

1. INTERNATIONAL COOPERATION BY JAPANESE WATER SUPPLY UTILITIES

This report presents examples of international cooperation by following four water supply utilities in Japan.^{※1}

- Water and Sewer Bureau of the City of Kitakyushu
- Yokohama City Waterworks Bureau
- Saitama City Waterworks Bureau
- Chiba Prefectural Waterworks Bureau

1.1 OVERVIEW OF INTERNATIONAL COOPERATION BY JAPANESE WATER UTILITIES

Name of utility	Water and Sewer Bureau of the City of Kitakyushu (WSBK)
Purpose	Utilize the water supply and sewerage technology owned by Kitakyushu City and help mitigate related challenges in foreign countries and stimulate local economies through water businesses and other activities.
Activities	Since 1990, the Water and Sewer Bureau of the City of Kitakyushu (WSBK) has shared technical expertise and experiences with Asian countries regarding water treatment, water quality management, NRW reduction, and water service management. In Cambodia and Haiphong City of Vietnam, for example, WSBK has helped human resources development by training local utility staff. The utility has also encouraged water business in these countries by utilizing the friendly relationship and local trust built through their various activities.
Primary projects	Cambodia 1999-2002 Dispatch of an expert and the Japan International Cooperation Agency (JICA) Partnership Program for the Phnom Penh Water Supply Authority 2003-2006 Capacity Building for Water Supply System in Cambodia 2007-2012 Capacity Building for Water Supply System in Cambodia - Phase 2 2012-2017 Capacity Building for Water Supply System in Cambodia - Phase 3 2013-2015 Project for Capacity Improvement of Water Supply Facility Management in Siem Reap Vietnam

^{※1} All the information in this report were compiled by March 2017.

	<p>2001-2003 Project for Water Sector Training Center in the Southern Part of Vietnam</p> <p>2010-2012 Improvement Program for Water Treatment Method against Organic Substances in HaiPhong</p> <p>2013-2015 Improvement of Haiphong Water's Capacity of Distribution Network Management</p> <p>Myanmar</p> <p>2013-2016 Capacity Improvement of Water Treatment Plant Operation in Mandalay</p> <p>Indonesia</p> <p>1991-1997 Project for Water Supply and Environmental Sanitation Training Center in Indonesia</p> <p>China</p> <p>2001-2003 Water Leakage Reduction in Dairen City</p> <p>2005-2007 Improvement of Water Supply Reliability in Dairen City</p> <p>2010-2012 Technical Cooperation for Surrounding Cities of Dairen City</p>
Primary Recipient Utilities	
Name of utility	Haiphong Water Joint Stock Company Case No. 1
Name of utility	8 Provincial Cities in Cambodia Case No. 4

Name of utility	Yokohama City Waterworks Bureau (YWWB)
Purpose	<ul style="list-style-type: none"> • Mission as a public enterprise Placing “Support to other water utilities both domestically and globally” as one of the core activities, YWWB is promoting it through the public-private collaboration. • Our Human Resource Development YWWB expects its employees to develop their own skills by working in a challenging environment in developing countries. • Municipal Policy The international activities of the Yokohama City Waterworks Bureau (YWWB) are conducted in accordance with a policy of Yokohama City, which is to contribute to a solution of various global issues and challenges, including access to water supply in developing countries.
Activities	<p>Since the first expert dispatch to Afghanistan in 1973, YWWB has been working on various international activities including trainee acceptance and expert dispatches by its own efforts or through the collaboration with other agencies such as the Japan International Cooperation Agency (JICA). In addition, aiming to solve water-related challenges abroad, YWWB cooperates with Yokohama Water Business Association* and Yokohama Water Company founded by YWWB.</p> <p>*Network of local companies, established in 2011, to share information and carry out promotion for water-related overseas businesses in both water supply and sewage sectors through the public-private partnership. By 2017, it is registered by 165 local companies.</p>
Primary projects	<p>1973- : Started staff dispatch as an expert and a member of research group. By 2017, YWWB has dispatched more than 400 staffs to over 30 countries.</p> <p><u>Major destination of dispatches:</u> Vietnam (Thua Thien Hue Water Supply Joint Stock Company etc.), Indonesia (Tirtanadi Medan Regional Water Supply Company etc.), Thailand (Thai Metropolitan Waterworks Authority, Thai Provincial Waterworks Authority) etc.</p> <p>1987- : Started own trainee acceptance program (Thai Metropolitan Waterworks Authority, Thai Provincial Waterworks Authority, Department of Public Works, Indonesia, Tirtanadi Medan Regional Water Supply Company, Shanghai Water Authority, etc.)</p> <p>By 2017, YWWB has accepted more than 3,700 trainees from over 130 countries and regions</p> <p><The current target countries of cooperation> Vietnam 2003 – 2006 JICA Partnership Program: “Improvement of Water Utility Management” in Hue City and Ho Chi Minh City</p>

	<p>2007 – 2009 JICA Technical Cooperation: “ Human Resources Development for Water sector in the middle region of Vietnam”</p> <p>2009- Activities based on “Memorandum of Understanding between YWWB and Vietnamese water companies”</p> <p>2010 – 2013 JICA Technical Cooperation: “Capacity Development for Urban Water Supply Utilities in the Central Region”</p> <p>2013 – 2016 JICA Partnership Program: “Vietnam-Yokohama Safety Water Supply Management Project”</p> <p>2017 – Bilateral activities based on “Memorandum of Understanding Between Yokohama Waterworks Bureau and Thua Thien Hue Water Supply Joint Stock Company”</p> <p>Laos</p> <p>2012 – 2017 JICA Technical Cooperation: “Capacity Development Project for Improvement of Management Ability of Water Supply Authorities”</p> <p>African region</p> <p>2008 – Accept the trainees of JICA Knowledge Co-creation Program “African Region Urban Waterworks Engineering” (Conducted in collaboration with Yokohama Water Company)</p> <p>2013 – Staff dispatches by JICA volunteer program (17 YWWB staffs were dispatched by 2017.) <u>Destination of dispatches:</u> 2013 : Zanzibar Water Corporation (Tanzania), 2014 – : Blantyre Water Board (Malawi).</p>	
Primary Recipient Utilities		
Name of utility	Thua Thien Hue Water Supply Joint Stock Company	Case No. 2

Name of utility	Saitama City Waterworks Bureau (SCWB)																	
Purpose	By engaging in a wide range of water supply expansion projects in other countries, the Saitama City Waterworks Bureau (SCWB) expects its employees to have broader perspectives, develop awareness of continuous service improvement, and enhance their communication skills in challenging environments.																	
Activities	<p>SCWB has provided technical assistance to Laos for more than 20 years. The first technical assistance was provided in 1992 when the utility participated in a study organized by the Japan International Corporation of Welfare Service (JICWELS), to make concrete plans for providing such assistance.</p> <p>SCWB's involvement in Laos has been primarily made through the technical cooperation projects of the Japan International Cooperation Agency (JICA). But the utility has also strengthened its relation with Laos in their own way, by hosting international seminars in Vientiane Capital and Saitama City, as well as by developing staff exchange programs with the utility of Vientiane Capital.</p> <p>Owing to its strong ties with Laos, SCWB has also played an important role in connecting various Japanese organizations to relevant authorities in Laos for related cooperation programs as well as in supporting their activities.</p>																	
Primary projects	<p>Laos</p> <table border="0"> <tr> <td data-bbox="427 1133 496 1167">1992</td> <td data-bbox="603 1133 1353 1167">JICWELS investigation on the water supply service in Laos</td> </tr> <tr> <td data-bbox="427 1173 496 1207">1994</td> <td data-bbox="603 1173 1326 1245">Dispatched SCWB engineers for JICA project to support development of water supply improvement plans</td> </tr> <tr> <td data-bbox="427 1252 568 1285">2002-2005</td> <td data-bbox="603 1252 1251 1323">JICA Technical cooperation project - Capacity Development of Water Supply System</td> </tr> <tr> <td data-bbox="427 1330 568 1364">2006-2008</td> <td data-bbox="603 1330 1358 1402">JICA Partnership Program for Improvement of Distribution Pipeline Maintenance and Management</td> </tr> <tr> <td data-bbox="427 1408 568 1442">2010-2011</td> <td data-bbox="603 1408 1401 1480">Friendship Program between SCWB and the Vientiane Capital Water Supply State Enterprise (VWSSE)</td> </tr> <tr> <td data-bbox="427 1487 496 1520">2011</td> <td data-bbox="603 1487 1267 1559">Strengthening of Zao Water Supply Sector Seminar in Vientiane Capital</td> </tr> <tr> <td data-bbox="427 1565 496 1599">2012</td> <td data-bbox="603 1565 1366 1637">Saitama City Waterworks International Expansion Seminar in Saitama City</td> </tr> <tr> <td data-bbox="427 1644 568 1677">2012-2017</td> <td data-bbox="603 1644 1321 1753">JICA Capacity Development Project for Improvement of Management Ability of Water Supply Authorities (MaWaSU Project)</td> </tr> </table>		1992	JICWELS investigation on the water supply service in Laos	1994	Dispatched SCWB engineers for JICA project to support development of water supply improvement plans	2002-2005	JICA Technical cooperation project - Capacity Development of Water Supply System	2006-2008	JICA Partnership Program for Improvement of Distribution Pipeline Maintenance and Management	2010-2011	Friendship Program between SCWB and the Vientiane Capital Water Supply State Enterprise (VWSSE)	2011	Strengthening of Zao Water Supply Sector Seminar in Vientiane Capital	2012	Saitama City Waterworks International Expansion Seminar in Saitama City	2012-2017	JICA Capacity Development Project for Improvement of Management Ability of Water Supply Authorities (MaWaSU Project)
1992	JICWELS investigation on the water supply service in Laos																	
1994	Dispatched SCWB engineers for JICA project to support development of water supply improvement plans																	
2002-2005	JICA Technical cooperation project - Capacity Development of Water Supply System																	
2006-2008	JICA Partnership Program for Improvement of Distribution Pipeline Maintenance and Management																	
2010-2011	Friendship Program between SCWB and the Vientiane Capital Water Supply State Enterprise (VWSSE)																	
2011	Strengthening of Zao Water Supply Sector Seminar in Vientiane Capital																	
2012	Saitama City Waterworks International Expansion Seminar in Saitama City																	
2012-2017	JICA Capacity Development Project for Improvement of Management Ability of Water Supply Authorities (MaWaSU Project)																	
Primary Recipient Utilities																		
Name of utility	Vientiane Capital Water Supply State Enterprise	Case No. 3																

Name of utility	Chiba Prefectural Waterworks Bureau (CPWB)	
Purpose	At the request of the Japan International Cooperation Agency (JICA), the Chiba Prefectural Waterworks Bureau (CPWB) has sent its employees abroad for technical cooperation, utilizing its expertise and experiences to help water supply service in another country. The utility has also hosted training programs in Japan for visiting foreign water professionals.	
Activities	Engineers of CPWB have worked in East Timor since 2012 to help improve the country's water supply. Owing to this cooperation, residents in portions of the capital Dili now have 24-hour access to water supply.	
Primary projects	Timor Lest 2012 – Send employees to Timor Lest	
Primary Recipient Utilities		
Name of utility	National Directorate for Water Services, General Directorate for Water and Sanitation, Ministry of Development and Institutional Reform in Timor Leste	Case No.5

1.2 EXAMPLES OF INTERNATIONAL COOPERATION FOR FIVE WATER SUPPLY UTILITIES ABROAD

Table 1. List of international cooperation

Case No.	Supporting utility in Japan	Recipient utility in other countries
1	Water and Sewer Bureau of the City of Kitakyushu	Haiphong Water Joint Stock Company in Vietnam
2	Yokohama City Waterworks Bureau	Thua Thien Hue Water Supply Joint Stock Company in Vietnam
3	Saitama City Waterworks Bureau	Three major state enterprises of water supply in Laos
4	Water and Sewer Bureau of the City of Kitakyushu	Eight provincial cities in Cambodia
5	Chiba Prefectural Waterworks Bureau	National Directorate for Water Services, General Directorate for Water and Sanitation, Ministry of Development and Institutional Reform in Timor Leste

Figure 1. Locations of recipient countries and their basics

