

To the Afghan Land

It is Thursday morning; a short relaxing moment and I am smoking after breakfast. Thursdays and Fridays are the holidays in Afghanistan. I normally relax on Thursdays and try to re-charge my batteries for the coming week. Tasty almonds and raisins are served at the hotel. It is the beginning of spring now in Afghanistan. It is a little cool in the morning and evening and it rains more than you might imagine. The capital, Kabul, is 1,800 m above sea level. Perhaps because of this, when I first arrived, I felt the thinness of the air when I climbed and went down the stairs.

It has been about three weeks since I entered Afghanistan. It is my first visit to the country. I came to conduct a survey related to agricultural extension, however, due to security issues, it has been very difficult to visit the project sites. Security is also an issue in our daily lives. It is, of course, prohibited to walk around the town, and we have to ask the local staff to do all the shopping for us.

Still, I managed to visit the field several times. I understood that Kabul is an arid area with precipitation of around 280 mm per year. However, there has been quite a bit of rain since my arrival! This must have been a blessing for the farmers. Around Kabul, where people grow wheat and fruits, agriculture is a combination of rain-fed and irrigation using the traditional Karez. The Karez system is called Qanat in Iran, Faraj in the Gulf region and Khetara in West Africa. The idea, whatever the name, is similar. Karez are underground water channels with a series of vertical shafts that connect water sources to farmlands. In part of the project sites, many of the water channels were open channels. I heard that the narrow water channels merge from the upstream and become fairly wide channels. Afghanistan is a mountainous country and they have a traditional terraced farmlands system which is similar to the rice and crop terraces in Japan. The terraces are narrow in the hilly areas, and, in the lowlands around the Kabul

basin, they are rather wide and form a peaceful farming landscape.

In Kabul, the population is increasing rapidly. According to an information source, it has already exceeded 4 million and in future it will reach 6 million people. As the city has a limited amount of flat lands, the houses are sprawling up to the middle and top of the rocky hills, looking quite impressive. From a distance, there seems to be no road for vehicles to drive up. Even when I tried really hard to spot cars on the hill, I could see none. Hoses, which probably provide household water, can be seen stretching up to the hill top, and I could see people who were going up and down the steep stairs. When it rains, roads become muddy and garbage floats on the rivers. Still, people are going about doing their business, pulling carts and selling vegetables by the road – a bustling atmosphere that can be observed through the car window. At junctions and around important facilities, heavily armed security guards are placed to maintain public order.

In the Kabul basin, it feels that water resources are comparatively abundant due to the snow that falls on the surrounding mountain ranges. Because of the arid climate with its large temperature range, a variety of fruits such as delicious grapes, apricots and apples are produced using irrigated water from Karez. Vegetables we see in town do not look any inferior to the ones that are imported. In fact, whatever the looks may be, fruits and vegetables from Afghanistan are very tasty. I hope I can increase opportunities as much as possible to see the actual situation on the ground. The Afghan people I was acquainted with in the Gulf States and those who I met in Japan were all very kind and pro-Japanese. In the difficult environment, many Japanese experts are providing support for capacity building, being careful about their security. It will be my privilege to be able to contribute to the country and to increase more “Japanophiles” here in Afghanistan.

(By Zaitzu, May 2013)



Karez channels



Wheat farm with irrigation channels



Houses built almost all the way up to the top of the rocky mountain

From the frontline of environmental education <Part 3>

Whole Earth Nature School

Ecotourism

Ecotourism is a coined word, combining the words ecology and tourism. There is no established uniform definition of ecotourism, and it is used differently depending on the standpoints of people and countries. This is because areas and individuals places differ depending on the way they are involved in ecotourism and their stance. There are also different objectives for promoting ecotourism which affect the definition. Whatever the ultimate definition is, as the word starts with “eco”, ecotourism is not mere tourism. Ecological elements such as natural resources are the core of ecotourism, and conservation of natural resources and sustainable use, form an important basis.

Whole Earth Nature School and Ecotourism

Whole Earth Nature School (WENS) is a company based in Fujinomiya City. It aims to restore the Japanese style view of nature by demonstrating ways of life where people, nature and locales live in harmony, through offering various nature experience programs and organizing environmental education activities targeting corporates. The main activities include ecotours such as Mt. Fuji climbing and trekking around the crater, cave exploration, making the most of our location at the foothill of Mt. Fuji with its vast natural area. The school also offers programs to reflect on the usual way of living and lifestyle through farming work with a view to improving lifestyles. WENS’ activities are run and sustained by various revenues including guiding fees for ecotours.

Roles of Interpreters (Guides)

Ecotours are accompanied by a guide called the “interpreter”. WENS have 30 plus interpreters and this makes the ecotours and nature experiences more fun and fruitful. Interpreters’ explanations make participants notice things which they would not otherwise, and helps deepen their understanding of what they see, thus improving the quality of ecotours. Their motto is that one of the most important roles of the interpreters is to “communicate what one cannot see through what one can see.” For example, communicate the amazing facts

about evolution of animals using owl’s feathers, or make participants realize the intricate colors that are unique to Japanese culture, using a large variety of fallen leaves. For this to be successful, it is necessary to develop practical yet attractive teaching materials. The interpreters are also required to have skills to create the right atmosphere and sense of “place” that will help communicate messages. Another important work of the interpreters is relationship building with host farmers at farming experience events.

Ecotours and Environmental Education

Looking at ecotours and nature experiences as a business, by offering high quality content that can conjure up deep emotion, one can ensure continued revenue. On the other hand, if one looks at ecotours from the view point of environmental education, enjoying the tour experiences alone is not sufficient. Additional emphasis is placed on realization and awareness raising through these experiences, and it is expected that ecotours will also trigger changes in actions due to the new awareness of participants.

WENS incorporates actual nature conservation activities within their ecotours, so that participants will not only be made aware of the conservation issues but will link the awareness to actual actions. For instance, there are local actions to protect the natural environment in the area by looking after bamboo woodlands and conserving satoyama (mountain villages) as volunteer activities. As for agricultural experience, with cooperation from local farmers, WENS offers rice planting, weeding, rice cultivation experiences, as well as craft classes using straw after harvest. Offering the sequence of farming activities, creating a “story line” helps secure repeaters.

Whether business oriented or environmental education oriented, an important common aspect of ecotours is to continuously improve quality of experiences, even if the objectives are different. This quality of experience is something that will lead to sustainability of activities.



Whole Earth Nature School’s Fujinomiya main school



Making education materials with a variety of fallen leaves



Site for farming experience and volunteering

Water saving irrigation extension tools in Syria <Part 3>

Further to the discharge measurement kit, in this part, we would like to introduce a irrigation calendar which can tell the adequate irrigation water amount required.

In order to provide an optimal irrigation amount for crops, farmers need to know how much water is needed for different crops and how much irrigation water they need. However, many farmers and extension workers we visited for project activities told us that it is difficult to judge how much irrigation water is needed. Most of the farmers seemed to be deciding on irrigated water amounts based on their own experiences and what they might have heard from other neighboring farmers.

In Syria where water saving irrigation has become one of the important national challenges, irrigation research centers have been established specializing in irrigation in individual governorates. These centers actively conduct various experiments to establish the optimal amount of irrigation water for different crops for different types of irrigation. Although on a limited scale, they also invite farmers and extension workers, and introduce them to research results. However, most farmers still do not know how much irrigation is necessary. In our project, we investigated the reasons behind this, and came to the conclusion that the documents and explanations the researchers provide are more for specialists and are therefore too difficult for farmers to understand. Hence, information does not get passed on accurately. Therefore, the project developed the irrigation calendar as a means to communicate to farmers the adequate irrigation water amount based on the crop water requirement.

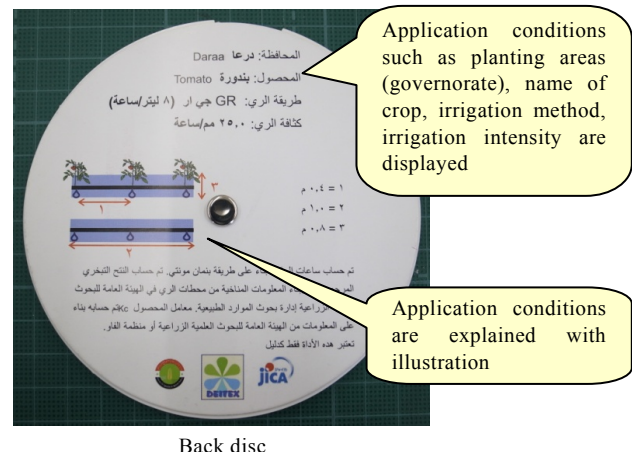
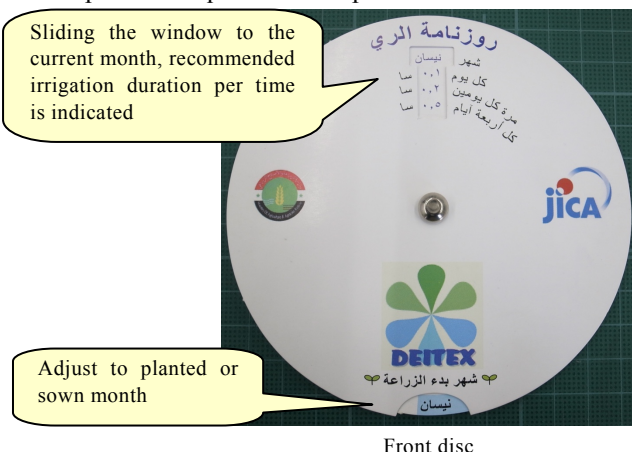
The irrigation calendar consists of two discs on top of each other, just like the constellation chart. By sliding the front disc and adjusting the bottom of the disc to a right planting or sowing month, and adjusting the top window to the applicable month, recommended irrigation timing and duration per time is shown. It shows one of three instructions - daily irrigation, every other day, or once in 4 days. On the back side, application conditions such as target area (governorate), crop type, irrigation method, are indicated. Recommended irrigation duration was estimated based on data from the irrigation research centers and using the crop water requirement as per the Penman-Monteith

Equation and irrigation intensity depending on different irrigation methods.

The irrigation calendar's theme is how simply (and interestingly!) it can be used. If we just write the same information on A4 paper, farmers may not see the content carefully and may simply throw it away. In order to introduce something new, taking the idea from the constellation chart, we made this a disk shape and sliding chart. Also, in order to ensure that everybody who uses this can read information accurately, we limited the information to a bare minimum – only the frequency of watering. When you ask Syrian farmers about irrigation regime, they usually respond like “every 10 days for 10 hours.” Therefore rather than indicating the “volume” of water, we decided to use “time”. The chart distribution was an integral part of the extension activities conducted by extension workers. They give the irrigation calendar, explaining to the farmers how to use the irrigation calendar and how much water and timing and duration of irrigation is appropriate for different crops.



Later on, extension workers asked the farmers about their impressions of the irrigation calendar. Many stated that they liked the simple system with only irrigation timing indicated. Some farmers voluntarily conducted an experiment comparing the yields from a plot cultivated using the irrigation calendar and another plot using the irrigation manners they had been always using. They confirmed that with the irrigation calendar, they could save water without compromising yields. The data we used in the irrigation calendar are collected from the research centers in Syria. The irrigation calendar was a memorable extension tool, which made us realize the importance of developing an optimal method for “communicating” existing information to farmers.



Reports on activities of ex-participants from Central America <Part 1>

In December 2012, in El Salvador and Nicaragua in Central America, a field survey was conducted regarding activities of JICA ex-participants from the vegetable cultivation technology training courses at Tsukuba (4 ex-participants in each country) for 2 weeks. We could see how they are utilizing knowledge and technology acquired during the training courses in their daily work. In this series, we would like to report activities of ex-participants in a 4 part series. This first part is an introduction and report on the background for conducting the ex-participants survey.

Human resource development is a priority theme of ODA. AAI place a great emphasis on human resource development. It is an important aspect of our work. We conduct training to transfer technologies to counterparts, and extend technologies to farmers and local people as part of the work of our long-term JICA experts and within the technical cooperation projects with which we participate. Since 2001, we have been entrusted with running the vegetable cultivation technology training courses which are directly implemented by JICA Tsukuba, providing capacity development training for extension workers, research staff and teachers. To date, we have been involved in 8 courses in the field of vegetable and upland rice cultivation, targeting 220 participants (159 for the vegetable courses and 61 for the upland rice courses as of 2013). One of the challenges we face is how to gauge and evaluate training results of the training that is conducted in Japan.

Since 2005, the JICA Tsukuba training curriculum has included development of action plans for the post-training period. A post-training program was also established whereby the participants submit a report on revised action plans after further review at their workplace after returning to their own countries and jobs. However, with the report submitted 3 months after going home, it is difficult to confirm and evaluate the training impacts on their work in their own countries, and the current situation is that expected results from the post-training programs are not very clear.

AAI is always examining ways to improve training contents. In 2005, we visited ex-participants in Botswana, and in 2010, we visited 10 ex-participants in two countries, namely Malawi and Zambia, conducting a follow-up investigation aiming to understand their actions and support needs. In both surveys, we could witness enthusiastic activities by the ex-participants, and confirmed the training impacts on their work after returning to their home countries. At the same time, we could also learn about the challenges which the ex-participants face. We are working towards utilizing the information obtained during the visits to improve the contents of future training courses.

The third follow-up visit to Central America this time was triggered by the action plan report submitted by Mr Louis, an ex-participant from El Salvador. His report

contained detailed descriptions on progress in implementing his action plan, and examples of application of knowledge and technologies he acquired during the training in Japan. Therefore, we thought by investigating Mr Louis' activities, we could further clarify some points about his action plan implementation and application of training results. Then we could also make the visit a preliminary study to see how we could provide follow-up support to Mr Louis based on his needs.

The vegetable cultivation technology training course which started in February 2013 as a new scheme no longer targets Central and South American countries. However there had been a yearly intake of participants from these countries, totalling 16 participants, since 2005 when AAI started conducting the vegetable cultivation technology training courses. Given this, we thought a field survey would be a good opportunity to summarize the achievements from the training courses. We chose El Salvador and Nicaragua as target countries as these countries had the largest number of ex-participants.

Number of participants in the vegetable cultivation technology training courses per region (2005 - 2012)

Asia	Pacific	Central America	Africa	Middle East	Total
40	10	16	18	2	86

Note: In this report, the vegetable cultivation technology training courses include the "Vegetable Cultivation Technology II (2005-2009), the "Vegetable Cultivation Technology for Small Scale Farmers (2010-2012), and the "Vegetable Cultivation Technology and Marketing Method for Small Scale Farmers (ongoing since 2013).

In this field survey, we confirmed, evaluated and analyzed how they are utilizing what they had learned during the training in Japan. Two objectives were: to feedback the findings to future training work; and to follow up to explore potential for providing support for activities that particularly motivated ex-participants.

In the next three volumes of AAINews, we will introduce the enthusiastic activities of the 8 ex-participants we visited. We will also introduce concrete case studies for creative actions to utilize knowledge and skills they acquired in Japan. We will further provide a detailed report on challenges and areas for improvements which emanated from our visit.



An interview scene and field visit at a target site