conducted by	Indonesia	office:	February,	2013
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Country Name	Rural Water Supply Project in the Province of Nusa Tenggara Barat (NTB) and Nusa Tenggara
Republic of Indonesia	Timur (NTT)

I. Project Outline						
Project Cost	E/N Grant Limi	it: 245 million yen	Contract Amount: 212 million yen			
E/N Date	July, 2007	July, 2007				
Completion Date	July, 2009	July, 2009				
Implementing	Directorate General of Human Settlements (DGHS)					
Agency	Ministry of Pub	olic Works				
Related Studies	BD Study: June	e, 2003 – December, 2003				
	Implementation Review: February, 2006 – May, 2007					
Contracted	Consultant(s)	Japan Techno Co., Ltd.				
Agencies	Contractor(s)	Takenaka Civil Engineering &	Construction Co,. Ltd.			
	Supplier(s)	-				
	[Japan's Coope	eration]				
	- The Study on Rural Water Supply Project in Nusa Tenggara Barat and Nusa Tenggara Timur (TC,					
Related Projects	2000-2002)					
	[Other Donors'	Cooperation]				
	- The Second Water and Sanitation for Low Income Communities Project (WSLIC) (2002-2007, IBRD)					
	- Water Hiban	(AusAID) (2011)				
	In the province	s of Nusa tenggara Barat (NIB	) and Nusa tenggara Timur (NTT), which include the least			
	developed regi	ions in Indonesia, only 50% and	60% of people had access to clean water. The remaining			
Deekaround	people obtain	the dry seener. These seuros	dug weils, springs, and rainwater, the fatter often being			
васкугочно	insuitcient in t	the dry season. These sources	and NTT provinces was the highest and fourth highest			
	people, and in	people, and the infant mortality rate of NIB and NII Provinces was the highest and fourth highest				
	specifically rur	among all provinces of indonesia. Therefore, it was an urgent task to improve hygiene conditions in				
		ifficient volume of safe water for	the rural areas in East Nusa tenggara Province and West			
	Nusa Tenggara	a Province by constructing rural	water supply systems			
	Jananese side					
	- Construction of the following facilities of rural water supply systems					
	<ul> <li>intake facili</li> </ul>	ties				
Drainat	• distribution pipes					
	• public taps					
	• material for house connection					
Objectives	•transmission pipes					
Objectives	service reservoir					
	-Soft Compone	ent: community development a	and operation and maintenance (O&M) management. i)			
	preparation of trainer's manual and documents for education and sensitization of people, ii) training of					
	trainers, iii) assistance for development of a monitoring plan, and iv) guidance for monitoring activities					
	during the preparation and guidance phases.					
	Indonesian side	e				
	-Acquisition of	i land for the construction of	water facilities, and securing of access road to the			
	construction si		fine in Deathermon			
	-Construction v	NORKS OF HOUSE CONNECTION FACILI	ties in Bagikpapan			

## II. Result of the Evaluation

Summary of the Evaluation

In the provinces of NTB and NTT, many people were exposed to unclean, unreliable water from dug wells, springs, and rainwater, which sometimes had adverse impacts on the health of people. Therefore, it was an urgent task to improve hygiene conditions for villagers in those two provinces.

This project has achieved the improvement and enhancement of water supply conditions in the target villages (i.e. to provide households with easier access to safe water throughout the year) to a certain extent though delays were found in installation of house connection in some villages. Nevertheless, according to community people, water quality has become better compared to water from wells, which they used before the Project. As for sustainability, some problems have been observed in terms of financial aspect and current status of O&M due to insufficient budget for O&M of the existing facilities. Regarding relevance, the project has been highly relevant with Indonesia's development policy, development needs as well as Japan's ODA policy at the time of both ex-ante and ex-post evaluation. As for efficiency, the project period exceeded the plan. In the light of above, this project is evaluated to be partially satisfactory.

#### 1 Relevance

This project has been highly relevant with Indonesia's development policy "to improve capacity of water supply system" as set in the National Strategy (Renstra) of Ministry of Public Works 2010-2014, and development needs "to increase number of people who can access to safe water in NTB and NTT", where people had obtained unclean, unreliable water from dug wells, springs, and rainwater, as well as Japan's ODA policy "Country Assistance Program 2004" to assist the Government of Indonesia (GOI) to improve basic public services including providing better water and sanitation services to create a democratic and fair society at the time of both ex-ante and ex-post evaluation, Therefore, relevance of this project is high.

### 2 Effectiveness/Impact

This project has achieved its objectives of supplying safe water to the communities in NTB and NTT by constructing facilities to supply safe water to a certain extent. The facilities constructed by this project can serve about 20,000 population as planned, and the actual number of beneficiaries was about 13,204 at the time of ex-post evaluation, which was 67% of the target value. This result was caused by the delay in installation of house connection in some villages. In general, house connection was given more priority than public taps in water supply development, but it takes time for beneficiaries to understand the benefit of bearing expenses for house connection. In the villages where house connection was delayed, public taps have covered population. Another delay was in the installation of necessary piping network expansion because the materials that were procured under this project had different specification from those that are locally used Galvanis pipe in some areas. Nevertheless, the planned total water supply volume was achieved. Also, according to community people, water quality has been greatly improved compared to water from wells, which they used before the Project. For instance, according to the communities in Dusun Mapak Desan, Desa Jempong Baru, people now use the water from public tap for cooking and drinking without boiling, while the water from wells must be boiled. The soft components generally contributed to the community development and O&M management, though one (1) public tap has been stopped in Bajur and one (1) public tap has been moved to another place because of the unpaid water charge.

Positive changes, to which this project might have contributed, have been observed in the project areas: the incidence of water-borne disease (i.e., skin disease, diarrhea) has been decreased after the project, for instance, in Tarus (Desa Mata Air and Desa Tarus), where 1,140 persons newly got access to safe drinking water through this project, number of patients who have diarrhea has been decreased drastically from 1,722 persons in 2009 to 400 persons in 2011. In addition, it is reported that the burden of women and children to fetch drinking water from the river/well has been reduced. No negative impact on natural environment was observed. As for the land acquisition, the public taps were installed on the land granted by land owners. The process of land acquisition was reported successfully completed as planned. Therefore, effectiveness/impact of this project is fair.

### Quantitative effects

Indicator	target value (2011)	actual value (2011) (target year) at ex-post e aluation
Number of beneficiaries *	19,642	13,204
(Supplementary indicator) Water supply volume	16.25 liter/second	16.25 liter/second

Source: Basic Design Study in 2006, Data collection from PDAM, National Statistics in 2011

Note: \*) The figure includes the number of people served by the public water taps and house connection constructed under this project plus those served by existing facilities and facilities that were newly constructed by the Indonesian side besides this project, to which the water intake and transmission facilities constructed under this project supplied water.

## 3 Efficiency

Although the project cost was within the plan (ratio against the plan : 87%), the project period exceeded the plan (ratio against the plan: 128%) because of delay in administration of procurement procedure, i.e., the delay in finalizing/verifying the contract documents for construction works. Outputs have been changed since construction works of house connection facilities by the Indonesian side was not completed in almost all the project sites except in Bagikpapan. The reasons of these are that i) whether or not to install house connection depends on beneficiaries, who bear the cost for connection and ii) the pipe networks are necessary to be more expanded before house connection. Therefore, efficiency of this project is fair.

### 4 Sustainability

The facilities/equipment provided by the project are maintained by Perusahaan Daerah Air Minum (PDAM), Regional Drinking Water Enterprise. The project has some problems in financial aspect and the current status of operation and management due to insufficient budget for O&M of the existing facilities. Though the current conditions of the provided facilities were basically good, for instance, in Bajur, one public tap has been stopped because the community did not pay the water charge and in Lower Duman, there is one public tap which has been moved to another place, because the community does not pay the fee. However, no serious problem has been observed in structural/technical/operation aspects, since i) the implementation structure is sustained what it was considered desirable at the time of ex-ante evaluation, ii) PDAM's staff are able to utilize facilities constructed by the Project and the public tap group has been functioning well in the target villages, and iii) facilities constructed by the Project are generally well maintained, despite some problems such as unrepaired public taps and insufficient utilization of manuals prepared by the project. The soft component of this project contributed to such performance.

Therefore, sustainability of this project is fair.

# III. Recommendations & Lessons Learned

Recommendations for Implementing agency

<For Implementing Agency>.

- Implementation Agency shall continue monitoring of progress of house connection and provide necessary assistance to accelerate it. In addition, it shall discuss with related PDAMs how to utilize the materials for house connection provided by the Project.

- It is recommended that PDAMs take measures to collect water fee through discussions with community people regarding the benefits of using tap water.

### Lessons learned for JICA

Since the house connection works will be done by PDAM based on the request from beneficiaries and its cost shall be borne by beneficiaries, it took a long time to increase the number of service population. In addition, it was not so effective to provide only materials for house connection without installation within the Project. Therefore, project design should be well prepared, considering the cost, works and understanding for the project by beneficiaries, and should be decided together with confirmation on work plan and budget allocation plan prepared by implementing agency, prior to the commencement of project.



Water Pump

Water Reserve Tank





Unrepaired Public Tap



Stock Galvanized Pipe for H.C



Stock equipment for H.C