



**Capacity Building Project
 on Urban Water Supply
 in Cambodia**
 Hiroshi HIROWATARI*

Japan has supported water supply sector in Cambodia for long term. In July, the Phase 3 project of technical co-operation has terminated, which Mr. Hirowatari led as a chief advisor. The detail information of the project can be referred to an [official website of the Project](#). (Yariuchi, WaQuAC-NET Office)

[Overview of Cambodia]

The Kingdom of Cambodia locates in Indochina peninsula approximately 3,000km far from Kitakyushu City where I live, and member of ASEAN. It



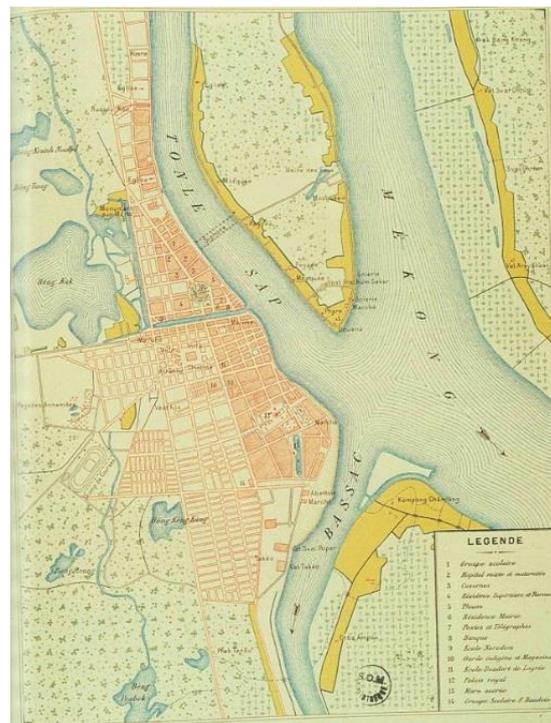
faces the north side with Laos, the east side with Vietnam, and the west side with Thailand. Cambodia had fought with neighboring countries as shown above, and the ancient time battle is drawn on walls of Angkor Wat in Siem Reap Province. Since the border has been changed by the times, people living are diversified by their origins such as from China, Vietnam, Thai and



Vol. 38 Contents

- Project in Cambodia: Mr. Hirowatari..... 1
- Member interview: Mr. Mon Tito4
- Introduction of member :Mr. Job (Kenya).... 5
- Mini Talk 11 “Basic finance for engineers”.. 8
- General meeting in Kyushu..... 10

Khmer, also religions are Buddhist, Muslim, Christian and others. There are many temples and mosques (and churches in some places) in the city. The central city of the country has changed by the times of king and culture, from Angkor Wat in Siem Reap in ancient times to current Phnom Penh along the Mekong River. Phnom Penh had been developed by France since about 100 years ago with preparing canal and road as city planning. Currently, Phnom Penh has grown up drastically but remains landscapes of European colonial city. However, there was an era that people were moved from



Phnom Penh (1928)

*Mr. Hirowatari: Deputy Director, Oversea Project Division, Oversea Project Department, Water and Sewer Bureau, City of Kitakyushu.

Phnom Penh to rural areas because of the policy of Pol Pot regime. The urban water supply started the restoration after the Paris Peace Agreement in 1991, and Japanese Government contributed in developing water supply master plan of Phnom Penh.



View of Phnom Penh

【Capacity Building Project in Cambodia】

[1st Phase] The Capacity Building Project in Cambodia on Urban Water Supply was started from Phase 1, which was implemented from 2003 to 2006. The Project Phase 1 supported Phnom Penh Water Supply Authority (PPWSA) with striving to develop capacity of staff members through preparation of SOPs (Standard Operation Procedure) for proper and efficient daily operation and maintenance of water treatment plant, management of water quality and distribution facilities. SOPs were prepared with intension to secure basic level of operation even after Japanese Experts' leaving to Japan. However, the SOPs were developed and/or improved by themselves through the daily work according with SOP and study on daily work to maximize work effectiveness. These are the evidences of best suitability from Japanese Expert's contribution into PPWSA. With the cooperation by the Project and other water supply facility rehabilitation, revenue water ratio increased from 30% (1990's) to 92% (2006). PPWSA got the honor of Magsaysay award called Asian Novel Award, and Stockholm Industrial Water Award which is the most famous award on water supply sector by this dramatic

success.

[2nd Phase] The Phase 2 of this project was launched in 2007 to expand this dramatic achievement to primary local water supply run by ministry, which was implemented till 2012. The theme of Phase 2 is to improve operation and maintenance at 8 provincial water supplies by utilizing achievement of Phase 1, namely PPWSA staff who was developed. It achieved to shift from intermittent supply into continuous 24/7 supply with proper operation and maintenance in 8 provincial water supply.

[3rd Phase] Then, from 2012 to June 2016 the Phase 3 was implemented targeting to improve business management for sustainable running of water supply at 8 provincial water supply utilities which are same as Phase 2. The activities are installing and applying of comprehensive business management system, establishment of 5-year business management plan, set of performance indicators, establishment of law on water supply, set of self-evaluation system, etc. As the result of Phase 3, 8 provincial water supply achieved to earn annual profit.

【Approach of Project】 These dramatic and great successes came from great efforts of H.E. EK Sonn Chan as our counterpart who is current Secretary of State, Ministry of Industry & Handicraft as well as our approach of the project. First approach that we keep in the mind is "we should stand by counterparts' side and support and contribute them", because if the voice of us could not reach to their mind and spirit, they never understand and improve themselves. We should talk to the mind and spirit, since the supports and contributions are based on the human relationship. By this approach, it realized to have transparency and smooth relationship with counterparts, and the success. The second approach is embodiment of proactive manner. I



Distribution pipe laying (2009, Pursat)

tried the method that the counterparts understand what they have to do by seeing my action. For example, I walked and investigated leakages with them at night survey as late as 23:00 to 03:00 as one of NRW reduction activities. After I modeled such activities, counterparts could change their attitudes. It shows that modeling is great effective to teach and/or train the way of working.

And in the Phase 3, we classified 8 provincial water supply utilities into the 1st runner group and the 2nd runner group according to the development. The project utilized PPWSA staff as Cambodian expert, and the staff of 1st runner group as well to support and train 2nd runner group after we supported 1st runner group. It was one of the reasons for great success of the project that we promoted their motivation in the competitive circumstances. On the other hand, we were able to grab the excellent and motivated staff by this classification, since they present their mind and motivation to us. The project chose such staff as trainees of training in Japan and/or master course to Japanese university.

This is the overview of the project, but we should not forget that the start of the story is “the growth of PPWSA”. The success of Phase 1 lead to success of Phase 3.

【International Cooperation and My Target】

The trigger of my international cooperation and/or activities was my cousin who was

dispatched to Paraguay as Japan Overseas Cooperation Volunteer of JICA in 1989. It left small seed of the interest for the international cooperation in my heart. After then, I could get the chance to participate in phase 2 project, and started to walk the road of the international cooperation. The first assignment of work as short-term expert was in 2009. I had a trouble of cutting optical fiber cable, since I was really excited and nervous from the responsibility as the representative of Japan and Kitakyushu City. and getting fired up as hon or to the name of “JAPAN” and “KITAKYUSHU” on that time. I had had some more opportunities after the first assignment. And finally, I got the chance to be dispatched as long-term expert “Chief Advisor” to manage project from April 2015 to June 2018, since I passed the examination of promotion to deputy director. To manage and achieve project outputs as chief advisor for cooperating, supporting and contributing on water supply sector in counterpart’s country was my final target in 2015. I think that I could achieve the output on “Law on Water Supply”, “Performance Indicator”, “Annual Profit at provincial water supply”, etc., in the project, and a part of target of my life till the completion date. On the other hand, further crucial issue occurred to my mind, since the great achievement and the next target setting are two sides of a coin. My main stream of target is “Be an Engineer to carry out



Training on NRW Reduction (Svay Rieng, With legend of water supply in Cambodia H.E. EK Sonn Chan)

international activities". I consider day-by-day possibilities to work for international cooperation such as being dispatched as staff of JICA or embassies to Cambodia which is my 2nd mother country, Africa or other Asian countries, if I have

chance. Anyway, I can say that it is my final and desirable circumstance if I can cooperate and contribute to the water supply sector somewhere in the world, after setting firm target and intention with flexible mind. ~& ~& ~& ~



Member Introduction 1

Mr. Mon Tito

PPWSA, Cambodia



Mr. Mon Tito, the chief of Nitro Water Treatment Plant, Phnom Penh Water Supply Authority (PPWSA) in Cambodia is now in six months training at Kitakyushu Water Supply and Sewerage Department under the training program of the Local Authority International Association (CLAIR) from May to November 2018. When he joined the WaQuAC Kyushu meeting, I interviewed him about the training and the life in Japan. Since he is the chief of treatment plant, he seems to have most interested in the training system aimed improving the capacity of water treatment staff.

Q1: What kind of work do you do in your water treatment plant?

I am a Chief of Niroth Water Treatment Plant (NWTP), overseeing the operation and maintenance of the water treatment plant facility to ensure the efficient, safe, and economical. My responsibility is for planning, assigning, scheduling, supervising, and evaluating employees in the operation and maintenance of NWTP facilities in order to supply safe, plenty and stable water to the people (customer?).

Q2: What do you expect from the training?

I have expected that I could learn more knowledge and practices tools in management and leadership. Moreover, through this training, it would provide me more experiences in the field

works of water supply management and operation maintenance. Meanwhile, during my stay in Japan, it is a good chance for me to learn Japanese language and Japanese culture which I could improve my communication competence and capacity building-I could contribute to my organization as well as my country.

Q3: What is the most interesting so far?

My training period is 6 months since 20 May 2018 until 23 November 2018. The first 6 weeks is learning Japanese language. During this time, it is not only about language but also Japanese culture and international relation such as Chinese, Korea, Philippines, Myanmar, Brazil, Peru, Indonesia, Mongolia, and Vietnam.

After 6 weeks, I moved to Kitakyushu city and starting to learn difference subjects and site visits. Most of subjects are pretty interesting like Capacity Building Training, and Job Rotation of potential staff System to improve their knowledge and experience in Kitakyushu city.

One more thing, I have noticed essential system of integrated documentation of work experience since 100years before till nowadays in order to share experience and knowledge to new generation.

On the other hand, Kitakyushu International Contribution Project offer all staff a good chance to maintain professional skill, get new experience, and improve communication skills from developing country.

At last, I do enthuse Japanese people because they are very kind, polite and working hard.

Q4: How is your life in Japan? Are you using Japanese language?

Japan is very convenient country, clean, and the traffic is very good. All Japanese people are very kind; especially, all staffs from Kitakyushu City Water and Sewer Bureau are very friendly and helpful. I learnt Japanese language for 6 weeks, so I can communicate with them for easy simple conversation like asking the way, self-introduction, and greeting. It's very interesting for me.

Q5: What is your favorite Japanese food?

For me most Japanese food I try is delicious. Some of my favorite food is Sushi, Sashimi, Ramen.



*Kyushu Branch General Meeting: Mr. Tito. (2nd from the right), and Mr. Kagata (interviewer, 2nd from the left)
The report of the meeting is at page 10.*

**Introduction of member 2
Water Services Providers
Association, Kenya**

Mr. Job Kangicu Fundi
National Technical Adviser
(Policy, Knowledge
Management &
Communication)



I hold a Bachelor's degree in Sociology with specialization in social (projects) development and management. My working experience includes a broad range of assignments in the development practice. Missions include planning and implementation of support projects aimed at utility organizational development, advocacy, monitoring and evaluation of initiatives for the water utilities on various operational fields for improved regulation, performance improvements and good governance in management and provision of water and sewerage services in Kenya. I have also coordinated the intercession for the resolution of water related conflicts (especially with regard to abstraction, sharing and use of scarce water resources in some rural arid areas of the country).

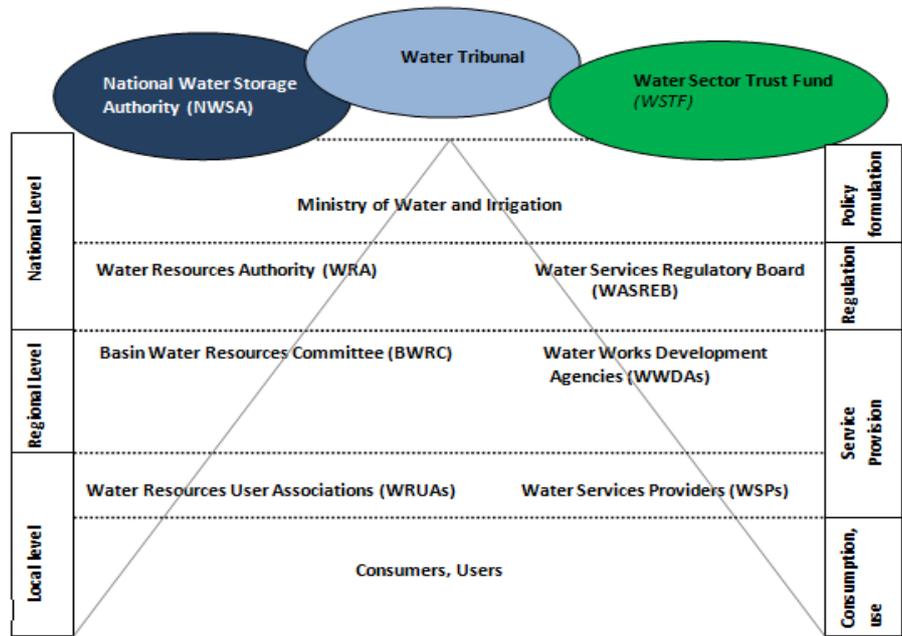
Influencing Sector Policy, Legislations & Regulations:

The figure below illustrates the current water sector institutional framework (Water Act 2016) As such, and as a constitutional requirement, I have played an instrumental in consolidating the Associations views to provide input in the development of the Water Act 2016. This legislation, aligned the sector institutions to the new constitutional requirement that brought into effect two tiers of government, the central and county governments. It is hereby to be noted that in Kenya, provision of water and sewerage management is County Government Function. Other pieces of legislation that I have been

involved in consolidating membership contributions include the National Water Policy 2018.

Moreover, on a routine basis, I am coordinating with WASREB – being the agency of government mandated with the responsibility for the development and enforcement of standards, in ensuring that there is awareness and

compliance. While the country largely depends on the internationally acceptable World Health Organization’s standards with regard to water quality, we have complimented best international practices by customizing and adopting local standards to fit the local needs. Such additional standards include minimum standards for construction, materials and equipment. I also develop and disseminate policy briefs that address utility needs to other government agencies. One such initiative is to address high cost of power that negatively impacts pumping operations. With evidence backed reports, we are seeking a preferential power tariff from state energy regulators in order to cushion ordinary citizens from an increased water bill accustomed



to power costs. The government has agreed to cater to this request by prompting energy efficient measures are implemented for instance, use of efficient pumps and power correction in the water sector.

Coordination of utility led benchmarking for collective learning and performance improvements:

The performance of Kenyan water services providers (WSPs) does not yet comply with standards, as shown by the most recent report the Water Services Regulatory Board (WASREB, 2018). In the Kenyan water and sewerage sector, we have started a comprehensive program that brings together drinking water and sewerage

Our member, Mr. Igarashi (OB of JICA Volunteer) introduced Mr. Job!

Mr. Job works in Water Services Providers Association (WASPA) in Kenya. He hosts task group for Water Service Providers.

I met him when I participated in GIS task group, then we became friend. Since he works in WASPA, he knows many people who work in water sector in Kenya. I also knew a lot of friends through his network, especially GIS task group.

Recently, he told me that he wants to know the people working in Japanese water service providers. That is why I introduced WaQuAC-Net to him.

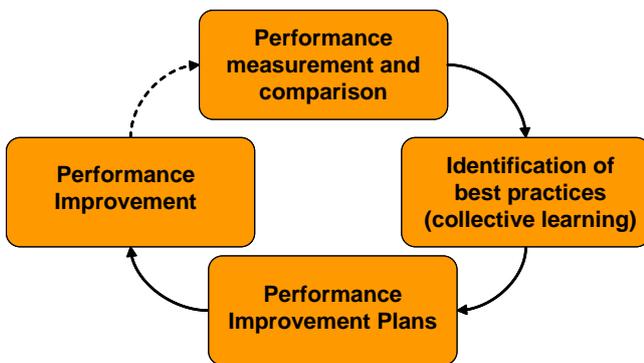


Mr. Igarashi (left), with a Kenyan engineer whom he got to know in GIS conference in Tanzania.

operators both as managers and ordinary staff to discuss and share ideas.

Water Services Providers Association (WASPA) was established in 2002 to support Water Services Providers (WSPs) achieve their mandate under the Water Act, 2002. The Association is registered under the Societies Act (Cap 108) of the Laws of Kenya. With the mandate being to provide a platform for members to advocate for issues pertaining to their development and sustainability and development, the membership continues to grow and stands 75 and 65 being WSPs.

WASPA - Kenya's Water Services Providers Association - and nine of its member WSPs (respectively of Nyeri, Malindi, Murang'a, Thika, Isiolo, Siboi, Kericho, Nzoia and Ololaiser) started an innovative, action-oriented project to enhance the performance of Kenya's water services sector through enhanced benchmarking, collective learning and implementation of best practices in 2012 as shown in the diagram



For utility managers, a bimonthly agenda is discussed by all members for decision making. With middle level staffs, we have constituted a four technical working groups to address the following issues;

1. Non-Revenue Water i.e. physical and commercial losses (currently 43% for urban WSPs).
2. Cost Recovery i.e. revenue enhancement, cost

reduction & efficiency, debt management and self-reliance (independence from subsidies).

3. Service Levels i.e. customer service/focus.
4. Pro – Poor Services delivery (increasing access to low income urban settlements).

The results of the comparative analysis prepared under Component 1 serve as a basis for the development of WSP-specific Performance Improvement Plans (PIPs) in each subsequent financial year. Four parallel task groups focusing on the four prioritized Performance Areas meet on a quarterly basis to drive the collective learning process by: a) sharing WSP-specific performance improvements, and b) refining their respective PIPs based on demonstrated experience as to what has worked and what has not along the way.



Utility benchmarking coordinators meeting to validate data FY 2017/18 in early February 2018

By rotating the venue of the 4-monthly meetings and facilitating the peer review of progress by the host WSP, participating WSPs are challenged and stimulated to develop as 'model WSPs'.

Knowledge Management:

Along with the above-mentioned coordination of the utility led benchmarking activities, I also facilitate the collection and dissemination of information and knowledge especially in the best interest of the utilities. For this purpose, we have established a knowledge hub and community of practice. Tools have been developed to regularly collect and collate information in ways that are relatable to utilities. Members also participate in

regular training activities.

Indeed with more than seven years in water and sanitation sector, I am continually learning, improving my competencies and working hard to contribute to the positive realization of the safe access to services and with dignity.

Activity No.	Activity Name	Duration (Days)	Target Group	Location	Start Date	End Date
1	Geographical Information Systems - Mapping of Water Distribution Networks	5	Water Utility Managers, Engineers, Technicians	Kisumu	23-27	
2	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	28-29	
3	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	30-31	
4	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	01-02	
5	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	03-04	
6	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	05-06	
7	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	07-08	
8	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	09-10	
9	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	11-12	
10	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	13-14	
11	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	15-16	
12	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	17-18	
13	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	19-20	
14	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	21-22	
15	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	23-24	
16	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	25-26	
17	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	27-28	
18	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	29-30	
19	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	31-01	
20	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	02-03	
21	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	04-05	
22	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	06-07	
23	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	08-09	
24	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	10-11	
25	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	12-13	
26	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	14-15	
27	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	16-17	
28	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	18-19	
29	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	20-21	
30	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	22-23	
31	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	24-25	
32	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	26-27	
33	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	28-29	
34	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	30-31	
35	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	01-02	
36	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	03-04	
37	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	05-06	
38	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	07-08	
39	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	09-10	
40	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	11-12	
41	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	13-14	
42	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	15-16	
43	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	17-18	
44	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	19-20	
45	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	21-22	
46	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	23-24	
47	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	25-26	
48	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	27-28	
49	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	29-30	
50	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	31-01	
51	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	02-03	
52	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	04-05	
53	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	06-07	
54	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	08-09	
55	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	10-11	
56	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	12-13	
57	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	14-15	
58	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	16-17	
59	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	18-19	
60	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	20-21	
61	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	22-23	
62	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	24-25	
63	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	26-27	
64	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	28-29	
65	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	30-31	
66	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	01-02	
67	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	03-04	
68	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	05-06	
69	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	07-08	
70	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	09-10	
71	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	11-12	
72	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	13-14	
73	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	15-16	
74	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	17-18	
75	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	19-20	
76	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	21-22	
77	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	23-24	
78	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	25-26	
79	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	27-28	
80	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	29-30	
81	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	31-01	
82	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	02-03	
83	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	04-05	
84	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	06-07	
85	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	08-09	
86	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	10-11	
87	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	12-13	
88	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	14-15	
89	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	16-17	
90	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	18-19	
91	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	20-21	
92	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	22-23	
93	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	24-25	
94	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	26-27	
95	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	28-29	
96	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	30-31	
97	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	01-02	
98	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	03-04	
99	Financial Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	05-06	
100	Effective Water Management	2	Water Utility Managers, Engineers, Technicians	Nairobi	07-08	



Mini Talk 11
“Finance and Accounting of water utility for Engineers (2nd)”

The second workshop on finance was held on June 28, 2018. The first workshop was held with inviting Mr. Yoshio Oshima of Senior Staff Certified Public Accountant, Deloitte



Mr. Kuroda, lecturer

Tohmatsu Consulting LLC, to provide a lecture on basic financial and accounting concepts. This time, Mr. Yasuyuki Kuroda, a senior researcher at the International Development Center of Japan (IDCJ) of the General Foundation, conducted a lecturer. Mr. Kuroda has been in charge of finance for many years at a private company. After starting working in IDCJ, he has experience of financial analysis, management diagnosis, management guidance etc in many countries. He also served as a lecturer on 'Finance Management Analysis' at IDCJ's Development Economist course. In recent years, he is in charge of finance management at technical cooperation project in Sudan and Pakistan.

The workshop was held in Shinjuku from 19:00 on June 28, 2018. There were 13 participants,

Mr. Matsubara, Mr. Uemura, Ms. Kinukawa, Mr. Okamura, Mr. Goto, Mr. Ono, Mr. Sasaki, Mr. Matsuo, Mr. Adachi, Mr. Futagawa, Mr. Matsui, Ms. Yamamoto, and Horie. People gathered more than expected. Most people are consultants.

Mr. Kuroda lectured financial situation, income statement and balance sheet of Sudanese State Public Water Corporation and Pakistan-Punjab State water and sewerage public corporation, and then exercises on cost benefit analysis of investment project of bottled water plant in Pakistan. Unfortunately, two hours was not enough to be fully explained, and it ended in a slightly halfway. I was very sorry that securing the venue was not enough as the secretariat.

1. Sudanese case
(1) Background

In the state where the JICA technical cooperation project is carried out, the water supply system has various problems. Currently, there is no satisfactory supply of water to customers due to power outages, water leakage etc., and customer has not trusted waterworks' service. In addition, the water tariff is a flat rate system, consumers do not have the concept of water saving, there is a lot of waste of water. Therefore, in the JICA technical cooperation project, we are improving capacity such as monitoring ability,

finance ability, O & M capability, public relations and so on.

(2) Budget composition

The budget mechanism of the State Water Corporation of the pilot project is a single year (January - December). Revenue is water tariff, business income of places ordered by government and donors (plumbing work etc.), donation of facility by grant aid project. On the other hand, expenses are salaries and allowances of staff, maintenance expenses of water facilities, and new capital investment. The problem is that the cost is based on the cash balance, there is no concept of depreciation, and there is no idea of period profit or loss, such as making the past unpaid money the income of the current fiscal year.

(3) Difference between budget and budget execution

When comparing budget and budget execution, budget execution is less for budget. For example, collection of water tariff is less than annual plan due to leakage because income outlook is not accurate. Therefore, maintenance and management expenses such as salary and chemicals are reduced. This reduces the motivation of the staff. Also, due to failure to properly maintain and manage, service depression and revenue declines are repeated and a vicious circle is repeated.

(4) Number of staff

As the number of staff is large and employees



who do not work are also involved, surplus personnel are putting pressure on the budget and proper staffing is necessary. However, it is impossible to realize restructuring, etc., so it is a situation inevitable to deal with natural declines such as retirement and suppression of new hiring. In Sudan, there are instances in which the number of surplus personnel has been reduced in other states, so it is also necessary to refer to that method in the future.

2. Pakistan's case

(1) Background

The state of Punjab has established WASA (Water and Sanitation Agency) in a city with a population of 1 million or more. WASA is currently installed in five cities. Water tariff is flat rate system like Sudan.

(2) Budget, financial management status

The budget consists of the operation budget and investment budget. The operation budget is the operating expenses for O & M, and the investment budget is the budget for capital investment. Budget has been prepared by cash balance, but no depreciation expenses are recorded. Recovery of past tariff is included in income for this fiscal year and there is no concept of period profit or loss. It is distinctive that the provincial government keeps the water tariff low and puts in taxes and subsidies for WASA's budget. Regarding operation budget, about 60% will be subsidized by the state government. All the investment budget is burdened by the state government, and the burden of the state government is increasing.

3. Cost-benefit analysis (case of construction of water bottling plant in Pakistan)

Finally, a lecture on cost benefit analysis in the planning stage was delivered. This is a method to analyze whether the planned project creates profits in the future and is appropriate as a

project. Participants calculated on exercises, learned about the forecast of future income, future value, present value, internal rate of return using case examples of project of construction of water bottling plant in Pakistan.

[Editor's Note]

Based on the actual example, this financial study workshop was able to show the difference in the financial situation of each country. I understand well that the method of accounting for financials differs according to the way of thinking and actual circumstances to the water supply in the country. In addition, I was able to learn about present value, idea of future value, IRR through case examples of water bottling factory in Pakistan.

Author also could not understand everything simply by listening to Mr. Kuroda's lecture, and while editing this article, I actually calculated it with Excel, and finally understood. I think that it was quite difficult for everyone who participated if there was no prior knowledge. I recommend you to calculate. Also, since all the participants did not have enough time, I think that some people could not understand very well. I plan to hold the second meeting if you request.

Mr. Kuroda kept on talking for a long time as long as two hours and I think he had a hard time. I would like to express my sincere gratitude for his valuable experience and thank him once again. In addition, as Mr. Kuroda joined WaQuAC-Net, we can see him at the meeting in the future so why don't you try asking your daily financial doubts etc?

(Edit by: Toshiki Horie)



On August 26, 2018, 10th WaQuAC-Net Kyushu Branch General Meeting was held in Fukuoka, Japan. For 10th anniversary, the special lecture by Mr. Yuki Tokudomi who is a chief of Management & Planning Section, General Affairs Department in Fukuoka City Waterworks Bureau (FWWB) was performed in the meeting. Another guest, Mr. Mon Tito is a chief of Niroth Water Treatment Plant in PPWSA, Cambodia. He participated in the meeting and presented "Recent situation of PPWSA and his work". Other participants were Mr. Nakashima, Mr. Kagata, Mr. Oda, Mr. Akaishi and Ms. Yamamoto.

Special Lecture; Int'l Cooperation Activities & HR Development in FWWB

<History of "FWWB"> FWWB has 95 years' history since the commencement of water service which supplied 15,000m³/d for Fukuoka citizen in 1923. Severe drought occurred in 1978 and the service restriction lasted 287 days (average suspending hours was 14 hours a day) because several dam reservoirs dried out completely. People had to take the water at the temporary water supply stations. For last 95 years, 19 water resources have been developed. And now, the supply capacity of FWWB is 777,700m³/d and served population is 1,550,000.

<International cooperation activities>

Beginning of the international cooperation in FWWB was to dispatch Mr. Oda to Malaysia as JICA NRW expert in 1987. Since then, 148 staff members have been dispatched to 13 developing countries like Thailand, Malawi, Mongol, Jordan, Indonesia, China, Saudi Arabia, Slovenia, Philippines, India and Bhutan. Now

FWWB has projects for Fiji and Myanmar.

<Cooperation to Myanmar> Since 2012, FWWB has dispatched 2 JICA experts and planned to send another staff to Myanmar as third expert now. FWWB cooperates with CLAIR (Council of Local Authority for International Cooperation) program for receiving trainees from Yangon since 2014, which is 6 months training for 1~2 persons.

<Grass root technical cooperation to Fiji> Mr. Oda worked for NRW problem in Fiji as JICA Senior Volunteer after retired from FWWB. When returning back to Japan, he recommended FWWB to cooperate to Fiji because that it is necessary to support continuously for improving high NRW ratio. In 2014, FWWB started the grass root technical cooperation to Fiji for 3 years. At first, staff of the Water Authority of Fiji (WAF) came to FWWB and took the training for leakage detection, repairing and etc. And then, staff of FWWB went to Fiji and trained WAF staff at the pilot area. The second phase started in January 2018 for the purposes of “improvement of consumers’ awareness for proper water usage” and “improvement of staff member’s abilities for distribution control, pipe replacement and leakage prevention”. It is planned to continue till December 2020.

<Human resources development for international cooperation>

The working group for international cooperation was established in 2013. The purposes were to carry out the activities of international cooperation smoothly and efficiently, to develop capacity of staff members and to inherit technology. Activities of the working group are regarded as official work. The number of registered staff members is 94 as of March 2018. Job classification of members; 63% is civil



*Center of front, Mr. Tokudomi,
Right of back, Mr. Tito*

engineer, 13% is mechanical engineer. Age classification; 36% is 18-29 years old, 33% is 30-39. Opinions of members are as follows; “technical ability improved”, “staff relationship expanded”, thanks for the cooperation of colleagues”, “English ability improved”

***Impression and supplementation;** Mr. Tokudomi was a former JICA long term expert in Philippines for 3 years. First JICA expert in Myanmar from FWWB was Mr. Matsuoka. He reported his activities in [WaQuAC-NET Newsletter vol.26](#) and lectured at 7th Kyushu Branch General Meeting in August 1, 2015.

It is very interesting that many young staff can participates in international cooperation activities of FWWB. They can learn the technology again at the training center before being dispatched to the developing countries. It seemed that the activities of international cooperation raise the effect of human resources development for staff members. As the background of systematic international cooperation, there are positive policy of Mayor and utility manager, and the characteristic of Fukuoka City which is originally “city is opened to the outside”

Mr. Mon Tito presented “Operation and Maintenance of Water Treatment Plant in Phnom Penh Water Supply Authority”. For the limitation of the paper space, please refer to our webpage [Top→Data→Information of Water Utilities](#)

Mr. Kagata mentioned that the difficulty of human resources development in Sudan, Africa and the necessity of different cooperation method apart from Asian experiences. Mr. Oda mentioned his experience on the preparatory survey of grant project in Sudan. Mr. Nakashima and Mr. Akaishi said that they did not have a chance for international activities recently. After the meeting, we had small party for more discussing closely at the French restaurant. We enjoyed talking, drinking and eating. (By Yamamoto)



Introduction of new members

- Mr. Job Kangicu Fundi (Kenya)
- Mr. Goro Hoshi (Japan)

***We welcome new members anytime.
Please contact us!***

WaQuAC-NET Newsletter Vol.38

Issued on October 16, 2018

WaQuAC-Net Office

E-Mail; waquac_net@yahoo.co.jp

(Yariuchi, Yamamoto)

URL: <http://www.waquac.net/english/index.html>

Next Activity

Dec 2018

Newsletter 39 in Japanese

Jan 2019

Newsletter 39 in English