

### Into Iraq's Kurdish Area

In May 2010 I had a chance to enter the Kurdish area\* in Iraq. I mainly stayed at the Kurdish autonomous region's capital of Erbil, which, contrary to my expectations, proved to be a large city. In Erbil, motorways were being built and new hotels and shopping centers were going up. The first European style shopping mall in Iraq was also in Dohuk, in the northern part of the Kurdish area.

There are three Kurdish autonomous regions in Iraq in the northern-most prefectures of Erbil, Suleimania and Dohuk. The population is estimated to be 6 million and is mostly comprised of Kurdish people. The northern part of the Kurdish area is dominated by steep mountains that contrast with the gentle plains in the south. Currently, Kurdistan regional governments is granted a high degree of autonomy and have established administrative structures that are largely independent from the central Iraqi government; these have been working on their own post-war reconstruction activities (although there is opposition to this from the central government). The Kurdish area has a relatively high amount of rainfall in the Iraqi territory and various crops are grown including wheat and pulses. In recent years, vegetable farming has also been increasing. In the mountain area, walnuts and fruits such as apricots and apples are widely grown and goats and sheep are kept.

I heard that the Kurdish districts used to be the food basket of Iraq. However, because of the civil war and an exodus of refugees, agricultural production suffered major damage and to date has not recovered. The core of agricultural production is wheat and this is still largely dependent on rainfall with only a few farms equipped with irrigation facilities. This makes production unstable and characterized by large yearly fluctuations in yields. It seems that farmers are not making sufficient

income from vegetables due to competition from cheaper imports from neighboring countries, despite the increases in domestic production. Farmers talked about these things indifferently when I asked. People did not seem to worry seriously about agricultural income as the Kurdish government continues to provide free wheat to all the residents, and if necessary, people can work with the Kurdish regional army to earn a cash income. Or perhaps this lack of concern may be down to the enduring quality of the Kurdish people who have lived through degrees of suffering that we have never experienced. They don't seem to even care and seem to be thinking "this level of difficulty is nothing."

There are more than 25 million Kurdish people in the world, however they don't have their own nation. Throughout history they have been consistently oppressed and have endured enormous hardships. Even under their current difficult situations and despite the precedents of history, the Kurdish people received us cheerfully and welcomed us warmly. I could see ancient ruins and scenically beautiful areas in different parts of the Kurdish area and could also sample local food including delicious shawarma. Shawarma is a local dish involving thinly sliced meat seasoned with hot spices placed on a turning spit, and when cooked the outer parts are cut off and eaten with bread. I hope that the security situation in Iraq will improve and we will be able to walk around the country freely for sightseeing. Incidentally, perhaps it is the oil power, but I was a little surprised to see that there were many migrant laborers along with the Kurdish workers as is the case in the Gulf states. They came from the Philippines, Sri Lanka and probably from India. I was wondering why everything could not be done by Kurdish workers.

(July 2011 by Yoshihisa Zaitso)



Vegetable and fruits cultivation in the mountain region



Erbil city center

Shawarma shop in town



## Close friends from far countries

### AAI's training follow-up program

I visited Malawi and Zambia in southern Africa in July 2011. It was winter in these southern hemisphere countries. The main purpose of the trip was to conduct AAI's voluntary follow-up activities targeting ex-participants who had returned home. For 10 years since 2001, AAI has been commissioned to conduct seven training courses at JICA Tsukuba. These were: 1) Vegetable cultivation for the republic of Tajikistan; 2) Vegetable and upland crops cultivation techniques for southern African countries; 3) Vegetable cultivation for the republic of south Africa; 4) Vegetable cultivation technology II; 5) Vegetable cultivation technology; 6) Vegetable cultivation technology for small scale farmers; and 7) Upland rice variety selection techniques for Africa. This time, targeting the southern African region where many ex-participants live and work, we conducted a follow-up investigation on their post-training activities at their work places. In 2005, an AAI staff, who went to Zimbabwe on business, visited ex-participants in Botswana. I represented the AAI in this second follow-up visit.

In our efforts to deliver high-quality training courses, we have been constantly having internal discussions within our company on how to improve the training contents. This follow-up visit was part of our ongoing effort to improve the quality of training programs. We conducted individual interviews based on the questionnaire we sent to the ex-participants prior to our visit. Through the interviews, I could feel their effort to try to innovate and implement what they learned in the training. I could witness many techniques devised by innovative Japanese farmers that are introduced in the JICA Tsukuba training program being applied as they are on African soil. These techniques included potato production with seed potato cuttings, introduction of tomato seedling raising and management, and the demonstration and extension of compost making using materials available around villages. In the rice cultivation field a researcher passionately talked about how he was teaching variety selection experiment methods to farmers, using NERICA which is expected to

become widely cultivated, as part of the commissioned cultivation system.

In any case, what I reconfirmed through contacting the ex-participants was the close trusting relationship that exists between JICA Tsukuba participants and their instructors. During the 4-10 months training period, instructors spend time with participants from morning to evening, not only giving advice on technical aspects of the training but also discussing and advising on the private matters of the participants. The tight relationship built during the time and places of training is not something that can be developed in one morning or evening. Without exaggerating, I sometime even felt that participants and instructors can form a friendship which is even stronger than the tie between brothers. Based on this mutual trust, although I was not involved directly in the training programs, I received a hearty welcome as if I was an old friend, which made this follow-up visit go smoothly.

Nowadays, there is a skeptical view about training programs organized in Japan, far away from the participants' own countries. If one looks at the training content, it may sometimes be more effective to conduct training programs in a third country with similar environmental and social conditions rather than participants having to go all the way to Japan. However, training in Japan can provide highly valuable impacts, offering precious time for participants to immerse themselves in technical issues, both systematically and intensively in their career, on subjects related to vegetable and upland rice cultivation. In addition, the training tends to nurture Japanophiles, as the participants have the chance to meet Japanese culture and become friends with Japanese people. Through follow-up visits like this one, cultivating the network of ex-participants, it is our dream to establish small scale projects jointly with the participants in their home countries.



Ex-participants interviewing farmers (Blantyre, Malawi)



An ex-participant passionately talking about NERICA variety selection experiments (Salima, Malawi)



An ex-participant working as a lecturer on practical tomato seedling management (Lusaka, Zambia)

# Rice cultivation in Africa <Part 4>

## Rain-fed rice cultivation in Guinea

Not many people know that the West African country Guinea has a 2000-year tradition of rice cultivation. The staple of Guinea is, of course, rice, and it is estimated that 90 kg of rice per person is consumed per year. The precipitation of Guinea is over 4,000 mm in the Capital Conakry. Inland, the rainfall is also high - between 1,500-2,000 mm - and most of the rain falls during the rainy season between May and October. There are generally four types of rice cultivation in Guinea, namely: 1) Upland rice: upland rice cultivation on the slopes of hilly areas using the shifting cultivation system, 2) Bas fond rice: lowland paddy rice cultivation in the inland area, 3) Floodplain rice: extensive rice cultivation using the vast floodplain along the Niger River, and 4) Mangrove rice: lowland paddy rice cultivation in the coastal lowland area. Let us introduce the first three types of cultivation.

Upland rice cultivation in the mountains and on slopes is operating under rain fed. On the contrary, paddy rice cultivation used to be dependent on rain fall and water naturally running along the land contours in the rainy season, but after achieving independence, the country made (and continues to make) efforts to promote rice cultivation with active water control by introducing irrigation facilities. However, most cultivation is still rainfall dependent, because of the destruction of facilities by floods occurring during the rainy season and the introduction of inappropriate facilities and inadequate management.

Paddy rice cultivation is done using both direct sowing and transplanting methods. In Bas fond rice cultivation, the transplanting method is mainly used as the water flow is fast. In floodplain cultivation, both direct sowing and transplanting methods are used depending on the location and conditions. The paddling by dismantling borders and lumps of soil from the previous cultivation was also observed. Seedling production for transplanting is conducted on banks near paddy fields or along the farm roads. Seeds are sown after hastening of germination, and are grown within 30-40 days. In the case of Bas fond rice cultivation and floodplain rice

cultivation, as they are cultivated without having any control over water, planting timing is totally dependent on rainfall therefore, sometimes seedlings can grow too high. If this happens, the tips of the seedlings are cut before planting. Planting is done randomly. After planting, there is little tending activity such as water management or weeding. Ear level harvesting is done and post harvest treatments are done using traditional methods of drying and threshing in the field. Seeds are mostly self harvested. With these traditional cultivation methods, there is a significant amount of loss and the production rate is low with an average of 1.5 tons per ha in the country.

In Guinea, rice production cannot catch up with demand, and a large amount of rice is imported. To remedy this, the Guinean Government has been promoting increased rice production. In 2008, the rice cultivation area size was 830,000 ha, with 1.45 tons per ha yield. The total production was approximately 1.2 million tons. However, the statistics are a little doubtful. In any case, Guinea is a member of the first group of the Coalition for African Rice Development (CARD), and has formulated the National Rice Development Strategy (NRDS). The strategy aims to achieve self sufficiency in rice and export through the rice production increase plan, with targets of dramatically increased cultivation area of 1,600,000 ha with 2.73 million tons of production per year by 2018. In the NRDS, in order to achieve the targets, it is planned to introduce improved varieties including NERICA, increase the use of fertilizers and pesticides, improve processing techniques, consolidate and repair irrigation facilities, and create a focus on human resource development.

NERICA was introduced through pilots in 1997 as an upland rice variety, and a seed production project started in 1999. Seed production has been supported since then by the Japanese government and NGOs. Achieving self-sufficiency in rice production is an extremely important policy, leading to the reduction of imports and the outflow of foreign currency. Many farmers are hoping to benefit from the NRDS and increase rice production and improve their livelihoods.



Growing seedlings on the border



Upland rice cultivation on the slopes



Transplanting paddy rice in Bas fond



Paddy rice cultivation in floodplain

# Bridging training and extension activities <Part 3>

## Implementing training courses that are useful for extension activities

The field day of group training course on vegetable cultivation technology for small scale farmers is a program to present the main findings of technique application for particular vegetables and the results of experiments at the cultivation field. It aims to enhance accurate understanding of Japan’s vegetable cultivation techniques. Another aim of this program is for participants to become used to communicating about experiment objectives and other necessary points to explain what they have done in an accurate, effective and easily understandable manner. However, individual participants’ presentations are limited to simply reading their original cultivation plans and experiment results. We as the instructors feel that the program needs much improvement. Therefore, we decided to position the field day as an exercise for extension activities, trying to ensure meaningful training.

We set the following imaginary scene: “A cultivation technique was developed at a central experiment station in a region which is ready for extension. A technique extension conference is being held in order to promote this technique widely through the local extension centers.” At the conference, the experiment station’s subject matter specialist explained to local extension officers the significance of this new technique, and detailed important points to remember during extension activities to the beneficiary farmers. The participants were invited to jointly examine concrete extension methods. Using a watermelon training technique and a method to determine planting density of potato as examples, participants debated what would be the best communication method for the subject matter specialist and how they should prepare what they will use for presentation including rehearsals, and then put the results into concrete action. In this exercise, instructors first explained the imaginary scene and divided the participants into two groups. Facilitated by the instructors, each group looked at concrete plans and made a presentation.

As part of the program support, in the lecture on irrigation techniques for vegetable cultivation during the first part of the training in April, we introduced the



Preparatory meeting



Preparing documents and Presentation materials for the meeting

results-oriented training and extension method used in Syria. In this methodology, targets are set based on farmers’ needs and plans are thus formulated. We explained that implementation of the plans is carried out through careful discussions and preparation, and stressed the importance of the process flow and feedback including the evaluation of the level of understanding of farmers. Moreover, during the cultivation practice, we explained the features of the employed techniques following the growth of watermelon and potato, and examined the results of the various investigations conducted up to the harvest. Furthermore, after explaining the program’s challenges, a lecture on presentation methods was provided, introducing different ways to communicate information accurately and effectively.

A discussion was held with the participation of all the participants, where a plan was devised to hold a virtual technique extension meeting exercise. Individual countries’ current situations in the corresponding events were introduced and clues for preparatory activities were sought. The participants from St Vincent reported that he developed an evaluation sheet for demonstration projects to be used to inform future activities. He also reported that he prepared for the field days to extend useful cultivation techniques, through integrating the needed preparatory activities in his work plan and using a check list to avoid omitting some activities in the process. Participants from Myanmar and Laos reported on the use of information materials and photos summarizing the features of different techniques. The participant from Fiji said that to enhance farmers’ understanding, he first explained the extended techniques using diagrams indoors or under shade. He then took the farmers to the field to show the techniques actually being applied. The Nepali participant reported on the implementation of farmer’s field school method. Therefore we asked the participant to explain the details to share with all the participants.

The second meeting was held in groups to examine the contents of the presentation at the virtual technique extension meeting, presentation order and materials to be prepared, and the participants started presentation material development. The material preparation included poster development with easy-to-understand diagrams and photographs, harvesting of sample vegetables to show the results of the techniques, and an evaluation sheet to be used after the presentation. At the third group meeting, more preparation was done for the virtual technique extension meeting day. Through conducting the training to date, we felt it was effective to hold this type of session whereby one another’s knowledge and wisdom are presented, in order to ensure that field days will be truly useful for extension activities.