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AAINews

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Journal of Hokkaido's agriculture discovery trip: a study trip on Hokkaido's agriculture with Sudanese counterparts

In mid-September, I visited Hokkaido as part of the JICA's training course, accompanying the five counterparts from JICA's Capacity Development Project for Provision of Services for Basic Human Needs in Kassala, Sudan. When we arrived from Haneda in the New Chitose Airport, there was already a pleasant autumn wind. During the one-week stay, it became quite chilly in the morning and evening. Furthermore, it was just after a typhoon that brought heavy rain and there were news reports of some damage in the Sapporo and Obihiro areas. However, fortunately, we could complete the visit as planned without any problems and without anybody getting sick. In the eastern part of Hokkaido, it was potato harvesting time, and large harvesters were at work.

The program of this visit was organized in a way that directly supports activities of the JICA project in Sudan, and included visits to a number of vegetable and upland crop. Hokkaido's agriculture is highly diverse – ranging from paddy rice and fruit to upland crop and livestock husbandry elsewhere on the island. In addition, forms of farming vary from horticultural crop production around large cities, to large scale upland crop production in eastern Hokkaido. Given this, it was very educational that we had a chance to visit the Hokkaido provincial government office on the first day of our trip to hear an overview of Hokkaido's agricultural policy and plan formulation.

Sorting operation of Japanese radish (daikon) on the harvesting machine in Taisho, Obihiro

Visiting a Chinese yam (nagaimo) farmer in Obihiro

Japan's overall food self sufficiency rate is around 40% in terms of calories but in Hokkaido the food self sufficiency rate is about 200%. In the case of Obihiro, it is over 1,100%! This clearly shows the unique role Hokkaido's farming has as a Japanese food production base. One of the core farming measures which has been advocated in Hokkaido is "clean farming". Training has been provided for farmers on farming with reduced pesticide and fertilizer input. On the other hand, organic farming has not been taken up widely. Efforts on J-GAP (Japan Good Agriculture Practice) standards and certification system have finally been launched. However, there has been more emphasis on the certification system to compete with imported products from overseas rather than producing competitive products for exports from Japan. It is noteworthy though that there have been some progressive efforts on the private sector side to promote export of Hokkaido's farm products and processed products that are produced in an eco-friendly manner with reduced pesticides and fertilizers to destinations such as Taiwan and Shanghai.

In eastern Hokkaido, we met a lively farmer in his 40s. He has two sons who will succeed his large-scale full-time farming. It looks like a different world, contrasting with the situations in farming villages in mainland Japan which are experiencing serious depopulation. However, in general, even Hokkaido farming is facing the problem of an aging society and shares the fundamental problem Japan's agricultural sector has to tackle. After the decline of the coal industry, Hokkaido has been placing emphasis on nurturing the tourism and agriculture sectors. Sudan has been trying to revitalize its agricultural industry, departing from the oil-dependent economy after the separation of South Sudan. Thus Sudan and Hokkaido have some issues in common. For me, as I went around Hokkaido with the Sudanese participants, it was refreshing to see farmers and people working in the agricultural sector with great vigor and innovation, rather than only encountering the negative aspects of Japan's agricultural situation.

(By Koga, November 9, 2011)

At the "Gallery Nohmado (Window for agriculture)" – a non-governmental forum for information and knowledge exchange among producers, consumers and processors in Sapporo

From assistance to business-from support to collaboration <Part 3>

Contractors in Syria

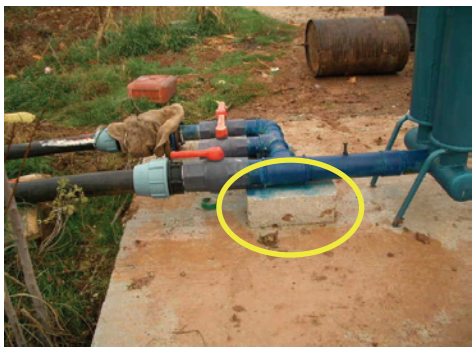
AAI has been working in Syria since the 1990s in the field of agricultural extension and training and has established a deep relationship with the country. Since 2005 to 2012, we implemented the JICA technical cooperation project "The Project on Development of Efficient Irrigation Techniques and Extension", supporting the introduction and extension of modern irrigation systems such as drip irrigation and sprinklers. In this report, we would like to explore the potential of our future collaboration based on the knowledge we gained through these activities.

What we have noticed in our work in Syria is the low level of skills, knowledge and work ethics of technicians who are doing the actual work on the ground. For example, they cannot really install plumbing according to the blueprints, and they cannot properly put together joints. They cannot make the pipes properly leveled, and often use blocks they find as pedestals to support pipes rather than using dedicated equipment. One can immediately see it is a rush job. As a result, in most cases, pipes leak as soon as water passes through them. As far as we know, this low standard level of work is prevalent in Syria to such an extent that farmers think that it is normal for water to leak from pipes. We cannot help thinking that this makes farmers sceptical about irrigation tools such as drips and sprinklers, thus preventing modernization of irrigation systems.

Why are most technicians like this? Thinking about it, we came to the conclusion that they have not learned proper skills and therefore they probably do not know what a very good job is like. In Syria, unless a child goes to university, it is customary in rural areas for a child to succeed the family business. We often see children helping their father's work and hanging around at construction sites. The children pick up skills like craftsmen in the old days by helping their fathers and learning techniques by imitating what their fathers do. It is all well if we are talking about traditional crafts of Syria which have developed over hundreds of years. However, solid understanding of the basics through a structured education is essential when it comes to new technologies such as modern irrigation systems. One cannot acquire skills to deal with industrial products only by relying on working experience and intuition. However, because our technical assistance is part of the ODA between governments, the reality is that it is usually difficult to directly support people working on the ground.

Given this, we are mulling over the possibility of establishing a system whereby young Syrian technicians are dispatched to Japan for on-the-job training at a town factory that provides plumbing services. After the training, they will form a contractor in Syria to provide high-quality services. By learning meticulous work in Japan while young, they can avoid getting soaked with Syrian custom and common practice. They can master the high quality knowledge of, and attitude to, work which is normal in Japan, constructing irrigation facilities according to the blueprint, properly attaching joints and pipes, as well as finishing work within the planned construction period. An increase in the number of technicians and builders with this kind of knowledge and attitude will be highly beneficial for Syria's industry. The fully trained technicians' work in Syria will influence other contractors, obliging them to raise their work standards, resulting in an enhancement of the overall quality of Syria's plumbing industry.

Unless the standard of practice at the working level is raised, introduction of state of art technologies will not win the necessary credibility. Furthermore, to nurture technicians in practical terms, it seems that non-ODA support would be more effective than bilateral government cooperation. More immediate results can be yielded by directly communicating to the workers that "you can make a profit by offering high quality work" and "what high-quality work means" through non-governmental channels. In any countries and any fields, there seem to be always essential needs for a country's development which are difficult to support through ODA. Paying attention to these needs, this type of support to realize social significance rather than profit-seeking only should be a part of AAI's business.



Left: Use of a brick instead of a pedestal makes durability problematic.
Middle: The water pressure gauge is impossible to read as it is fixed directly under the valve where a pipe is to be joined.
Right: Leaking as soon as the work is completed.

Agriculture and farmers in Kurdish region <Part 3>

Vegetable cultivation and spread of greenhouses

Kurdish people have been cultivating open field vegetables making use of the region's dry climate which has a marked temperature gap between day and night. The main crops are tomato, cucumber, water melon, melon, onion, cabbage and egg plant. Fresh vegetable salads at town restaurants are very tasty. The cultivation period of open field vegetables is largely from May to November. Water is pumped up from channels for the vegetable fields. Farmlands are demarcated in irregular shapes, with different kinds of vegetables grown in small areas adjoining each other.

Open field vegetable cultivation: Farmlands are divided into irregular shapes.

According to farmers, problems of vegetable production in the Kurdish region are the lack of shipping opportunities and the undeveloped distribution business infrastructure. Vegetables need to reach consumers as quickly as possible after being collected, but such a sales and transport business is nonexistent. Farmers talked about the necessity of securing transport routes so that products that have particular harvesting periods can reach large consumer areas while the products are still fresh. Also for vegetable cultivation in the Kurdish region, water saving and product quality improvement are important challenges. They have to compete with the high quality vegetables that are imported from neighboring countries such as Turkey and Iran. Lower quality Kurdish products are in an inferior position. Therefore the Kurdistan Regional Government takes measures such as restricting vegetable imports during the harvesting time when a large volume of Kurdish vegetables are available. Under these circumstances in recent years more intensive farming using greenhouses is being introduced even in the Kurdish region aiming for quality improvement and increased production volume. However they have only a small number of years of experience.

According to a farming equipment shop in the area, it was only in 2007 that the first greenhouse was introduced. Then by 2010, between 4,000 and 4,200 greenhouses were set up mainly in Sulaimania. This farming equipment shop has sold 130 greenhouses in Erbil this year. Although greenhouse cultivation is on the increase, it is still in its early years. Greenhouse materials are mainly from Lebanon and the most often seen size is a 9 m wide and 50 m long facility. They do not have the cooling devices that make use of heat vaporization which are often seen in the Gulf countries. Ventilation is manually operated by opening parts of the plastic walls. With greenhouse cultivation which is sensitive to moisture, disease and pest management is also important.

Greenhouses are increasing rapidly. They open part of the greenhouse for ventilation.

Furthermore, as the ground inside greenhouses is often not properly level, it seems difficult for drip irrigation nozzles to release a set amount of water. It looked to us that it would be possible to increase yields with just easy technological improvements.

Drips are installed on uneven ground within the greenhouse. It is difficult to produce a fixed quantity of water from each nozzle.

The Kurdistan Regional Government is very positive about introduction of greenhouses, and places this as a pillar of its agricultural extension strategy. It provides farmers with greenhouses free of charge to test extension potential, and gives technical support for cultivation. Greenhouse equipment companies are also active in providing technical support and training in the areas of seedling sales, determination of right quantities of water, mixing ratios of liquid fertilizer, cultivation methods and disease and pest control. The local agricultural research institute is also conducting research for improving production and techniques by conducting experiments on greenhouse cultivation.

However, there are many challenges. The agriculture research institute could not even produce data on yields from experimental cultivation when interviewed. Only one farmer among many interviewed, could provide clear precise answers to similar questions. When it comes to farm management, being able to calculate the balance between the investment amount and income (production volume and sales price) is highly important for planning future expansion of facilities. In addition, there is another problem related to adverse effects of continuous cropping. So far, as it has been only so many years since greenhouses were introduced in the area, there is no case of serious adverse effects from continuous cropping. And farmers are not aware about the potential problem. Even a corporate technician who manages dozens of large scale greenhouses proudly responded to us, saying "continuous annual tomato cultivation is suitable here." On the other hand, government researchers show strong concerns about problems from continuous cropping, but have no sufficient knowledge to develop counter measures. They expressed their strong desire to learn about measures to deal with continuous cropping issues as applied in Japan.

Conducting training of Syrian counterparts of technical assistance projects in Japan

A JICA training course for Syrian counterparts was held for one month from October 3. This training was part of The Project on Development of Efficient Irrigation Techniques and Extension in Syria. Although there have been similar training courses in the past, this course was held under special circumstances and emotions which were different from before. The so-called “Arab Spring” which started in Tunisia has now rippled over to Egypt, Libya and to Syria. Syria has been in an extremely volatile and confusing situation. Therefore until the last minute, we were doubtful if the counterparts could come to Japan. The training course, which was held under this special situation, had an original objective of learning Japan’s agriculture, agricultural extension and training system. In addition, the training was also closely linked with the project activities in Syria with an aim to directly support the on-going project and further revitalize the project. It was aiming to be a practical training whereby the participants were expected to gain knowledge and techniques that can be immediately translated into action after returning to their home country.

There were seven participants: four extension officers and three officials dealing with training issues. Three of them were from central government agencies and four were from local governments. Five of them were male and two were female. The ages of the participants were also varied, from those who were in their 30s to 50s. It was a well composed and balanced group in all respects. Training contents were tailor made to suit the specialties of the participants. In the first two weeks, training focused on Japan’s agricultural extension and training programs, as well as farmers’ cooperatives, farmer’s markets for direct sales of farming products and distributions, irrigation schemes, and training was facilitated through lectures and site visits.

One of the new features of the training compared to past training courses was a discussion between participants and Japanese specialists on topics related to the project’s activities. With the facilitation of the Japanese specialists, the participants discussed different aspects of the project, including experimental research, demonstration plots, training activities and extension activities. For each field, participants reported on the current situations and based on their presentations, active discussions took place on existing challenges and future courses of action.

In the fourth week which was the last week of the training course, a two-day workshop was held with the objective of formulating a future training plan based on identified training needs. In this workshop, the participating irrigation extension staff conducted their job analysis to take cognizance of their expected roles as extension officers, writing down the types of capacity which will be required of them to play their expected roles. Then based on individual capacity, we conducted individual and institutional capacity assessment. Reactions of the participants were positive and many expressed their interest in using the same methods as soon as they returned to their home country.

By the way, the significance of the training courses in Japan is for the participants to learn what they may not have in their countries and learn about state-of-art technologies in Japan. We also hoped that the participants got to know about the Japanese approach to careful and meticulous work, the importance of timely work completion and a sense of respect to people of different cultures and the idea of Japanese peoples’ modesty.

In this training, these elements were included. In addition to the official training, it was vital to include extracurricular activities to experience various aspects of “Japan”. We organized Tokyo sightseeing from Akihabara, Asakusa Kaminari Mon (the temple gate), to overlooking the metropolis of Tokyo from the Government Office observatory. Furthermore, the participants experienced pear picking at a tourist farm, a fine Japanese style BBQ, tasted sashimi and sushi and tried using chopsticks, and had some Japanese language lessons for beginners. For souvenirs for their families and friends back home, they were impressed by the variety of items at the 100-yen discount shops.

We would be extremely happy if the knowledge and wide experiences they gained in Japan will be utilized in their future work in Syria and will encourage them in their efforts to continue their projects in the country under the current difficult circumstances.

Activities at the agriculture improvement and extension centre

A workshop to develop a training plan

Sushi, sushi and sushi!