ministry of Environment, Forestry and Water Administration in February 2008.

(iv) Anti-Pollution Measures

Since appropriate steps will be taken to deal with sludge, foul odors, etc. in accordance with the domestic standards of Albania, adverse impacts are not anticipated.

(v) Natural Environment

The area targeted by this project is not located in or around sensitive areas, such as national parks, and so adverse impact on the natural environment is assumed to be minimal.

(vi) Social Environment

This project is expected to require 47 ha of land acquisition and relocation of four households, and the land acquisition and compensation procedure will be carried out in accordance with the domestic laws of Albania.

(vii) Other/Monitoring

Under this project, the executing agency will monitor the water quality, foul odors, etc.

(b) Promotion of Poverty Reduction

None

(c) Promotion of Social Development (gender perspective, measures for infectious diseases including AIDS, participatory development, consideration for persons with disabilities, etc.)

None

(7) Other Important Issues

None

(1) Evaluation Indicators (Operation and Effect Indicator)

Indicator	Baseline (2007)	Target (2016, 2 years after completion)
Population treated (10,000 persons)	—	34.25
Amount of wastewater treated (m <sup>3</sup> /day)	—	77,110
Rate of facility utilization (%)	—	100
BOD concentration (effluent) (mg/l)		24
Percentage of population served (%)	0	34
Percentage of wastewater treatment (%)	0	34

(2) Number of Beneficiaries

342,500

(3) Internal Rate of Return (Financial and Economic Internal Rate of Return)

Based on the conditions indicated below, the project's economic internal rate of return (EIRR) is 10.2%, while its financial internal rate of return (FIRR) is 7.9%.

[EIRR]

- (a) Cost: Project cost (excluding tax), operation and maintenance expenses
- (b) Benefit: Reduction in medical expenses due to fewer people afflicted with disease; effects on household finance
- (c) Project Life: 35 years

[FIRR]

- (a) Cost: Project cost (excluding tax), operation and maintenance expenses
- (b) Benefit: Revenue on sewerage charge
- (c) Project Life: 35 years

## **6. External Risk Factors**

If the percentage of homes connected to the sewerage system is low, there will not be enough revenue to cover the operation and maintenance expenses. Thus, it will be necessary to provide subsidies to make up for the shortfall. Consequently, since there is a need to raise the percentage of homes connected at an early stage after the beginning of operation. JBIC will support efforts to raise the percentage of homes connected through the operation and maintenance capacity strengthening component of the consulting services.

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

From ex-post evaluations of similar ODA loan projects in the past, it has been learned that in countries where JBIC does not have representative offices, special efforts need to be made to properly conduct project monitoring and supervision, including utilizing outside manpower. JBIC does not have a representative office in the Republic of Albania, and furthermore, since MoPTT has never implemented an ODA loan project, it has a lack of experience in ODA loan procedure. Consequently, after signing the loan agreement, JBIC will strive to strengthen the counterparts' project monitoring and supervision capacity by holding seminars on procurement, loan disbursement, and so on. Additionally, during the implementation of the project, through its consulting services, JBIC plans to provide assistance in the implementation procedures for procurement and loan disbursement.

## **8. Plans for Future Evaluation**

(1) Indicators for Future Evaluation

- (a) Population treated (10,000 persons)
- (b) Amount of wastewater treated ( $m^3/day$ )
- (c) Rate of facility utilization (%)
- (d) BOD concentration (effluent) (mg/l)
- (e) Percentage of population served (%)
- (f) Percentage of wastewater treatment (%)
- (g) Internal rate of return: EIRR, FIRR (%)

(2) Timing of Next Evaluation

Two years after project completion