



## WaQuAC-Net Mini-talk No. 2

### Advantage of Grass-roots Activities

The second Mini-Talk of WaQuAC-Net was held on March 4, 2010 in Tokyo. Two members were interviewed on grass-root level activities on support for safe water. One was Mr. Nakanosono, a chief of the secretariat of JECK (JICA Expert Conference in Kanagawa), and another was Mr. Kawashima, a staff of Saitama City Waterworks Bureau and has been working for international cooperation for long period.

**Yamamoto (Y):** What are activities of the NPO Mr. Nakanosono belongs to?

**Nakanosono (N):** I am a member of NPO "JECKA" (JECK Associates). In 2003 JECK was set up aiming to promote friendship among ex-JICA experts in Kanagawa Pref. Now 110 ex-experts registered to the



group. And in April of 2006, twenty members of the group got together to set up NPO "JECKA". It aims to step forward to supportive activities both inside and outside Japan,

by utilizing experience and skills of each expert and complementing their expertise each other. And now, "JECKA" started to dispatch experts from our members to overseas project on a contract basis. Even though specialties of our twenty members are various, only these members cannot meet requirement of the project, therefore the JECK is supposed to be able to play a role of a pool. Responding to field of a required project such as aquafarming or water supply, "JECKA" can gather up proper experts through JECK network in order to implement certain field of a project. Now we have a contract to implement a project which is not water supply sector, and have a plan to get contract to

implement a human resource development project in the field of water supply. Considering increase of members who will retire waterworks bureau from now, we think "JECKA" can utilize such human resources.



**Mini-Talk; Mr. Nakanosono and Mr. Kawashima**

**Y:** Mr. Kawashima worked for human resource development of water supply sector in Laos, and has continuously worked for them through grass root level.

**Kawashima (K):** Human resource development of water sector of Laos was promoted by a technical cooperation project of JICA from 2003 to 2006. After the project completion, I felt necessity of continuous support for them. Because the JICA's project dispatched a lot of experts from Saitama City Waterworks Bureau including me, we proposed JICA a grass-root level technical cooperation project. And then we carried out it from 2006 to 2008.

**Y:** What do you think difference between technical cooperation project and grass-root project?

**K:** The technical cooperation project targeted all concerned technical area of water supply. And after the project termination, it was still necessary for them to strengthen capacity in the field of measures against non revenue water. JICA technical cooperation project was not so flexible scheme to be implemented depending on local situation or to concentrate certain specified technical area because a JICA project is designed with its targets

and indicators to measure the achievement before the project start. On the other hand, Grass-root-level project is so flexible scheme that Saitama city could participate from its planning stage, and reflected actual situation or demand, which could be got through hearing to counterpart, to the project or trainings.

Moreover, Grass-root level project could get feedback of outcomes of the project directly to Saitama city, which may enhance incentive for the project. Laotian side appreciated that our activities were suited to the situation. In the final seminar, Laotian side suggested a training course which exchange young engineers between Laos and Saitama City. And responding to this, we agreed to exchange two engineers each year from 2010. Establishment of such a system to learn each other is one of outcomes we have gotten through continuous support up to now. Moreover, this would be great incentive for Japanese side to continue cooperating as a partner from now on.

Now, I think that the support including management of utility are necessary, not



limiting to technical field. In order to support on the management issues, firstly it is necessary to bring up experts in Japan. To do this, exchange of young staff each other is very useful.

**Y:** Mr. Kawashima, you and your friends work also for supports to install wells in schools in rural area of Laos.

**K:** After returning back to Japan, I set up English club "SWBEC (Saitama Waterworks Bureau English Club)" to strengthen experts' required English ability. Our members sold collected disused goods of their home in "Saitama International Friendship Fair", and held a charity concert. Using the raised fund got through these activities, we ask a NGO which we

got to know in Laos to dig wells in rural schools. We supported three wells for three years so far.

**Y:** I feel very interested in the attempt that you support urban water supply system through JICA project, while by NGO activities you support the drinking water in rural area as individual level.

**K:** We are now of temporary stop of activities because we got tired.

**Y:** I really expect the activity would resume soon.

What do you think advantage of grass-root support for water safety?

**N:** Grass-root activities can understand local situation and conditions deeply. Cooperation with other NPOs which have experience working there is also effective. Retired staff of waterworks can be a go-between of water supply utility and NPOs. NPO can act flexible. And important point of NPO activity is continuity, I think. (By Yariuchi)

### *Tama-Mina-Ke's Table Talk on NGO*



I heard The Democratic Party of Japan encourages NGO activities recently. Well, do you think NGO activity will be increased by government support? It is good, but some people say that NGOs should work for issues which consultants are dealing with now, instead of them! In my opinion, it is not easy because most of NGOs don't have enough experiences and specialties like consultants. ***Do NGOs deal with what consultants do? If so, what is "NGO"?***

In Europe, NGOs are working on wide range of issues which consultants do in Japan. Hmmm... There are a lot of charities by religious organizations in the U.S., aren't there? There are some anti-government NGOs in Japan. I was very surprised that some NGO's people said clearly that assistance in developing county is business. **I would define NGO as a group of people who afford (in terms of finance, engineering, experiences, physical. time or will) helps developing countries, poor people, handy-cap people beyond borders and races.** But, isn't a group of hobby also kind of NGO? If so, NGO means anything!!

***It's a very poor chat.***

**Executive Forum for Urban  
Water Service in Asia**  
sponsored by **Yokohama & JICA**  
☆☆ sharing and mutual leaning  
for sound management ☆☆  
20 ~ 22 January, 2010

Executive Forum for Enhancing Sustainability of Urban Water Service in Asian Region was held by the City of Yokohama and JICA in Yokohama from 20 to 22 January 2010. The sponsors invited 32 executive people of water operators and government officials from 9 Asian countries; India, Indonesia, The Philippines, Pakistan, Bangladesh, Cambodia, Sri Lanka, Thailand and Vietnam. And also, a lot of Japanese people who are from the central and local government, universities, Institutes and private water supply-related companies attended to the Forum. There were more than 600 of participants including observers through 3 days, and the presentations and active discussions for “sound management and good services” were developed in 6 plenary sessions and 3 group sessions.



*Photo :Participants from 9 countries and Japanese people concerned*

- Plenary session themes: 1. Water Policy, 2. Sound Management for water supply, 3. Measures against Non- Revenue Water, 4. New technology of water supply and Public Private Partnership, 5. JICA cooperation in water field, 6. Human Resources Development.
- Group session themes: 1. Water service for the poor, 2. Financing and water tariff structure, 3. Safe water and Water Quality Management.

Phnom Penh Water Supply Authority in Cambodia gave a presentation on success case of water supply management by public utility and so did Manila Water Company in the Philippines which is the private company. Both paths to success and management methods were very interesting, therefore the participants from other countries were enthusiastic to ask questions and had learn the success cases.



*Photo :General Director of Phnom Penh Water Supply Authority, H.E.Ek Sonn Chan declared “Yokohama Forum Statement”*

Presentations on water policy and management and their experiences by the executives of Japan’s water supply field were also very useful for foreign participants. Five Japanese private companies which are entering into developing countries presented their business ideas and new technologies. It was an epoch-making forum as an opportunity to have discussions between public organization concerning ODA and private companies. As the result of three-day discussion, “Yokohama Forum Statement” was declared and participants promised continuous efforts for improvement of water management and their services in each country. (By Yamamoto)

\* There are reports of the Forum in Japanese and English. If you want it, please contact WaQuAC-Net. (mail to; waquac\_net@yahoo.co.jp)



Conference Room



Observation of Nishiya WTP, Yokohama

**[Event]**

**Farewell Party for  
Mr.Sasayama, Mr. Wada and Ms. Yariuchi**

In the rain, Farewell party for three members above was held on 27 April in Ichigaya, Tokyo. Three members will be dispatched for Vietnam by JICA as experts of technical cooperation project starting on 6 June. Nine members joined in the party and encouraged them. This project is strongly cooperated by Yokohama Waterworks Bureau which has been assisting to Hue Water Company and Saigon Water Company since 2002.

Mr. Sasayama is dispatched as a chief Adviser, Mr. Wada is as an expert of distribution net management, and Ms. Yariuchi who is as a project coordinator and an expert of training management. They would be a very strong expert team. Because of rapid development of economy, not only many other donors but also private companies are interested in Vietnam. Active roles by three persons are expected. (by Yamamoto)



**Mr. SASAYAMA Hiroshi, Chief Advisor**

I will work at the project for 3 years. Mainly, I work around Hue city, the middle of Vietnam. I'm so glad that I can start the project with 2 members of WaQuAC-Net. This is the first occasion for me to work with organizations which are not water supply utility. But I never mind because our team is very powerful. We can overcome any troubles and difficulties, I believe. Please visit our site when you have a chance to come to Hue.

**Mr. WADA Yoshiharu, Expert of distribution net management**

It is very important to make very good relationship among the persons concerned the project. I want to build reliable relation among counterparts for 3 months, especially, beginning terms.

**Ms. YARIUCH MINA, Project Coordinator / Expert of Training Management**

I feel happy to work in Vietnam with members of Yokohama Waterworks whom I got to know through WaQu-AC Net. I would like to share situation of water supply in Vietnam through WaQu-AC Net.



**Mr. MORI Hajime**

KISUI Water Treatment Design & Engineering Inc  
Representative Director President and CEO

**Introduction  
of New Member**

I have a dream. We can create one Asian world with water treatment business.  
We would like more people to drink cleaner water. Even low technological equipments in Japan are very precious in South East Asian countries.  
The alliance among small and medium enterprises with each water treatment technology fulfill their needs becomes more and more important. It is necessary to create the project called `Drinkable water team Japan` with the alliance



between the government and the enterprise. For that the excellent leader who coordinates all mettlesome enterprises making the most of their strong points is necessary and important. And the role of small and medium enterprises with quick decision and execution and freedom of movement becomes more and more important. We want to challenge to contribute water treatment business in South East Asia with their active alliance as the leader.

**Water business abroad  
by small companies syndicate**

*AKAISHI Korehiro  
Vice President, Q-shu Environment Creation  
Laboratory Co.ltd (QECL)*

**1. [Introduction]**

I am vice president of Q-shu Environment Creation Laboratory Co.ltd (QECL) that works on environmental research and analysis (mainly of water quality). My profile is as follows; I worked in Nihon Suido Consultant Co.ltd (NSC; Tokyo and Kyushu,river section) from 1996 to 2000, and in Phnom Penh Water Supply Authority as Japan Overseas Cooperation Volunteers from 2001 to 2003, then in NSC Kyushu Branch from 2004 to 2005, and in 2006, I established QECL. Business field of QECL is research and analysis of environment, and sales of plant incubation system.



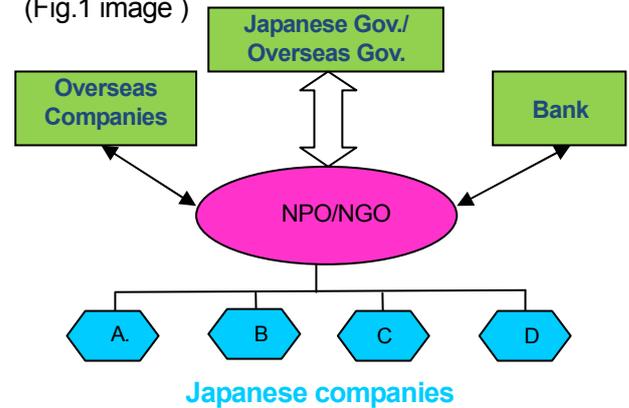
I am a member of FACT (Fukuoka Action Group for Cambodia Tomorrow) and JOCA Kyushu (Japan Overseas Cooperative Association of Kyushu).

**2. [Overseas business by Japanese small company syndicate]**

Recently, we can hear it is chance to go and do business abroad, but many small companies do not respond positively on it. Because they are concerned on their financial risk; overseas business is considered to take too long time to make a profit than domestic business. Even though they know they have a chance, but they trend to abandon it because of the big risk. My solution toward this problem is to make syndicate by multiple companies, which can disperse this risk. In fact, WaQuAC-NET Fukuoka branch held a meeting recently. I suggested this network must cooperate with other small companies on water business to promote them to share information, to facilitate collaboration and to make syndicate on overseas business. In such a style of collaboration, a leading company often

dominates others, and others would not want to provide their original technology and information positively and sufficiently. So, I think it is better that a system which NGOs and NPOs, non-profit organizations, join into the collaboration positively, (See Fig.1) By setting NGOs and NPOs as a core member of the collaboration, we can make all members to work positively and contribute to the team with own originality. And besides, we can unify the management of contact points with overseas partners, and improve bank credit.

(Fig.1 image )



**3. [Water business abroad]**

Japanese water-majors, which seem to have been spotlighted recently, focus on business field of construction and management of water supply and waste water treatment. The syndicate, that is mentioned above, can set their target on business in rural area or local cities of developing counties, which have small but many projects on that sector.. The syndicate can spread water supply system and Jokaso (small waste water treatment equipment) system there. By the way, now, my company is studying projects on analysis of well water, and installation of simple Jokaso system for business in developing country, especially in Cambodia. We hope other organizations join us. If you're interested in it, please contact us.



JOCA Kyushu's Study tour to Cambodia



Toilet of hospital in rural Cambodia



## Question & Answer Corner

We welcome any opinions, and questions to this Q & A Corner. Please contact us.

**Q Row Water contains high concentration lime. Can lime removed by Bio-filtration method?**  
(Questioner: Mr. K. in Bhutan)

**A1** There was a case that calcium was caught by algae in slow sand filter in Miyako Island, Japan  
**A2** In my opinion, it is difficult to reduce calcium dramatically by the level of lime removal by applying the slow sand filtration method without plural filter system.

Q: Dr. Nakamoto\* explains that the biological filter of slow sand filtration effects to soften the hard water by following processes,

Adsorption of nutritional salts → Creation of oxygen  
→ Separation of calcium carbonate  
→ Softening hard water.

Does “softening hard water” mean that the calcium in the water is also removed by slow sand filter?

(Mr. K., in Bhutan)

\* President of the community water supply support center of Japan, a NPO and a professor emeritus of Shinsyu University, Japan

**A1** : I tried to an experiment of slow sand filtration in Bolivia. I checked the quality of the water. The hardness of each well-water, river-water, reservoir-water is about 100mg-CaCO<sub>3</sub>. So hardness is not treated. The book of Professor Nakamoto indicates that it is the example of the water purification plant of MIYAKOJIMA. This is the blog of Professor Nakamoto.



<http://blogs.yahoo.co.jp/cwscnkmt/31603065.html>

In this example, it could be seen as the calcium was caught by the algae in the filtration. However it is not show the detail data, so I can't clearly say that slow sand filtration can purify right here.

Mr. HORIE Toshiki (graduate school of Tokyo metropolitan University )

**A2** : There is an actual case of calcium removal by the slow sand filter. I did not know. However, I think, even high concentrated calcium in the water is removed by changing lime to calcium carbonate in short period, film of calcium carbonate is produced on the surface of sand. And the film may cause clog of the filter.

Because I don't have the experience of slow sand filter, I cannot say clearly. But, when algae grow and photosynthesis work well, carbonic components are consumed. And then calcium volume which settles down as calcium carbonate, will reduce. I think, as the condition of water-flowing, slow sand filtration method doesn't work to reduce calcium dramatically by lime removal level, without plural bio-filter system (Mr. SASAYAMA Hiroshi, Yokohama City Waterworks Bureau)



### Explanation of Terms

**Lime**: Generally, lime is calcium oxide (CaO) or /and slaked lime = hydroxide (Ca(OH)<sub>2</sub>) (by “Water supply terms dictionary”, Japan)

**Hard water**: Generally, water that requires considerable amounts of soap to produce a foam or lather and that also produces scale in hot water pipes, heaters, boilers, and other units in which the temperature of water is increased materially. With

respect to hardness, waters have been classified as follows: 0–25 mg/L as calcium carbonate (CaCO<sub>3</sub>), very soft; 25–75 mg/L as CaCO<sub>3</sub>, soft; 75–150 mg/L as CaCO<sub>3</sub>, moderately hard; 150–300 mg/L as CaCO<sub>3</sub>, hard; 300 mg/L as CaCO<sub>3</sub> and up, very hard. (by “AWWA Drinking Water Dictionary”)

**Water softening:** The removal of calcium and magnesium ions, which are the principal causes of hardness in water. The cation exchange resin method is most commonly used for residential and commercial water treatment. In municipal and industrial water treatment, the process can be *lime softening* or *lime–soda ash softening*, called precipitative softening. (Ditto)

**Lime softening:** The process of removing water hardness by adding lime to precipitate solids composed of metal carbonates and hydroxides. Clarification may or may not also occur. (Ditto)

**Lime–soda ash softening :** A water treatment that makes use of lime softening followed by a reduction of noncarbonate hardness by the addition of soda ash (Na<sub>2</sub>CO<sub>3</sub>) to form an insoluble precipitate that is removed by filtration. This method of removing hardness by precipitation is sometimes used by municipalities, but it will leave 85 mg/L or more of residual hardness as calcium carbonate (CaCO<sub>3</sub>). (Ditto)

**Congratulations  
on the Stockholm Industry  
Water Award 2010**

**To General Director, H.E. Ek Sonn Chan  
and all PPWSA Staff**

**From WaQuAC-NET**



**Introduction of New Members**

(as of May 2010)

- Mr. KITAHARA Yasuyuki
- Mr. MATSUMOTO Shigeyuki
- Ms. HANEDA Mika
- Mr. MORI Hajime

**We welcome new member any time.  
Please contact our office.**

**WaQuAC-NET Newsletter No. 6**

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Next Activity

Newsletter 7 “Water leakage and water quality management”