

Ex-Ante Evaluation

Private Sector Investment Finance Division, Private Sector Partnership and Finance
Department, Japan International Cooperation Agency (JICA)

1. Name of the Project

Country: Socialist Republic of Vietnam

Project: Water Supply Expansion Project in Binh Duong Province

Loan Agreement: November 17, 2020

Borrower: Binh Duong Water Environment Joint Stock Company

2. Background and Necessity of the Project

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

Socialist Republic of Vietnam (hereinafter “Vietnam”) recorded high average annual GDP growth of 7% from 2016 to 2019. In the background of this growth lies rapid industrialization, and the amount of GDP share of the secondary industry in Vietnam grew from 37.3 billion dollars (2010) to 83.9 billion dollars (2018) while the ratio of urban population also grew from 30% (2010) to 36% (2018), showing the acute urbanization (source: World Bank). Although the average piped water supply coverage ratio of major cities is about 81% (2017) (source: Progress on household drinking water, sanitation and hygiene 2000-2017 (WHO/UNICEF, 2019)), more water supply capacity to meet the increasing water demand is urgently required.

In Vietnam, 5-year Socio-Economic Development Plan (hereinafter “SEDP”) was set forth in April 2016. SEDP shows the concrete socio-economic engagement in the period of 2016 to 2020, specifically aiming at (i) Building the socialism-oriented market economy, (ii) Development of human resources, (iii) High economic growth employing the provision of infrastructure as the breakthrough, and targeting at GDP per capita of 3,200-3,500 USD (2,215 USD in 2016). Under SEDP, the development plan for each sector has been created, and it aims at improvement of access ratio to clean and safe water in all cities and industrial areas of the country by 2020 (90% in rural area and 95% in urban area). It should be noted that, while the number of confirmed cases of COVID-19 in Vietnam is 1,038 (as of August 29) which is maintained at lower level compared with other Southeast Asian countries, the continuous supply of safe water is considered extremely important from the view of suppressing the spread of infection from now on.

Binh Duong Province, the target area of the Water Supply Expansion Project

(hereinafter the “Project”), is situated at the northeast of Ho Chi Minh City. It is the area accumulated with large scale industrial parks after inviting overseas direct investment and is also a commuter town for Ho Chi Minh City. This is why the area has the critical position in the industrialization of Vietnam. Due to the steady overseas direct investment to this Province which has brought about accumulation of factories, increase of factory workers and urbanization of this district, the water supply demand of the area is increasing by 17% annually (source: ADB), and is estimated to exceed the current water supply capacity of 450,000 cubic meters/day in 2023. Therefore, the Province is in the pressing needs to expand the capacity of water supply facilities. This Project is to expand water supply plant by 100,000 cubic meters/day next to the existing plant (with 120,000 cubic meters/day) in Tan Hiep District which is situated at the south of Binh Duong Province, The project supplies water to multiple industrial parks and urban areas, resolving the issue of increasing water demands in the industrial parks as well as residential areas. The Project is not only to contribute to achievement of long to middle term development policy/plan of Vietnamese Government but also contribute to containment of infection and improvement of health environment through the supply of safe water as a means of COVID-19 Response.

(2) Japan’s and JICA’s Cooperation Policy and Operations in the Water Supply Sector

The response to urbanization problems accompanied by rapid economic development and accumulation of industries has been pointed as the priority issues in the JICA Country Analysis Paper for Vietnam (June 2020), and “Response to Vulnerability” was defined as the priority issues in the Country Assistance Policy for the Socialist Republic of Vietnam (December 2017), which clarified that urban environmental problems caused by rapid urbanization and industrialization must be addressed. This Project aligns with these analyses and policies, and JICA has already implemented the assistance for water supply sector in Vietnam by such projects as “Dong Nai Province Water Infrastructure Construction Project” (L/A signed in 2015) in Dong Nai Province which is adjacent to Binh Duong Province. Furthermore, sewage facility provision projects, namely, “Southern Binh Duong Province Water Environment Improvement Project - Phase 2” (Loan Agreement signed in 2012) and “Southern Binh Duong Province Water Environment Improvement Project” (Loan

Agreements signed in 2007) were implemented with ODA loan support in the Project target area, Binh Duong Province.

Note that, since this Project is a Climate Change Response (Applicable) Project which is to promote the green investment by operators in ASEAN area, it is also a project to contribute to Initiative on Overseas Loan and Investment for ASEAN announced by former Prime Minister Abe in ASEAN-related top-level meetings in November 2019. This Project is to contribute to enhancement of water supply capacity through the provision of water purification plant and to contribute to COVID-19 response. This Project is to contribute to the achievement of the SDGs: Goal 6 (Ensure availability and sustainable management of water and sanitation for all) and Goal 17 (Strengthen the means of implementation and revitalize the global partnership for sustainable development).

3. Project Description

(1) Project Objective

The objective of the Project is to enhance the water supply capacity of Binh Duong Province through the expansion of water purification plant, thereby contributing to sustainable economic growth of the Province and southern district including Ho Chi Minh City.

(2) Target Area

Complex area, Tan Uyen Town, Ben Cat Town, and Thu Dau Mot City of Binh Duong Province, Vietnam

(3) Project Components

The Project is to loan the fund necessary for the provision of water purification plant of 100,000 cubic meters/day in Tan Hiep District in southern Binh Duong Province and the building of water intake facilities from Dong Nai River as well as water conveyance facilities to purification plant.

(4) Environmental and Social Consideration/Gender Category

i) Environmental Consideration

a) Category: B

b) Reason for Categorization: Since this Project is not considered to be a sector liable to give such impacts as illustrated in the JICA Guidelines for Environmental and Social Considerations (announced in April 2010), have the characters thereof, or is in the area liable to receive impacts thereof, the negative impact to environment is not considered serious.

c) Environmental Permit: The creation of the Environmental and Social Impact Assessment Report (EIA) related to this Project is obligated by the

domestic law of this country, and the update version (second version) was submitted to Ministry of Natural Resources and Environment in Binh Duong Province in June 2020, and the permission has been acquired in July.

- d) Anti-Pollution Measures: The impact on air, water quality, waster, noise and so on emitted during the construction and operation is expected to meet the domestic standard of Vietnam and global environmental standard by employing the mitigation measures. The impact on air, water quality, waste, noise and so on will be limited to certain level even considering the accumulated factors of the existing purification plant.
- e) Natural Environment: The target area of this Project is not in a national park or any similar areas liable to receive any impact, or not in peripheral areas thereof, and negative impact on natural environment is minimum.
- f) Social Environment: Since the site of this Project is within the existing water purification plant, no acquisition of land or resident relocation will take place.
- g) Other/Monitoring: The contractor, during the construction, and the environment and social consideration staff of the borrower, during the actual operation, will monitor the air, water quality, waster, noise and so on according to the Environment and Management Plan (EMP).

ii) Gender Category: ■GI (Gender mainstreaming needs study/analysis project)

<Reason of categorization> Although the gender mainstreaming needs were studied and confirmed, actual engagements for gender equality and empowerment of female failed to be taken.

(5) Other Important Issues: Not in particular

4. Targeted Outcomes

(1) Quantitative Effects

1) Processing capacity of purification plant, water supply volume of purification plant and usage rate of expanded facilities are measured.

(2) Qualitative Effects

Sustainable improvements of urban environment, advancement of industrialization and enhancement of public health

5. Lessons Learned from Past Projects

(1) Evaluation Results of Similar Projects

In the Ex-Post Evaluation of ODA Loan to Vietnam, “Dong Nai and Ba Ria-Vung Tau Water Supply Project (I) and (II)” (evaluated in 2016), it was shown that the delay of project took place by such factors as review of project costs from price rise of building materials and equipment, procurement procedure for contractors and land acquisition.

Also, in the Ex-Post Evaluation of ODA Loan to Republic of Peru, “Provincial Cities Water Supply and Sewerage System Improvement and Expansion Project” (evaluated in 2016), it was shown as the lesson that high precision of demand estimate was required to adequately plan the facility scale of purification plant and it was necessary to assure the adequacy in calculation method and prerequisites for estimation.

(2) Lessons for this Project

In this Project, since the procurement of contractors was completed with the definite project costs and the land necessary for the Project has been completed, the risk of involving Project delay is low. In the meantime, water demand in Binh Duong Province has increased by 15% annually in the past 5 years. Even when the demand was assumed to be conservatively lower than the past water demand growth, the availability is confirmed to exceed 80% in 2025.

7. Evaluation Results

Since this Project is to contribute to expand the water supply capacity through the provision of purification plant, which matches both the development issues of the said country and Japan’s and JICA’s cooperation policies/analyses, and is also to contribute to the SDGs: Goal 6 and Goal 17, the significance of the assistance through the project is high.

8. Plan for Future Evaluation

(1) Indicators to be Used

As stated in 4. Above.

(2) Timing

2022 (2 years after the commencement of operation)

End