Name of Organization	Waterworks Bureau, City of Sapporo
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Name of Activity	JICA Knowledge Co-Creation Program "Comprehensive Engineering on Water Supply Systems: Practical Training for Water Supply System(B)"
Implementation Period	3 June- 9 Aug. ,2019
Main Organizer	JICA Hokkaido, Sapporo Waterworks Bureau, HIECC
Outline and Objectives	This course aims to improve the capacity for waterworks engineer to tackle their own bottlenecks to supply safe and continuous water to their people by experienced Sapporo City's experts or professional engineer. The participants of this course acquire practicable knowledge and techniques of waterworks engineering through lectures, site visits, discussions and consultations with experienced Japanese experts and professional engineer. Main programs of this training course are as follows. Outline of water supplies in Japan and Sapporo Introduction to water resources and water intake Integrated Operation of water purification plant(Control Room, back washing of filter, jar-test) Pipeline maintenance Countermeasure against water leakage Pipe manufacturing plant (ductile & PE) Network analysis of distribution pipes (EPANET) Water demand forecasting etc.
Target (Cooperator) Countries	Afghanistan, Azerbaijan, Iraq, Kenya, Nepal, Sri Lanka, Sudan (TOTAL 9 participants)





Name of Organization	Bureau of Waterworks, Tokyo Metropolitan Government
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Name of Activity	JICA Technical Cooperation Projects "The Project for Improvement of Water
	Supply Management of YCDC"
Implementation Period	2015-2020
Main Organizer	JICA, Tokyo Waterworks Bureau, Fukuoka City Waterworks Bureau, TSS Tokyo Water Co.,Ltd.
Outline and Objectives	In Yangon, while construction of waterworks facilities utilizing yen loans is underway, JICA is also conducting a technical cooperation project associated with a yen loan project, to strength the organizational capacity of Yangon City Development Committee in parallel with the facility construction for securing sustainable water supply service. Tokyo Waterworks and Fukuoka City's Waterworks Bureau conduct seminars and training in Yangon and Japan. FY2019: Dispatch of Lecture (From 15 January through 18 January,2020)
Target (Cooperator) Countries	Myanmar Yangon City Development Committee





Name of Organization	Bureau of Waterworks, Tokyo Metropolitan Government
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Name of Activity	Non-revenue water reduction project in Yangon
Implementation Period	2016-2022 (scheduled)
Main Organizer	Tokyo Waterworks Bureau, TSS Tokyo Water Co.,Ltd., and etc.
Outline and Objectives	Based on the results of the non-revenue water reduction pilot project implemented in Yangon in FY 2014, we expanded the area in some parts of Yangon and implemented infrastructure development project by utilizing ODA (project cost: 1.8 billion yen). Furthermore, we plan to carry out maintenance and management projects funded separately by Yangon City from the district where infrastructure development is completed.
Target (Cooperator) Countries	Myanmar Yangon City Development Committee





Name of Organization	Bureau of Waterworks, Tokyo Metropolitan Government
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Name of Activity	JICA Partnership Program "Water Supply Control and NRW(Non-Revenue Water)
	Manegement Technology in Malaysia"
Implementation Period	August 2017- March 2020
Main Organizer	Tokyo Waterworks Bureau, TSS Tokyo Water Co.,Ltd., and etc.
Outline and Objectives	In Labuan Island, Malaysia, which faces the high non-revenue water rate, we implement technical cooperation by offering technical guidance and providing Japanese-made materials and equipment to improve Labuan Water's personnel skill of managing the water supply control by using SCADA and reduce non-revenue water. FY2019: Training in Japan (From 15 April through 24 April)
Target (Cooperator) Countries	Ministry of Energy and Natural Resources, Malaysia





Name of Organization	Bureau of Waterworks, Tokyo Metropolitan Government
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Name of Activity	Asian Waterworks Utilities Network of Human Resources Development (A1-HRD)
Implementation Period	10-12 September 2019
Main Organizer	Bureau of Waterworks, Tokyo Metropolitan Government :The members host a meeting by turns.
Outline and Objectives	A1-HRD is an initiative among waterworks utilities of Asian cities to contribute to the improvement of waterworks throughout Asia by exchanging information and know-how about human resources development and training. Main Activities: -Annual conference on HRD which includes presentation and Q&A session, sharing of ideas, open discussion and technical site visitsSharing ideas on HRD through Newsletters and a website. The 12th conference was held in Bangkok, Thailand in 2019.
Target (Cooperator) Countries	Korea : The Office of Waterworks, Seoul Metropolitan Government K-water Academy Taiwan : Taiwan Water Corporation (TWC), Thailand : Metropolitan Waterworks Authority, Thailand (MWA) Japan : Bureau of Waterworks, Tokyo Metropolitan Government





Name of Organization

Yokohama Waterworks Bureau, City of Yokohama

Name of Activity	Activities based on Memorandum of Understanding between Yokohama Waterworks Bureau and Thua Thien Hue Water Supply Joint Stock Company
Implementation Period	July 2017 to December 2019
Main Organizer	Yokohama Waterworks Bureau
Outline and Objectives	Based on 15 years' cooperative relationship with Thua Thien Hue Water Supply Joint Stock 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.
	- Development of distribution pipe network - Countermeasure for non-revenue water - Improvement of purification method/ SCADA system/ Data management
Target (Cooperator) Countries	Thua Thien Hue Water Supply Joint Stock Company (HueWACO), etc., Viet Nam

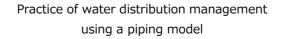


Discussion on water distribution management

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)





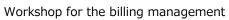


Discussion on data management between YWWB staff and African participants

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



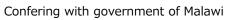




Water pressure survey in the model area

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 Organizor	JICA, Yokohama Water Co.,Ltd., KYOWA ENGINEERING CONSULTANTS Co.,Ltd
Main Organizer	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 EV 2010.
	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)	Lilongwe Water Board(LWB) , Malawi
Countries	





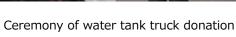


Instruction of setting water meter

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







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
	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
Outline and Objectives	(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

Name of Organization

Waterworks Bureau, City of Kawasaki

Name of Activity	The Project for Improvement of Management Capacity of Water Supply Sector (MaWaSU 2)
Implementation Period	21 May,2018 - (Dispatch long-term expert) 10 Jun - 7 Sep, 2019 (Dispatch short-term expert / Water quality) 16 Sep - 14 Dec, 2019 (Dispatch short-term expert / Civil engineering)
Main Organizer	JICA
Outline and Objectives	This Project is purpose to "The foundation necessary for strengthening the water supply sector management system and Water Supply State Enterprise's(WSSE) capacity is formulated" to achieve Lao national goals. The term of the project is from 2018 to 2023, we dispatch long-term and short-term engineers. Besides, we concluded an agreement among JICA and 4 local governments (Saitama City, Saitama Prefecture, Yokohama City) including Kawasaki City participating in the project in order to work in close cooperation.
Target (Cooperator) Countries	Department of Water Supply (DWS), Ministry of Public Works and Transport (MPWT) of Lao PDR / DWS of MPWT, Vientiane Capital Water Supply State Enterprise (NPNL), Luang Prabang Provincial Water Supply State Enterprise (NPLB) and Khammouane Provincial Water Supply State Enterprise (NPKM) as the pilot water supply state enterprises (WSSEs), Department of Public Works and Transport (DPWT)s of Vientiane Capital, Luang Prabang, Khammouane and WSSEs and DPWTs of other provinces
Photos	





Name of Organization Pu	ublic Enterprises Agency of Kanagawa Prefectural Government
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Name of Activity	MOU with Lang Son Province, Vietnam
Implementation Period	November 2018 - December 2025
Main Organizer	Public Enterprises Agency of Kanagawa Pref. Government (PEA-KPG)
Outline and Objectives	PEA-KPG signed "MOU on Consideration of the Possibility of a Cooperative Relationship in the Field of Water Supply" with Lang Son Province, Vietnam in 2017 to consider methods and contents of cooperation. In response to the counterpartner's suggestion posed during the discussion to proceed an approach to decrease non-revenue water, we developed the MOU to "MOU on Technical Cooperation in Water Supply" in 2018. Based on the new MOU, PEA-KPG started sending our personnel in a short term for training and field study jointly with staffs of Lang Son Water Supply and Drainage JSC mainly on water volume management, as well as continuing training programs in Kanagawa. In FY2019, we carried out a training program regarding water distribution analysis and network calculation, etc., as well as selecting pilot areas and specifying locations for new meters as a preparation for water volume analysis in the province. Practice in FY 2019 Assignment for a short-term training and field study in Lang Son 1. April 21 - 25, 2019 5 staffs 2. January 12 - 17, 2020 6 staffs Invitation to the Administrative Policy Program of Kanagawa Prefecture October 7 - 25, 2019 3 trainees (including a trainee from another province)
Target (Cooperator) Countries	Lang Son Water Supply and Drainage JSC





Name of Organization Chiba Prefectural Public Enterprises Bureau

21 August 2017 - 20 August 2019 (Long term technical expert dispatching) 11 November - 19 November 2017 (Short term technical experts dispatching) 2 February - 25 February 2018 (Short term technical experts dispatching) 25 January - 17 February 2019 (Short term technical experts dispatching) 25 July 2019 - 25 July 2020 (Long term technical expert dispatching) Main Organizer JICA The government of the Democratic Republic of Timor-Leste (RDTL) set a goal aiming safe and clean water supply for all and 24hours/7days water supply especially in 12 urban cities by 2030. However, the water coverage rate was still at 70% (95% in urban, 61% in rural area) as of 2012 despite various supports from the Government of Japan. Therefore, the water supply sector of RDTL has been in need of continuous supports in order to improve the water supply system. In response to JICA's request, Chiba Prefectural Public Enterprises Bureau (CPPEB) has been dispatching technical experts to improve water supply system in RDTL. [Dispatch of long term experts] CPPEB dispatched three technical experts to RDTL from April 2012 through August 2019 in response to JICA's request. The experts have improved water supply with staffs of the water sector in RDTL and achieved 24hours/7days water supply in some areas. From July 2019 to July 2020,a fourth expert has been dispatched continuously trying to enlarge 24hours/7days water supply areas.	Name of Activity	Dispatch Experts to The Democratic Republic of Timor-Leste
• The government of the Democratic Republic of Timor-Leste (RDTL) set a goal aiming safe and clean water supply for all and 24hours/7days water supply especially in 12 urban cities by 2030. • However, the water coverage rate was still at 70% (95% in urban, 61% in rural area) as of 2012 despite various supports from the Government of Japan. • Therefore, the water supply sector of RDTL has been in need of continuous supports in order to improve the water supply system. • In response to JICA's request, Chiba Prefectural Public Enterprises Bureau (CPPEB) has been dispatching technical experts to improve water supply system in RDTL. [Dispatch of long term experts] • CPPEB dispatched three technical experts to RDTL from April 2012 through August 2019 in response to JICA's request. • The experts have improved water supply with staffs of the water sector in RDTL and achieved 24hours/7days water supply in some areas. • From July 2019 to July 2020,a fourth expert has been dispatched continuously trying to enlarge 24hours/7days water supply areas.	Implementation Period	19 May - 15 June 2014(Short term technical experts dispatching) 27 July 2015 - 26 July 2017 (Long term technical expert dispatching) 26 October - 4 November 2015(Short term technical experts dispatching) 8 January - 7 February 2016(Short term technical experts dispatching) 13 January - 5 March 2017(Short term technical experts dispatching) 21 August 2017 - 20 August 2019 (Long term technical expert dispatching) 11 November - 19 November 2017 (Short term technical experts dispatching) 2 February - 25 February 2018 (Short term technical experts dispatching) 25 January - 17 February 2019 (Short term technical experts dispatching)
supply for all and 24hours/7days water supply especially in 12 urban cities by 2030. However, the water coverage rate was still at 70% (95% in urban, 61% in rural area) as of 2012 despite various supports from the Government of Japan. Therefore, the water supply sector of RDTL has been in need of continuous supports in order to improve the water supply system. In response to JICA's request, Chiba Prefectural Public Enterprises Bureau (CPPEB) has been dispatching technical experts to improve water supply system in RDTL. [Dispatch of long term experts] CPPEB dispatched three technical experts to RDTL from April 2012 through August 2019 in response to JICA's request. The experts have improved water supply with staffs of the water sector in RDTL and achieved 24hours/7days water supply in some areas. From July 2019 to July 2020,a fourth expert has been dispatched continuously trying to enlarge 24hours/7days water supply areas.	Main Organizer	JICA
i) Technical support for operation and water quality control improvement in water purification plants. ii)Technical support for improvement in water distribution system for 24hours/7days water supply district expansion. iii)Support for administering water service business by independent accounting. [Dispatch of short term experts] •CPPEB has dispatched 25 technical experts in total for short term since 2014. (Detail activities are as follows) i)Support for administration and management of the organization. ii)Technical support for the efficient water supply system and understanding of non-revenue water. iii)Technical support for water quality check and chemical doses. iv)Technical support for operation and maintenance of water supply facilities. v)Technical support for usage of water leak detector and metal detector.	Outline and Objectives	supply for all and 24hours/7days water supply especially in 12 urban cities by 2030. However, the water coverage rate was still at 70% (95% in urban, 61% in rural area) as of 2012 despite various supports from the Government of Japan. Therefore, the water supply sector of RDTL has been in need of continuous supports in order to improve the water supply system. In response to JICA's request, Chiba Prefectural Public Enterprises Bureau (CPPEB) has been dispatching technical experts to improve water supply system in RDTL. [Dispatch of long term experts] -CPPEB dispatched three technical experts to RDTL from April 2012 through August 2019 in response to JICA's request. The experts have improved water supply with staffs of the water sector in RDTL and achieved 24hours/7days water supply in some areas. -From July 2019 to July 2020,a fourth expert has been dispatched continuously trying to enlarge 24hours/7days water supply areas. (Detail activities are as follows.) i) Technical support for operation and water quality control improvement in water purification plants. ii)Technical support for improvement in water distribution system for 24hours/7days water supply district expansion. iii)Support for administering water service business by independent accounting. [Dispatch of short term experts] -CPPEB has dispatched 25 technical experts in total for short term since 2014. (Detail activities are as follows) i)Support for administration and management of the organization. ii)Technical support for the efficient water supply system and understanding of non-revenue water. iii)Technical support for water quality check and chemical doses. iv)Technical support for operation and maintenance of water supply facilities.
I he Democratic Renublic of Limor-Leste	Target (Cooperator) Countries	The Democratic Republic of Timor-Leste



Instructions to RDTL staffs on how to repair water leaking



Discussion on how to replace water facilities

Name of Organization	Saitama City Waterworks Bureau
Name of Organization	Saitama City Waterworks Bureau

Name of Activity	The Project for Improvement of Management Capacity of Water Supply Sector of Lao PDR (MaWaSU2)
Implementation Period	May 2018 ~ May 2023
Main Organizer	JICA
Outline and Objectives	This project is to contribute to formulate the foundation necessary for strengthening the water supply sector management system and Waterworks operation ability of Water Supply State Enterprise(WSSE) ,and 3 pilot WSSEs practice to the other WSSEs in Lao toward to improve population served. We dispatch experts with Kawasaki-city,Yokohama-city,Saitama-prefecture. [FY2018 Dispatch experts] 21st May 2018 ~20th May 2021 (Long-term expert[Chief advisor]:1 staff) 14th October 2018 ~ 14th December 2018 (Short-term expert[Civil Engineering]:1 staff) [FY2019 Dispatch experts,Acceptance Trainees] 17th June 2019 ~ 14th September 2019 (Short-term expert[Civil Engineering]:1 staff) 6th January 2020 ~ 21st March 2020 (Short-term expert[Water quality]:1 staff) 21st August 2019(Acceptance:6 trainees) [Detail about JICA technology cooperation project] MaWaSU1 ⇒https://www.jica.go.jp/project/english/laos/012/index.html MaWaSU2 ⇒https://www.jica.go.jp/project/english/laos/023/index.html
Target (Cooperator) Countries	Laos / Department of Water Supply , Ministry of Public Works and Transport 、 Pilot WSSEs(Vientiane Capital , Luang Prabang Provincial , Khammouane Provincial) and Department of Public Works and Transort(DPWT) 、other provinces WSSE and DPWT





Name of Organization	Saitama City Waterworks Bureau
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Name of Activity	The Project for Improvement of Pipeline Management and Maintenance in Water Supply State Enterprises of Lao PDR
Implementation Period	June 2018 ~ June 2021
Main Organizer	JICA
Outline and Objectives	This project is to contribute through dispatch staff and trainee acceptance to support of technique for improve about pipe construction management ,pipe construction standards, pipe selection and management toward to reduce water leakage. [FY2018 Dispatch staffs. Acceptance trainees] Dispatch: 4 times(9 weeks). 12 staffs Acceptance:1 time(2.5 weeks). 3 trainees [FY2019 Dispatch staffs. Acceptance trainees] Dispatch: 4 times(9 weeks). 11 staffs Acceptance:1 time(2.5 weeks). 4 trainees
Target (Cooperator) Countries	Laos / Department of Water Supply , Ministry of Public Works and Transport 、 Vientiane Capital Water Supply State Enterprise(WSSE), Luang Prabang Provincial WSSE, Khammouane Provincial WSSE
IPHOLOG	



Name of Organization Public Enterprise Bureau, Saitama Prefectural Government

The Project for Improvement of Management Capacity of Water Supply Sector
May 2018 - May 2023
JICA
<outline> JICA web page https://www.jica.go.jp/project/english/laos/023/index.html <cooperation contents=""> We are cooperating with dispatching experts of civil engineering and water quality management, and accepting trainees, based on the agreement on cooperation of the project which we signed in May 2018. <results 2019="" fy="" in=""> Dispatch of expert 1 engineer of equipment (August 5 - September 14) 1 engineer of equipment (September 9 - October 19) 1 engineer of water quality management (November 4 - December 14) Participation in conference 2 staff (January 27 - January 31) Acceptance of Trainees 8 trainees (August 20)</results></cooperation></outline>
Laos / Department of Water Supply, Ministry of Public Works and Transport, Vientiane Capital Water Supply State Enterprise, Luang Prabang ProvincialWater Supply State Enterprise, Khammouane Provincial Water Supply StateEnterprise and other



Guidance of water treatment skill



Workshop

Name of Organization	Nagoya City Waterworks and Sewerage Bureau
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Name of Activity	The JICA Training and Dialogue Programs Non-Revenue Water Management(Leakage Control) A
Implementation Period	19 September $\sim $ 30 October 2019 (The training in Nagoya was 7 days)
Main Organizer	JICA
Outline and Objectives	This program aims to Capacity Development for Non Revenue Water management of Developing countries engineers. The main training programs in Nagoya are as follows; Leakage Control in Nagoya Water Distribution Pipelines Renewal Planning Pipeline Design Field Training for Joining Water Pipes
Target (Cooperator)	Afghanistan, Ethiopia, Nepal, Nigeria, Philippines, Sri Lanka, Tanzania, Zambia,
Countries	Zimbabwe
Photos	



Name of Organization	Nagoya City Waterworks and Sewerage Bureau
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Name of Activity	The JICA Training and Dialogue Programs
	Non-Revenue Water Management(Leakage Control) B
Implementation Period	1 October \sim 13 December 2019
Main Organizer	JICA
	This program aims to Capacity Development for Non Revenue Water
	management of Developing countries engineers.
	The main training programs are as follows;
	•Leakage Control in Nagoya
	Water Distribution Planning
Outline and Objectives	·Water Distribution Pipelines Renewal Planning
	•Pipeline Design
	•Field Training for Joining Water Pipes
	•Water Meter Readings
	•Public Relations
	Site visits (Intake, Water Purification Plant, etc.)
Target (Cooperator)	
Countries	Egypt (2), Jordan (2), Palestine (2), Tunisia (2), Iraq
Photos	· · · · · · · · · · · · · · · · · · ·



Name of Organization	Nagoya City Waterworks and Sewerage Bureau
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Name of Activity	JICA Technical Cooperation Project "The Project for Enhancement of Operational Efficiency and Asset Management Capacity of Regional Support Center-Western South of NWSDB in Sri Lanka"
Implementation Period	1 September 2018∼ 31 August 2021
Main Organizer	JICA
Outline and Objectives	Nagoya City Waterworks and Sewerage Bureau dispatches experts and conducts training in Japan, in coopration with JICA Technical Cooperation Project to enhance the pipelines management work in National Water Supply and Drainage Board (NWSDB) in Sri Lanka since fiscal 2018. The contents of implementation in fiscal 2018 of Nagoya are as follows; •Dispatches expert (Long-term): 1 person (1 September 2018 - 21 March 2020) •Dispatches expert (Short-term): 2 persons (28 July - 10 August, 5 - 25 January) •Dispatches JICA Study Team: 1 person (21 - 25 January) •Training in Japan: 8 persons (17 - 28 February)
Target (Cooperator) Countries	National Water Supply and Drainage Board : NWSDB
Photos	





Name of Organization	Nagoya City Waterworks and Sewerage Bureau
Name of Organization	Nagoya City Waterworks and Sewerage Bureau

Name of Activity	JICA Partnership Program "PROJECT FOR ENHANCEMENT OF MEASURES AGAINST EARTHQUAKE OF WATER SUPPLY AND SEWERAGE IN MEXICO CITY"
Implementation Period	3 February 2020 \sim 30 September 2022
Main Organizer	Nagoya City Waterworks and Sewerage Bureau
Outline and Objectives	Nagoya City Waterworks and Sewerage Bureau has implemented JICA Partnership Program with Mexico City in February 2020 for enhancement of measures against earthquake of water supply and sewerage. We dispatches experts and conducts training in Japan. The contents of cooperation in Nagoya City in the first year of Reiwa are as follows. Temporary staff dispatch: 4 persons (February 9, 2020-February 23, 2020)
Target (Cooperator)	Mexico City Waterworks and Sewerage Bureau(SACMEX)
Countries	Mexico City Integrated Risk Management and Civil Protection Agency(SGIRPC)
Dhataa	





Name of Organization	Toyohashi Waterworks & Sewerage Bureau
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Name of Activity	JICA Knowledge Co-Creation Program "Non-Revenue Water (NRW) Management (Leakage Control) (A)"
Implementation Period	2019/09/24 ~ 2019/10/29 (7-day period in Toyohashi)
Main Organizer	JICA Chubu
Outline and Objectives	The objective of this program is to foster the development of waterworks engineers in developing countries by providing them knowledge and technical skills pertaining to non-revenue water management. Comprehensive training will be conducted, focusing on non-revenue water management measures applicable to the current circumstances of trainees' home countries and regions. The primary training programs conducted in Toyohashi are as follows: Training in water pressure control for distribution systems. Lectures/practical training concerning the analysis of water distribution quantities. Practical training in water leakage repairs. Training in water network information control systems, etc.
Target (Cooperator)	AFGHANISTAN,ETHIOPIA,NEPAL,NIGERIA,PHILIPPINES,SRILANKA,TANZANIA,ZI
Countries	MBIA, ZIMBABWE (TOTAL 9 participants)
Dhatas	





Name of Organization	Hamamatsu City Water Services Department
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Name of Activity	JICA Partnership Program
,	"Skills Support Regarding Leak Prevention Initiatives in Bandung City"
Implementation Period	March 2017 to September 2019
Main Organizer	Hamamatsu City Water Services Department
Outline and Objectives	With the opportunity created by the conclusion of the Letter of Intent (LOI) regarding exchange in areas such as Culture and Environment during December 2014 between Hamamatsu City and Bandung City, we have provided Bandung City with technical instruction on leak prevention measures as skills support for the reduction of non-revenue water in Bandung City.
	1. Activities (FY2019): •1st Delegation (July 8–19, 2019) Dispatched Hamamatsu experts: 6 staff members
	 2. Contents: Creation of a special team (6 persons) for leak prevention and implementation of practical training at the pilot area in Bandung City and Japan. ① Leak Detection Training ② Leak Repair Training ③ Making Leak Prevention Plans ④ Making a Water Supply Construction Manual
Target (Partner) Countries	Bandung City, Republic of Indonesia(PDAM Tirtawening Kota Bandung)



Name of Organization	Hamamatsu City Water Services Department
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Name of Activity	JICA Thematic Training "Water Services Non-Revenue Water Management Measures (Leak Prevention Measures) (A)"
Implementation Period	October 15-18, 2019
Main Organizer	JICA Chubu
Outline and Objectives	Through a practical training curriculum consisting of exercises, facility tours, lectures by practitioners, discussions and information sharing between the participants, we succeeded in improving the capacity for the management of non-revenue water (leak detection and prevention, leakage analysis, leak prevention plans etc.). Hamamatsu City, Nagoya City, Toyohashi City, and Mie Prefecture were responsible for organizing specific on-site training. Hamamatsu City's training comprised the following contents. [Training Contents] ·Water Services Revenue and Expenditure ·Setting Water Rates ·Water Meter ·Collecting Fees ·Customer Service ·Public Relations ·Leak Detection Work ·Leak Investigation Practice ·Measures for Mountainous Areas
Target (Partner)	Afghanistan, Ethiopia, Nepal, Nigeria, Sri Lanka, Tanzania, Zambia, Zimbabwe,
Countries	Philippines (Total number of trainees: 9)



Name of Organization	Hamamatsu City Water Services Department
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Name of Activity "P	ICA Technical Cooperation Project Project for Improvement of Comprehensive Management Capacity of Project for Improvement of Comprehensive Management Capacity of Project for Improvement of Public Health Engineering (DPHE) on Water Supply in Bangladesh Counterpart Training
Implementation Period De	ecember 11-13, 2019
Main Organizer JI	ICA Bangladesh Office
Ca im se op Ha or fo Outline and Objectives	he objective of the project was to "Improve DPHE's overall management apacities of water services to villages, cities and local regions" through the improvement of capacity in each stage of the water supply process, from electing a suitable water source, building a water facility, to monitoring facility perations and water quality. I amamatsu City, Nagoya City, and Kumamoto City were responsible for reganizing specific on-site training. Hamamatsu City's training comprised the ollowing contents. Training Contents Water Supply Plan for the Local Region, Selecting a Facility, Support Initiatives to Make the Water Safe and Drinkable Water Quality Monitoring System for Drinkable Water Facility Tour
Target (Partner)	eople's Republic of Bangladesh (Total number of trainees: 12)
Countries	



Name of Activity	Technical Exchange between SAWACO, DOWACO and OMWB
Implementation Period	10th - 18th December 2019
Main Organizer	Osaka Municipal Waterworks Bureau (OMWB)
Outline and Objectives	Saigon Water Corporation (SAWACO) and OMWB have mutually agreed to exchange and share technical and managerial knowledge, experiences, information for the purpose of making contribution toward the development of both waterworks and promoting their friendship, signed "Technical Partnership Agreement" on December 2009, revised it on November 2015 and December 2018. Based on this agreement, OMWB has accepted SAWACO's staffs annually since FY 2010. In this year(2019), OMWB accepted 3 participants from SAWACO and 2 participants from DOWACO* (Dong Nai Water JSC) between 10th to 18th December 2019, and conducted lectures, site visits and discussion. In the technical exchange, OMWB introduced water quality management, water quality improvement and water resources preservation etc. Issues on the SAWACO and DOWACO were discussed as well, and OMWB advised solutions to solve them. *DOWACO joined the technical exchange on referral from SAWACO.
Target (Cooperator)	"Vietnam (Saigon Water Corporation [SAWACO])
Countries	Vietnam (Dong Nai Water JSC [DOWACO])"
Photos	





Name of Organization	Osaka Water Supply Authority (OWSA)
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Name of Activity	MWA-OWSA Technical Exchange Program
Implementation Period	28th October to 8th November, 2019
Main Organizer	Osaka Water Supply Authority
Outline and Objectives	OWSA(Osaka Water Supply Authority) has cooperated with MWA(Metropolitan Waterworks Authority) through the technical training program at the NWTTI(National Waterworks Technology Training Center) in Thailand which JICA established. We signed the MOU(memorandum of understanding) for further development of each waterworks on 27th November, 2012. As a follow-up of our exchange program in 2018, we sent four OWSA staffs to MWA in June 2019 and we understood MWA's request for the next program and problems in their management. We accepted four MWA staffs as trainees besed on MOU 28th October to 8th November, 2019 and conducted exchanges of technology under the thema of "Risk Management on Water Quality Management" based on the follow-up.
Target (Cooperator) Countries	MWA(Metropolitan Waterworks Authority)





Name of Activity	JICA knowledge co-creation Program "Maintenance of Urban Waterworks"
Implementation Period	26 June - 2 Aug, 2019
Main Organizer	Kyoto City, Osaka City
Outline and Objectives	In response to a request from JICA, Kyoto City Waterworks Bureau had carried out training course of "Maintenance of Urban Waterworks" jointly with the Osaka City for 2 months and accepted 9 participants from overseas countries. We mainly organized lectures and technical visits as follows; 1. Lectures -The summary of purification facilities -Overview of the Water quality management -Fundamentals of purification 2. Technical visits · Keage Purification Plant · Lake Biwa Canal Museum 3. Others - Needs discussion, Instruction for making action plan, etc
Target (Cooperator)	Bangladesh, Brasil, Egypt, Laos, Nepal, Panama, Sudan, Tanzania (9
Countries	participants)
Photos	



Name of Organization	KOBE City Waterworks Bureau
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Name of Activity	JICA knowledge co-creation Program "Operation and Maintenace of Urban Water
Traine or receivey	Supply System (Water Quality and Purification) (B)"
Implementation Period	27 June - 31 July 2019
Main Organizer	JICA-Kansai
Outline and Objectives	This training is aiming to foster engineers who are in charge of water quality and purification. 9 participants from 7 countries visited in Kobe city in 2019. Participants made an Action Plan and work out the plan with Kobe city Waterworks bureau. Main programs of the training course are as follows. Make and Report an Action Plan Water Treatment Method Maintenance of Machinery and Electrical Equipment Water Quality Management Operation and Maintenance of Water Purification Plant Water Safety Plan Study Tour of Facilities (Reservoir, Water Purification Plant, Pump Station and so on)
Target (Cooperator) Countries	Sri Lanka, Rwanda, Myanmar,Eritrea,Congo,Cambodia,Haiti





Name of Organization	KOBE City Waterworks Bureau
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Name of Activity	The Project for Enhancement of Operational Efficiency and Asset Management Capacity of Regional Support Center-Western South of NWSDB in Sri Lanka
	Capacity of Regional Support Center-Western South of NWSDB in Sit Lanka
Implementation Period	September 2018 ~ August 2021
Main Organizer	JICA
	OConcept of the Projict
	The Project is to support NWSDB to enhance operational efficiency through
	strengthening pipe management capacity. This will be achieved through three
	main activities, i.e., introduction of asset management focusing on pipelines,
	capacity development of leak control at the pilot site, and improvement of
	training implementation capacity regarding leak control.
Outline and Objectives	OActivity of the Kobe City in 2019 (Kobe City activity ended in March 2020.)
	· Training in Japan: 9 May - 15 May, 2019
	· Short-term expert dispatch : 19 November - 29 November , 2019(Dispatch
	engineers)
	Survey mission: 23 January - 28 January , 2020(Dispatch engineers)
	Survey mission i 25 suridary 25 suridary 2020(Disputer engineers)
Target (Cooperator)	Sri Lanka · NWSDB(National Water Supply and Drainage Board)
Countries	



Name of Organization	KOBE City Waterworks Bureau
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Name of Activity	Collaboration Program with the Private Sector for Disseminating Japanese Technologies for Wide Area Water Network Monitoring System in Sri Lanka
Implementation Period	May, 2019 - June, 2020
Main Organizer	JICA
Outline and Objectives	OPurpose This program aims to help National Water Supply and Drainage Board (NWSDB) staffs to understand the necessity and effectiveness of wide area monitoring system for the operation and management of water supply network, by enhancing the technologies of the monitoring system for wide area water supply network and by conducting the site tour of actual system being utilized. OActivity in 2019 (The main activity of the project ends with the 4st workshop) 16 May - 22 May , 2019 (Dispatch engineers) : 1st training in Japan 20 June - 26 June , 2019 (Dispatch engineers) : 2nd training in Japan 15 December - 21 December , 2019 (Dispatch engineers) : 3rd workshop 28 January - 1 February , 2020 (Dispatch engineers) : 4th workshop In the future, we will provide necessary support upon request.
Target (Cooperator) Countries	Sri Lanka·NWSDB(National Water Supply and Drainage Board)





Name of Organization	The City of Hiroshima Waterworks Bureau
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Name of Activity	JICA Operation and Maintenance of Urban Water Supply Systems Course B
Implementation Period	June 28 to August 5, 2019
Main Organizer	JICA
Outline and Objectives	The City of Hiroshima accepts technicians in the field of waterworks from developing countries so that they can acquire practical knowledge and skills about Hiroshima's water supply and distribution. The goal of this program is for the trainees to contribute to the development of waterworks services in their countries. The City has accepted 65 trainees since receiving JICA Chugoku's request in 2013. Main Programs of Training Course: 'Hydrologic Accounting 'Operation and Maintenance of Purification Plants 'Water Quality Management 'Leak Prevention Training 'Repair of Burst Water Pipes
Target (Cooperator)	Afghanistan, Egypt, Eritrea, Indonesia, Islamic Republic of Iran, Liberia, Rwanda
Countries	[seven participants in total]
Photos	



Name of Organization	Shimonoseki City Waterworks & Sewerage Bureau
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Name of Activity	2019 Staff Exchange Program with Qingdao Water Group Co., Ltd.
Implementation Period	28 October - 1 November 2019
Main Organizer	Shimonoseki City Waterworks & Sewerage Bureau · Qingdao Water Group Co., Ltd.
Outline and Objectives	The cities of Shimonoseki and Qingdao have promoted friendly exchanges in a variety of fields since becoming friendship cities in 1979. As part of these activities, Shimonoseki City Waterworks & Sewerage Bureau and Qingdao Water Group CO., Ltd dispatch the staffs mutually from 2000. This staff exchange program is aiming to deepen friendly relations and improve water and sewerage technology in both cities.
Target (Cooperator) Countries	China·Qingdao Water Group Co., Ltd.





Name of Organization	Fukuoka City Waterworks Bureau
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Name of Activity	JICA Partnership Program: Project to improve water supply services in the Nadi/Lautoka region, Fiji
Implementation Period	January 2018–January 2021
Main Organizer	JICA
Outline and Objectives	■ Summary/Purpose In light of the accomplishments of the first project of the JICA Partnership Program, which concluded in July 2017, a second project was launched to assist the WAF in improving water supply services in the Nadi/Lautoka region. This included water conservation awareness activities for service users, as well as a bolstering of the WAF engineers' capabilities regarding water supply control and leakage prevention. This aims to support the WAF in achieving 24-hour water supply service in the region. ■ Activities - Dispatch Fukuoka City officer(s) (four times a year) - Accept officer(s) from the counterpart organization (once a year) - Supply materials and equipment for waterworks For the purpose of improving NRW, Fukuoka City performed water leakage surveys and repairing with local staff in Nadi Area in FY2019. In addition, we have conducted training for trainers, and have held water conservation campain in order to promote water conservation awareness of water users.
Target (Cooperator) Countries	Water Authority of Fiji





Name of Organization	Fukuoka City Waterworks Bureau
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Name of Activity	JICA Expert
Name of Activity	Yangon City Water Administration & Supply Advisor
Implementation Period	December 2018-December 2020
Main Organizer	JICA
Outline and Objectives	■ Summary/Purpose Yangon City is the largest city in Myanmar with a population of over 5.6 Million. Along with its further economical development and population increase, the demand for water has increased. Improving the water service is an urgent matter for the city to attend to. Due to this, the Myanmar government requested the Japanese government to dispatch experts to advise and support the water administration. Based on JICA's request, Fukuoka City Government dispatched its own officers to Yangon City to offer advice on water administration and to work on maintaining and renovating the water distribution pipe system. ■ Activities 1. Maintenance/renovation of water distribution pipe system and identify any issues 2) To advise on maintenance & renovation planning, designing, construction management of the water distribution pipe system 3) To advise on appropriate maintenance management of water distribution pipe system 4) To make the Water Vision a reality and apply development policies & plans 2. Waterworks administration 1) To analyze current policies and planning related to the YCDC waterworks management at the national, state & city levels 2) To advise the YCDC in order to improve policy, plan & system at the national, state & city levels 3) To advise/support concerned Ministries/Departments 4) To support in future Japanese assistance programs 5) To share the experience and knowledge of waterworks projects with other municipalities and the Township Development Committee, providing necessary advice
Target (Cooperator) Countries	Yangon City Development Committee, Myanmar





Name of Organization	Fukuoka City Waterworks Bureau
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Name of Activity	JICA Group and Region Focused Training: Non-Revenue Water (NRW) Management (Leakage Control)
Implementation Period	July 8-August 7, 2019
Main Organizer	JICA
Outline and Objectives	■Summary/Purpose Less developed countries tend to have a higher rate of NRW due to a shortage of waterwork engineers. By accepting their officers as JICA Group and Region Focused trainees, and transfering Fukuoka City's expertise and techniques on waterworks, Fukuoka City contributes to improve those countries' water supply environment. In addition, this aims to develop the capability of the engineers in Fukuoka City through international cooperation activities and to improve their technical standards by accumulating activities. ■ Activities Lectures: Fukuoka City Waterworks management, NRW reduction measures, pipe planning and maintenance, water meter controls, etc. Site visits: dams, waterworks facilities, areas for laying distribution pipes, etc. Support: creating action plans
Target (Cooperator) Countries	Myanmar (1 person), Fiji (2 person), Republic of the Sudan(1 person), Solomon Islands(1 person),Islamic Republic of Pakistan(1 person), People's Republic of Bangladesh(1 person),Marshall Islands(1 person)





Name of Organization	Fukuoka City Waterworks Bureau
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Name of Activity	Council of Local Authorities for International Relations (CLAIR): Local Government Officials Training Program (LGOTP)
Implementation Period	June-November 2019
Main Organizer	Council of Local Authorities for International Relations (CLAIR)
Outline and Objectives	■Summary/Purpose Through LGOTPs, Fukuoka City accepted YCDC engineers as trainees and transferred techniques and expertise to improve management and maintenance of the waterworks system of the YCDC. In addition, this also aims to strengthen relations between Fukuoka City and the YCDC. ■Activities Training programs as follows: · Lectures: overall management of waterworks and sewage in Fukuoka City · Site visits: dams, water intake facilities, water purification plants, distribution pipe installation sites, etc. · Practical training: operations and maintenance training at water purification plants and pumping facilities, water control activities, welding of water distribution pipes at Fukuoka City's training facility, etc. · Support: creating action plans Accepted one waterworks engineer from Yangon City Development Committee and provided training in FY2019
Target (Cooperator) Countries	Yangon City Development Committee, Myanmar





Name of Organization	Fukuoka City Waterworks Bureau
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Name of Activity	JICA Technical Cooperation Project: Project for Improvement of Water Supply
	Management of YCDC
Implementation Period	2015 - 2020
Main Organizer	JICA, TEC International, TSS Tokyo Water, Public Utility Services Center, Fukuoka
Hairi Organizer	City Waterworks Bureau, Tokyo Metropolitan Government Bureau of Waterworks
	■Summary/Purpose
	In Yangon, while construction of waterworks facilities utilizing yen loans is
	underway, JICA is also conducting a technical cooperation project associated with yen loan ventures to strengthen the organizational capacity of the YCDC in parallel with facility construction for securing sustainable water supply service.
	The Tokyo Metropolitan Government's Bureau of Waterworks and the Fukuoka
	City Government's Waterworks Bureau participated as supporting members and provided technical advice throughout the project as water suppliers.
Outline and Objectives	■ Activities
	The Tokyo Metropolitan Government's Bureau of Waterworks and Fukuoka City Government's Waterworks Bureau conduct regular joint seminars and training in both Yangon and Japan. FY2019: Dispatch Lecture
Target (Cooperator) Countries	Yangon City Development Committee, Myanmar
I Diameter	





Name of Organization	Japan Water Works Association
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Name of Activity	JICA Knowledge Co-Creation Program "Comprehensive Engineering on Water
	Supply Systems:Basic Planning and Design for Water Supply System (A)"
Implementation Period	16 May- 12 July, 2019
Main Organizer	JICA
	This training is aiming to foster development of engineers who will take on leading roles in managing waterworks facilities and target of the training is midlevel waterworks engineers from developing countries. The program features a number of lectures, observation tours and exercises regarding comprehensive water supply technologies for about 2 months. The training has a long history and so far a total of 637 participants from more than 100 countries and regions have participated.
Outline and Objectives	Main programs of the training course are as follows. ·Water intake, reservoir, distribution facilities ·Jar test (Optimization of coaguration) ·Leak detection/ prevention ·Exercise on basic planning of water supply systems ·Hydraulic Calculation of Water Treatment Plant ·Water Safety Plan ·Visit to Polyethylene Pipe Manufacturing Factory ·Sound Management of Urban Water Operator etc. [Reference] http://www.jwwa.or.jp/english/en_04.html
Target (Cooperator)	CAMBODIA, EGYPT, ERITREA, LAOS, MYANMAR, RWANDA, TIMOR-LESTE,
Countries	YEMEN (TOTAL 8 participants)
photos	

photos



