

Supporting utility	Saitama City Waterworks Bureau (SCWB)		Case No.	3
On recipient utility			Data from	2015
Recipient utility	Three major state enterprises of water supply in Lao PDR			
Cooperation year	1992 to present			
Service area	<ul style="list-style-type: none"> • Vientiane Capital • Luang Prabang Province • Khammouane province 			
Service population	<ul style="list-style-type: none"> • Urban area: 0.716 million • Rural area: N/A^{※1} • Total: 0.716 million 	Service coverage	<ul style="list-style-type: none"> • Urban area: 71.1% • Rural area: N/A • 42.9% of service area 	
Water distribution	230,000 m ³ /day	Maximum water distribution	333,000 m ³ /day (280,000+35,000+18,000)	
Water consumption per capita	135-200 L/person/day ^{※2}	NRW	24.7%	
Water source	Rivers	Pipe length	2,309 km (1,858+343+108)	
No. of WTP ^{※3}	23 (10+9+4)	No. of Employees	928 (571+182+175)	
Water treatment	Coagulation + Sedimentation + Rapid filtration + Chlorine Disinfection			
Water rates	2.04USD (16,600LAK) ^{※4}			
On technical cooperation				

※1 N/A = Not applicable

※2 Based on 2015 statistics

※3 WTP = Water Treatment Plant

※4 1LAK = 0.000123 USD (as of April 1, 2016) Basis for calculation: [1,300 (LAK/m³, 1-10 m³) x 10 m³ + 3,600 (LAK/maintenance fees /month)] Calculated according to the water rates in Vientiane Capital

Background	<p>The Saitama City Waterworks Bureau (SCWB) has provided technical cooperation primarily to the Vientiane Capital Water Supply State Enterprise (VTEWSSE) that services Vientiane Capital in Laos. VTEWSSE’s service coverage is 69% and its population served accounts for 40% of the whole population. For comparison, the average service coverage in Laos is 21%. As the largest state enterprise of water supply, VTEWSSE is expected to be a role model for other water utilities and support their activities.</p> <p>Also, SCWB is currently working with two other state enterprises, the Luang Prabang Province Water Supply State Enterprise (LPWSSE) and the Khammouane Province Water Supply State Enterprise (KMWSSE). LPWSSE and KMWSSE respectively provide water service in Luang Prabang Province in the north and Khammouane Province in the south. The working relation between SCWB and LPWSSE and KMWSSE is part of a technical cooperation project managed by the Japan International Cooperation Agency (JICA). The two provinces were selected as pilot areas of this project, whose purpose is to expand areas of JICA’s assistance outside of Vientiane Capital.</p> <ul style="list-style-type: none"> ➤ 2002 – 2005: JICA Technical cooperation project: Capacity development of water supply system ➤ 2006 – 2008: JICA Grass-root technical cooperation: Improvement of pipe maintenance and management ➤ 2010 – 2011: Friendship Program between SCWB and VTEWSSE ➤ 2012 – 2017: JICA Technical cooperation project: Capacity development for water supply service management (MaWaSU Project) ➤ December 2016: SCWB signed a Memorandum of Understanding (MOU) with VTEWSSE, LPWSSE, and KMWSSE on cooperation to enhance Lao water supply sector
Cooperative scheme	<ul style="list-style-type: none"> • Relevant authority in Laos: Water Supply Division of the Ministry of Public Works and Transport • Recipient utility: VTEWSSE, LPWSSE, and KMWSSE
Recipient utilities’ challenges	<p>Water supply in Laos is not in pace with its rapidly growing population and water demand. Countries including Japan and China have provided support to enhance water supply capacity and construct new water treatment plants, but it has not been sufficient to meet the growing needs.</p> <p>Another challenge is a self-governance in water supply. Due to a prime minister’s ordinance, Laos has now in place a legal framework that requires utilities to provide water services based on mid to long term planning as well as conduct proper performance monitoring. However, the effectiveness of this new requirement is rather skeptical at the moment as the country has long depended on assistance from other countries to improve water supply service, and thus it would not be easy and take time for the utilities to become sufficiently</p>

	self-reliant in the service management and objective settings.
Technical cooperation provided	<p>The technical cooperation started in 1994 when the predecessor of SCWB sent its employees to Laos for the first time. Since then, SCWB has assisted with the country's pipeline management and human resources development.</p> <p>Currently, SCWB is involved in JICA's technical cooperation project to enhance the service planning and monitoring capabilities of the related utilities in Laos^{※5}. The projects began in 2012 with VTEWSSE, LPWSSE, and KMWSSE as pilot utilities, and to continue until 2017. These projects are being implemented in collaboration with three water utilities in Japan from Saitama Prefecture, Kawasaki City, and Yokohama City.</p>
Future plans and prospects	<p>The scope of the projects covers every state enterprise of water supply in Laos. As part of the implementation, VTEWSSE, LPWSSE, and KMWSSE are providing various lectures for other utilities in Laos. These three utilities are expected to play a leading role in supporting other utilities after the end of the projects. Thus, the three utilities are required to further develop their leadership and overall management capabilities. For this reason, future technical cooperation by Japanese utilities would need to be more extensive and advanced in terms of human resources development as well as to encourage more voluntary, self-regulated service management on the part of VTEWSSE, LPWSSE, and KMWSSE.</p>
Figures and photos	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>▲ <i>MaWaSU</i> project (Lecturing at local elementary school)</p> </div> <div style="text-align: center;">  <p>▲ <i>MaWaSU</i> project (Site visit at pipe installation in Japan)</p> </div> </div>

※5 For short, this JICA project is called *MaWaSU* project. Details of the project are as follows:
 In 1999, the Prime Minister of Laos issued an ordinance aiming to provide safe and reliable water supply for 24 hours a day to 80% of the urban population by 2020. As of 2010, service coverage in the urban areas is 55%. To achieve the target, it is necessary to make further investments and save finances where possible by improving service efficiency. The *MaWaSU* project was initiated in 2012 with a five-year implementation period in order to help all state enterprises in Laos to make proper facility enhancement and renewal as well as to achieve stable water supply based on mid to long term service plans. For this project, the Water Supply Division of the Ministry of Public Works and Transport plays a central management role, and three major utilities, VTEWSSE, LPWSSE, and KMWSSE were selected as pilot utilities.

Source: JICA (<https://www.jica.go.jp/project/laos/012/index.html>)