

Ex-Ante Evaluation (for Japanese ODA Loan)

1. Name of the Project

Country: The Republic of Azerbaijan

Project: Provincial Cities Water Supply and Sewerage Project

Loan Agreement: May 29, 2009

Loan Amount: 32,851 million Yen

Borrower: The Government of the Republic of Azerbaijan

2. Background and Necessity of the Project
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Water supply system coverage in Baku, the capital city of the Republic of Azerbaijan, is high at 95%; however, the average rate for regional cities is a mere 33% (2004), with 24-hour service unavailable in most cities. Therefore, outside of the hours during which water is supplied, residents in regional cities have no choice but to obtain water from polluted rivers and underground sources, which has caused sanitation problems. In addition, although sewage system coverage in the Country is approximately 30%, with the exception of Baku, much of the sewage in regional cities goes untreated due to the fact that few areas outside of Baku have sewer pipes. For this reason untreated sewage water is a significant source of surface and underground water contamination in the areas surrounding cities without treatment facilities.

Based on the above understanding, the regional city water supply system rehabilitation project is included in Priorities and Points of Concern in the Action Plan for *The State Program for Poverty Reduction and Economic Development* (SPPRED), the *Poverty Reduction Strategy Paper* (PRSP) of the Republic of Azerbaijan established in 2003. Furthermore, the *State Program on Social-Economic Development of Regions of the Azerbaijan Republic* (2004-2008) also sets the improvement of infrastructure and utility services as one of the main goals.

JICA has set the provision of assistance for the development of infrastructure and environmental measures as one of its Priorities and Points of Concern. Supporting this Project matches these policies. In addition, providing assistance through this Project for the improvement of basic infrastructure in regional core cities in Azerbaijan will contribute to forming the basis of geographically balanced social and economic development in the entire Country of Azerbaijan, which matches the *Sustainable Growth* set as one of the priority issues for ODA.

Supporting this Project with an ODA loan is, therefore, necessary and relevant.

3. Project Description

(1) Project Objective(s)

The Project will improve water supply and sewage systems and enhance the Project implementation and management structure in regional core cities in Azerbaijan. The

Project will improve sanitation and the sustainable living environment in the relevant cities, further contributing to the geographically balanced social and economic development in the entire Country of Azerbaijan.

(2) Project Site/Target Area

10 regional cities in the Republic of Azerbaijan (Shirvan, Salyan, Neftchala, Khachmaz, Yevlakh, Barda, Khizi, Quzar, Gobustan, Naftalan)

(3) Project Components

- 1) New installation of water supply and sewage systems in the 10 above-mentioned cities (including remodeling), new installation of sewage system, etc.
- 2) Consulting Services (Detailed design, procurement support, supervision of construction work, structure enhancement, etc.)

(4) Estimated Project Cost (Loan Amount)

45,102 million Yen (Loan Amount: 32,851 million Yen)

(5) Schedule

Scheduled from May, 2009 to July, 2014 (63 months in total)

Project completion is defined as the time the systems are placed in service.

(6) Project Implementation Structure

- 1) Borrower: The Government of the Republic of Azerbaijan
- 2) Executing Agency: Azersu Joint Stock Company (Public Water Supply Corporation)
- 3) Operation and Maintenance System: Project Management Unit (PMU)
Project Implementation Unit (PIU)

(Note) We will establish a PMU within the Azersu Joint Stock Company, and PIUs for each of three surrounding regional cities to manage the implementation of the Project. After the completion of the Project, United Sukanal in Azersu will be in charge of the maintenance and control of the systems centering on the relevant PIU.

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

1) Environmental and Social Consideration

i) Category: B

ii) Reason for Categorization:

The Project is categorized into Category B due to the fact that it does not fall into the sector category, nor is it located in an area easily affected, as stipulated in the *JBIC Cooperation Guidelines for Confirmation of Environmental and Social Considerations* (established in April, 2002), and it is not considered to have any undesirable impact on the environment.

iii) Environmental Permit:

In accordance with the domestic laws of the Republic of Azerbaijan, an EIA report will be created when the system implementation plan in the Detailed Design is determined for approval of the application.

iv) Anti-Pollution Measures:

Appropriate construction machinery will be used for the prevention of air pollution and the reduction of noise. Sewage water will be treated to satisfy the domestic water emission standards and discharged into the agricultural drainage and the Caspian Sea. Therefore, no significant impact is predicted from the discharge of treated sewage water. Sewage sludge will be dried in the sun at the facility and given to the residents as fertilizer.

v) Natural Environment:

The targeted area of this Project is not located in an area easily affected, such as national parks, etc., nor is it located in an area surrounding such an area; therefore, the project is not considered to have the potential for any undesirable impact on the natural environment.

vi) Social Environment:

The Project requires the acquisition of a maximum of 35ha of land and the acquisition procedures will be carried out in accordance with domestic procedures in the Republic of Azerbaijan at the time the details of the Project are designed. Resident transfer is not required.

vii) Other / Monitoring

The executing agency shall monitor the quality of water and sludge, etc. during service.

2) Promotion of Poverty Reduction:

Through the implementation of the Project, public water will be supplied at one tenth the cost of purchasing tanked water from private companies, which will contribute to reduction of costs for individuals suffering from poverty. The Project is, therefore, significantly beneficial for individuals suffering from poverty.

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

(8) Collaboration with Other Donors: World Bank, Asian Development Bank, Kreditanstalt für Wiederaufbau (KfW)

(9) Other Important Issues: None in particular

4. Targeted Outcomes

(1) Performance Indicators (Operation and Effect Indicator)

Indicator (Common to 10 cities)	Baseline (Actual Value in 2007)	Target (2016) [Expected value 2 years after project completion]
Access to water supply (persons)	Set by each city	Set by each city
Amount of water supplied (m ³ / day)		
Access to water supply (households)		
Population connected to sewage treatment (persons)		
Amount of sewage treated (m ³ / day)		
System usage rate (%)		
BDD concentration (Final effluent mg/ l)		
Sewage system coverage (%)		

(2) Internal Rate of Return

Based on the conditions indicated below, the Economic Internal Rate of Return (EIRR) of the Project is 9.5% and the Financial Internal Rate of Return (FIRR) of the Project is 2.6%.

【EIRR】

Cost: Project costs (excluding tax and duty), Operation & maintenance costs

Benefit: Reduction of water purchase costs, pump electricity costs, water supply and sewage fees, and sludge disposal costs

Project Life: 30 years

【FIRR】

Cost: Project costs, Operation & maintenance costs, Land acquisition costs

Benefit: Water supply and sewage user fees

Project Life: 30 years

5. External Factors and Risk Control

None in particular

6. Lessons Learned from Past Projects

Ex-post evaluation of similar ODA loan projects in the past has shown that it is necessary to utilize external manpower for project supervision in countries without overseas JICA offices. There is no JICA office in Azerbaijan, and Azersu Joint Stock Company, the executing agency, has no experience in either implementing ODA loan projects or procedures. Therefore, JICA will ensure the ability of the relevant external manpower to supervise the Project through training and seminars.

Furthermore, JICA will promote the utilization of assistance for start-up and provide assistance with procurement and procedures for the ODA loan for the Project through consulting services during the implementation of the Project.

7. Plan for Future Evaluation

(1) Indicators to be used

- 1) Access to water supply (persons)
- 2) Amount of water supplied (m³/ day)
- 3) Access to water supply (households)
- 4) Population Connected to Sewage treatment (persons)
- 5) Amount of sewage treated (m³/ day)
- 6) System usage rate (%)
- 7) BDD concentration (Final effluent mg/ l)
- 8) Sewage system coverage (%)
- 9) Internal rate of return (EIRR, FIRR)

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