Name of Organization

Yokohama Waterworks Bureau, City of Yokohama

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I nua Thien Hue Water Supply Joint Stock Company (HueWACO), etc., viet Nam	Outline and Objectives	Company (HueWACO), Yokohama Waterworks Bureau (YWWB) concluded 2 parties' MoU with HueWACO in July, 2017. Based on this MoU, YWWB has carried out technical cooperation such as improvement of water treatment plants and program development of training courses as well as supporting business operation in Vietnam by member companies of Yokohama Water Business Association (YWBA) *Association of companies aiming to promote the oversea business operation of water supply and sewerage. Established in 2011, registered by 176 companies as of March, 2020. 1. Type of activities: (1) Staff dispatch from YWWB (for survey, discussion, technical assistance and workshop) - In June, 2018 and May, 2020, for a week, to carry out technical cooperation in the fields of water supply/distribution, water purification/quality and facility management. (2) Trainee acceptance from HueWACO (for lectures, observation and discussion) - Two management staff in March, 2018, with the aim of developing an action plan, visiting a pipeline training facility and receiving lectures on human resource development. - Four trainees in September, 2018, training about water supply/distribution and water purification/quality. - The Chairman of HueWACO and the executive of Hue Provincial People's Committee visiting YWWB and mutually confirming the progress of cooperation activities. (3) Business support - YWWB, YWBA and HueWACO co-organized "Seminar on Water Business Promotion" in Hue city, Vietnam in 2017, participated by 165 participants from 58 organizations. In the seminar, 6 member companies of YWBA delivered presentations and exhibited their technologies. -YWWB offered a series of business-matching opportunities between HueWACO and YWBA members on occasions not only in Yokohama and also at IWA Tokyo Conference in Sept. 2018 and also at annually-held VietWater in Ho Chi Minh city.
Countries	Target (Cooperator) Countries	Thua Thien Hue Water Supply Joint Stock Company (HueWACO), etc., Viet Nam

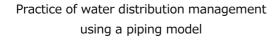


Discussion on water distribution management

Name of Organization Yokohama Waterworks Bureau, City of Yokohama

Name of Activity	JICA Knowledge Co-creation program "African Region Urban Waterworks Engineering"
Implementation Period	June 24 to July 25, 2019
Main Organizer	JICA, Yokohama Water Co.,Ltd., Yokohama Waterworks Bureau (YWWB)
Outline and Objectives	Responding to the 4th Tokyo International Conference on African Development (TICAD IV) held in Yokohama in May 2008, Yokohama Waterworks Bureau (YWWB) contracted JICA to implement the training of the "Knowledge Co-creation Program" for waterworks professionals from African countries. By the end of FY 2019, YWWB implemented 13 these courses and accepted 133 participants from 30 countries in Africa. In Africa, many countries still have problems with water supply, which are also featured in the TICAD every time. Many of the participating countries are confronted with the challenges of high NRW of 30 to 50% due to water leakage, illegal connection etc. YWWB offered a variety of lectures in the technical fields such as: water purification and quality management, distribution management, water supply planning and O&M, also in the administrative fields like water tariff, customer services and financial planning. During the training courses, all the participants made the action plans to solve their own issues based on what they learned in the lectures and practices, and brought them back to their countries to make a real difference on the ground. Contents of training program in 2019: Observation of water sources and water facilities such as water purification plants and lectures on water treatment mechanism and water quality management Introduction of YWWB's activities such as Water Safety Plan, asset management, etc. Lecture on NRW reduction and practice of leakage detection in the YWWB training yard Learning about the history of Yokohama waterworks in the Waterworks Commemoration Hall Lecture on mapping system, distribution management and water meter management Observation of pipe installation site and lecture of construction management Exchange Program with Japanese pupils (in the "Water Class" at a primary school) Management plan, meter reading, billing collection and customer service
Target (Cooperator) Countries	In 2019, YWWB accepted 8 participants: Benin (1), Ethiopia (1), Kenya (1), Malawi (2), Nigeria (1), Rwanda (1), Uganda (1)
Countries	Inigeria (1), itwaniaa (1), oganiaa (1)





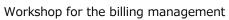


Discussion on data management between YWWB staff and African participants

Name of Organization	Yokohama Waterworks Bureau, City of Yokohama
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Name of Activity	Short-term dispatch of YWWB staff to Malawi (under JICA Volunteer Program)
Implementation Period	January 19 to February 29, 2020 (6 weeks)
Main Organizer	JICA, Yokohama Waterworks Bureau (YWWB)
Outline and Objectives	Yokohama Waterworks Bureau (YWWB) dispatches staff to Blantyre Water Board (BWB) in Malawi every year since 2014 utilizing JICA Volunteer program. In the first three years from 2014 to 2016, 9 staff members were dispatched to BWB, and worked on improvement of leakage detection and bill collection. After that, in response to a strong request from BWB for continuation of the program, YWWB dispatched 11 staff from 2017 to 2020. Specific Activities in FY 2019: The team of this year selected Baluti area as a model area of Blantyre city, and instructed how to reduce non-revenue water and to develop a pipeline map. In addition, the team implemented hydraulic analysis and water use survey in the model area. As for construction management, the current challenges and the possible solutions were discussed in a workshop, and they developed a SOP for construction management. As for tariff management, their manual was updated and the current challenges and the possible solutions were discussed in a workshop.
Target (Cooperator) Countries	Blantyre Water Board (BWB), Malawi



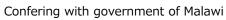




Water pressure survey in the model area

Name of Activity	JICA Technical Cooperation Project "The Project for Strengthening the Capacity of Non-Revenue Water Reduction for Lilongwe Water Board(LiSCap)"
Implementation Period	June 2019 to July 2023
Main Organizer	JICA, Yokohama Water Co.,Ltd., KYOWA ENGINEERING CONSULTANTS Co.,Ltd Yokohama Waterworks Bureau (YWWB)
	Yokohama Waterworks Bureau (YWWB) has dispatched a long-term expert since June 2019 to support JICA Technical Cooperation Project "The Project for Strengthening the Capacity of Non-Revenue Water Reduction for Lilongwe Water Board (LiSCap)". A director of YWWB was assigned to this long-term expert as a chief advisor of the project. YWWB also collaborates with Kyowa Consultants Co., Ltd. and Yokohama Water Co., Ltd., members of the Yokohama Water Business Association. This "Team Yokohama" is now working on improving water supply business in Malawi. In this project, the team instructs strategic planning, methods and knowledge sharing for reducing non-revenue water (NRW) due to leakage, illegal connection, etc.
Outline and Objectives	Specific Activities in FY 2019: In June 20, YWWB dispatched a long-term expert to Malawi as a chief advisor of this project for general project management and NRW management. In this project, the team is now analyzing the current NRW reduction activities implemented by Lilongwe Water Board (LWB), and has started a baseline survey in selected pilot areas. In YWWB, a support team was set up to support the chief advisor. In addition, YWWB dispatched a delegation to the workshop held in Lilongwe City from 23 to 26 September, and introduced the water supply business and activities of YWWB. At the training course in Japan from 23 to 30 October, executives of LWB were invited to Yokohama to receive lectures on NRW measures, water distribution management, customer management, business planning, etc.
Target (Cooperator) Countries	Lilongwe Water Board(LWB) , Malawi







Instruction of setting water meter

Name of Organization Yokohama Waterworks Bureau, City of Yokohama

Name of Activity	Water tank truck donation to the Blantyre Water Board in Malawi
Implementation Period	2017 to 2019
Main Organizer	Yokohama Waterworks Bureau
Outline and Objectives	Under JICA short-term volunteer scheme, Yokohama Waterworks Bureau (YWWB) dispatched staff to Blantyre Water Board (BWB) in Malawi since 2014 to support BWB's on-site activities. One of the staff who was dispatched there proposed to donate YWWB's water tank trucks to BWB, which were at the time of renewal to help respond to frequent cuts of water supply in Blantyre city. YWWB donated two water tank trucks with the cooperation of BE FORWARD CO.,LTD. for the overseas transportation from Japan to Malawi. Expected outcome by utilizing donated water tank trucks Due to the elevation difference of 800 meters from BWB's water source to the city center, water supply in the city requires a lot of electricity for pumping. Therefore, once power outage occurs, the water will be cut off for a long time on a daily basis, which YWWB's dispatched staff sometimes witnessed during their on-site activities. Now, with the donated water tank trucks, BWB can supply water even during water cut and expect to recover their trust from their customers by improving their services. Specific Activities in 2019: ·Ceremony of donation: June 21, 2019 ·Transportation of trucks
Target (Cooperator) Countries	the Blantyre Water Board ,Malawi





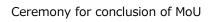
Ceremony of water tank truck donation

Utilization of water tank truck in Blantyre

Name of Organization	Yokohama Waterworks Bureau, City of Yokohama
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Name of Activity	Technical Exchanges based on Memorandum of Understanding between Water and Sanitation Agency Faisalabad and Yokohama Waterworks Bureau
Implementation Period	October 2019 to March 2020 (Update every fisical year)
Main Organizer	Yokohama Waterworks Bureau
Outline and Objectives	Yokohama Waterworks Bureau (YWWB) had supported JICA Technical Cooperation for Development Planning "The Project for water supply, sewerage and drainage master plan of Faisalabad" cooperating with Yokohama Water Co., Ltd., (July 2016 - June 2019). Through this activity, YWWB received a request from the Managing Director of Water and Sanitation Agency Faisalabad (WASA-F) for the further cooperation between the city governments from the perspective of human resources development. In order to contribute to human resources development with each other and water business promotion, YWWB and WASA-F signed a MoU on technical exchange in October 2019, and conducted two training sessions. Contents of MOU (1) Trainee acceptance from WASA-F (once a year, 4 staff members, 2 weeks)
	(2) Follow-up of the training by YWWB staff's dispatch to WASA-F (upon necessity) (3) Introduction of products and technologies of the Yokohama Water Business Association (YWBA) member companies
	Specific Activities in 2019:
	- Invitation of executives: (Managing Director & Vice Chairman, WASA-F): Sep. 30 to Oct. 5, 2019
	 MoU signing ceremony: Oct. 2. 2019 Business matching opportunities between WASA-F and five member companies of YWBA
	- First trainee acceptance (2 managers and 2 staff members): Jan. 19 to Feb. 1, 2020
	- Business matching opportunities between WASA-F and five member companies of YWBA
Target (Cooperator) Countries	Water and Sanitation Agency Faisalabad (WASA-F) ,Pakistan







Training of leakage water investigation at YWWB