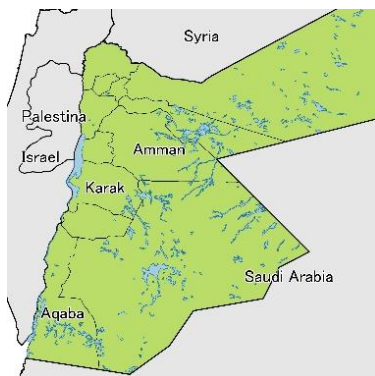


## My favorite Jordanian dishes

I find Arabic dishes very delicious. I have been working in mostly Arabic countries these days, so it is not very necessary for me to carry Japanese food stuff with me on a business trip abroad. This time I had the opportunity to stay in Jordan for 3 weeks, and I traveled across the country along the Jordan Valley, from the north, near the border to Syria and Israel, to the south, Aqaba. Our Jordanian driver cum guide of the same age as me, who worked for a travel agency before, was a food enthusiast. He



arranged a recommended meal wherever we went. We enjoyed Arabian cuisine in Jordan together. I would like to introduce some of the impressive Jordanian dishes I encountered during this trip.

### Zarb

When we were phoning to book an appointment with the director of Karak agriculture research station, located in the middle of Jordan, on the bank of the Dead Sea, he told us "Never bring lunch!" I thought that we would be invited to a nearby restaurant after the interview, but he was kindly preparing to serve *Zarb*. *Zarb* is originally a dish of the desert-dwelling Bedouin dish. The procedure seems as follows; digging a hole in the ground, adding charcoal, making an oven, putting mutton, chicken, and vegetables, and steaming them in the ground (see photo below). The director led us behind the building. He took the initiative to hold a scoop and dug out chicken meat and vegetables from the ground. Firstly, I was surprised at this extraordinary way of cooking. Looking closely, the shelf in the ground carrying the meat and vegetables seemed to be handmade prepared by welding a front cover of fan. I was very impressed with their DIY spirit and the quest for delicious food. The *Zarb* itself, seasoning was simple, chicken was crumbly soft, and the potato was steamingly soft and appetizing, because it

was cooked for a long period. I enjoyed *Zarb*, perhaps too much, and I had no room for dinner that evening.

### Ghidra

"Which do you like, *Ghidra* or *Mandi* for dinner tonight?" I was asked by the driver, when we were going to Aqaba, 6 to 7 hours south of Amman by car. Both seemed to be cooking names. "Going to the Red Sea, you must eat fish!", I replied. "Definetly no, it should be *Ghidra* or *Mandy* at Aqaba." He told me confidently. "Well, I would like *Ghidra*." I answered, because it sounded like the name of a monster somewhere I heard.

Immediately he phoned a restaurant, and started ordering in detail. Three hours later, we arrived at Aqaba and went straight to the restaurant. Then, only our table was prepared perfectly in the restaurant, where no other guests were there, and a waiter brought a big pot.



He turned the pot over a big silver dish placed on the table, and the big dish was quickly filled with rice, chicken, and others. It looks like *Biriyani*, an Indian cuisine, but the amount served was completely different from the one which I took in Japan. *Ghidra* contains chickpea with rice, and the taste was deep because spices were working well. It seemed Basmati rice was used, but it was delicious with a moist feeling, so I took too much without thinking anything but eating. *Ghidra* was similar to *Qouzi* which I used to eat frequently in Iraq.

Unfortunately, in this edition of AAI I can introduce only two dishes due to the limited space. I tasted plenty of other delicious dishes during the visit, which made this business trip fruitful and enjoyable. That is why it is rather difficult for me to stay away from Arab countries.

(By Nakayama, May 2017)



## How to compose study tour for training <Part 1>

### The role of study tour in training

#### Introduction

The acceptance of technical training participants is one of the types of technical cooperation implemented by JICA to solve various problems faced by developing countries. It is an important pillar of supporting human resource development, for those who will be responsible for development of the relevant fields. The training period varies from as short as two weeks to more than one year. The training curriculum also varies from observation type, knowledge learning type, and skill acquisition type, depending on the purpose of the training course.

The proportion of "study tours" differs in these training, but what is common is that they provide a valuable opportunity for training participants to observe the actual site of technology application. AAI has been engaged with rice and vegetable cultivation courses at JICA Tsukuba center, aiming to develop human resources related to these cultivation techniques. In addition, we have been involved in planning, managing and implementing various training programs, including project counterpart training under overseas technical cooperation projects.

This series will describe the points for composing effective study tours showing practical examples based on our experiences.

#### Significance of the "study tour" in skill acquisition type training and points to be considered

We believe that a "study tour" mainly has three roles in our entrusted training courses conducted at JICA Tsukuba. Firstly, the participants will observe how cultivation technologies and other things learned in lectures and practices are realized in the actual site, and what kind of modification/amendment is being done. In this case, it is important to link the content and timing of the visit with lectures and practical training.

Secondly, the participants will be stimulated on how to use the techniques and/or deepen understanding of what they learned through observing various cases. For example, basic ideas about marketing can be obtained through lectures, however, it is actually varied depending on the situation, so it is important to know various actual examples.

Thirdly, the participants will learn about actual approaches at the site and the ingenuity of on-site staff, which can not be learned through lectures and practical training. For example, listening to raw voices concerning, consideration of the safety of agricultural products and collaboration between the research station and extension section is the information which can not be obtained without visiting the site.

Since these three roles are related to each other, it is possible to cover multiple objectives at a single observation destination. However, it is important to compose the tour plan with consideration given to "how to show" and "how to convey", so that the participants must be conscious of these viewpoints.

#### Significance of the "study tour" in counterpart (CP) training and points to be considered

The major purpose of the CP training is to make use of the experience of CP visiting and observing the site in Japan in effective project implementation in their countries. Since the activities after returning to the country are clarified, it is relatively easy to specify the purpose of study tour. However, the period of CP training is rather short, generally a few weeks, therefore it is necessary to make the plan so that necessary knowledge can be obtained effectively within a limited time. It is important to arrange the visiting destination to meet the needs of CPs, through understanding both activities of the project and the characteristics of the destination.

#### "How to show" and "how to convey"

It often happens that a Japanese example can not be applied to the participants' country as it is, since the situation in Japan is quite different from that in developing countries. Therefore, in order to make effective use of the knowledge gained from study tours after participants return to their home countries, it is necessary to consider "how to show" and "how to convey" carefully.

For example, agricultural cooperative systems and specialized vegetable/crop production areas of Japan are completed at a high level, which will stimulate the participants to imagine future plans and activities that they are aiming for. On the other hand, if the formation of farmers' organizations and/or production areas are still in early stages in their countries, it would be more beneficial to learn the historical process and social background to the current agricultural cooperatives and production areas which have been established, showing efforts and ideas of people who have devoted themselves to developing these systems. Regarding the agriculture extension system, currently the roles of extension workers in Japan can be significantly different from those in participants' countries. In this case, it is one of the ways to clarify the difference. And it is also meaningful to convey the role that extension workers played in the development of postwar Japan, including former life improvement activities.

Even at the same place of visit, the knowledge gained is quite different according to the methods of "how to show" and "how to convey". Therefore, the most important viewpoint in composing a study tour is "What and how do you show?", based on the purpose of training.

Tsumagoi Village, a large production area of cabbage: Cabbage fields spreading all over the area which have an impact, but the participants would learn differently depending on "How to show" and "How to convey".





## Toward sustainable forest conservation <Part 1>

### Possibilities and difficulties as a measure against climate change

In Japan, damage caused by large typhoons occurred frequently last year, and recently the summer days start even in April. "Climate change" has become common nowadays. Global warming caused by emission of greenhouse gases such as carbon dioxide is considered as a main cause, and the "Paris Agreement" engaging the cooperation of the international community was ratified last year.

As one of the measures included in the Paris Agreement, "REDD+ (Reducing Emissions from Deforestation and Forest Degradation with Forest Management)" was proposed for the purpose of mitigating climate change by suppressing the decline and deterioration of tropical forests in developing countries. Institutional arrangements and capacity building in tropical countries is underway, in addition to formulation of international rules. The REDD+ aims to merge the carbon market and forest governance to allocate benefits (carbon credits) according to the results of efforts to conserve forests (Result-based payment). Many of the efforts to conserve tropical forests so far can not be continued due to lack of funds. Based on the lessons learned, it is anticipated that forest-dependent local residents will utilize carbon credit benefits and sustain forest conservation.

AAI is involved in a REDD+ project in Ethiopia and has started to work on site since 2017. The project is targeting administrative organizations at each level from the central to the regional, and monitoring results of forest conservation quantitatively, which is different from conventional projects. However, we believe that we can take advantage of the experience and lessons learned from the past technical cooperation projects in conducting activities with residents and administrative officials at the field level.

Forest resources consist not only of firewood and timber but also forest products such as honey and mushrooms, as well as services and functions such as clean water, soil, recreation, traditional culture, etc., which maintain and improve people's benefits and welfare in the long term. It is difficult to measure these values correctly on an economic scale and it is not easy for people in developing countries where living is hard to recognize the value and importance of forest conservation. Considering natural resources conservation as a whole, the needs and priority of the local residents are not high even when it comes to saving water, soil conservation, and wildlife protection, which all face similar difficulties for forest conservation.

In order to achieve sustainable management and REDD+ objectives through technical cooperation of forest conservation which has such characteristics and difficulties, the following questions shall be raised in

planning and implementing onsite activities.

#### (1) How to motivate residents' participation / interest?

How to work with residents nearby forest area, so that they will be interested and participate in forest conservation activities? It is conceivable to enhance their awareness through environmental education, as well as to introduce livelihood support (provision of training and materials) and rights (or tenure for residential and forest usage) to the residents as a kind of incentive.

#### (2) How to strengthen capacity of forest conservation?

In order to properly conserve forests, it is also important to strengthen capacity of residents and forest administration. This measure includes not only individual awareness and skills enhancement but also various components such as governance and rules for managing forests as shared commons through collaboration among residents, government, and other stakeholders.

#### (3) How to ensure sustainability of activities?

What should be done to sustain activities / projects such as "participation" and "capacity building"? Social capital such as technical support by government and collaboration by various stakeholders in the region is also important, but generally a "continuous fund" is commonly needed. It may be efficient if you encourage participation by physical incentives, when you seek short-term outcomes such as number of participants and/or tree planting. But, it is difficult to achieve fundamental (long-term) results such as awareness of the residents, institutional strengthening, and an increase in forest resources. It is anticipated that the successful use of REDD+ carbon credits will solve those problems and achieve sustainable forest conservation.



Coffee, a forest product, brings income to local residents. (Ethiopia)



Without proper management, there is a risk of burning down afforestation areas (Malawi)

In this series, we introduce forest conservation-related activities which AAI has been involved in so far, and we would like to explore essential requirements for initiating and activating forest conservation efforts, and making them sustainable, especially through considering the above three questions.

## Let's think about seed quality <Part 2>

### What is the quality of seeds?

#### In-house seed production and purchased seeds

Seeds are essential materials in crop production. There are two ways for farmers to obtain seeds; one is in-house seed production and the other is purchasing seeds from the market. In this part, we examine the advantages and disadvantages of each method of seed procurement.

#### Obtaining vegetable seeds

In the case of vegetable production cultivated for the market, purchased seeds are often used. In Japan, it is inevitable to purchase seeds because hybrid varieties are common. On the other hand, in developing countries, it is also popular to purchase seeds, although farmers are relatively poor and open pollinated (OP) varieties are widely used.

The primary advantage of in-house seed production is saving the cost of seeds for farmers. Secondly, it is anticipated to be able to select favorable strains adapted to the land and climate, through breeding seeds in the same area on a continuous basis. However, seed production technology differs from fresh vegetable production in various ways. Unless farmers know the proper techniques, there are risks such as deterioration or diminishing of strain characteristics and a decline in seed quality. In addition, seed production requires a long time in the field, and cleaning and storing the seeds after harvest also needs labor and technology. These are the factors impeding the in-house seed production approach.

By contrast, in the case of purchasing seeds, specialized technicians are responsible for seed production, and the seeds which have passed quality inspections are served for sale. Therefore, it is an advantage that farmers can obtain stable quality seeds, if an appropriate charge is paid. Even in developing countries, use of hybrid varieties is getting popular because disease resistance and strong vigor of hybrid varieties are advantageous in developing countries, where poor pest control materials are available. Its uniformity and higher yield are likely to be desirable characteristics for market-oriented vegetable production. In the case of using hybrid varieties, the way of obtaining seed is limited to purchase only.

Considering the required effort on seed production, the stability of seed quality and the superiority of varieties, it is likely that purchasing seeds is more advantageous than in-house seed production in developing countries. However, often seed companies in these countries do not have adequate seed production techniques and quality control abilities. For example, in the case of Uganda, most vegetable seeds are imported from Kenya, and there are problems with germination rates and vigor, resulting in poor seedling rates and bad germination uniformity. Furthermore, different varieties were sometimes contaminated. In Sri Lanka, bacterial

canker disease was detected from imported tomato seeds sold in the market. Regardless of in-house produced and purchased, it is indispensable to obtain good quality seed that personnel engaging in seed production and quality control have proper knowledge and skills.



Farmers threshing brassica seeds; a completely different technique from fresh vegetable production is required.

Germination test of seeds purchased in Uganda: germination rate was inferior to package display. Germination vigor was also bad.

#### Obtaining cereal seeds

Since crops such as beans are themselves crops seeds, preserved products can be used as seed as they are, and in-house seed production is easy, unlike the case of vegetables. Corn is a cross-pollination plant, which is easily deteriorated due to out-cross pollination or inbreeding depression. On the contrary, in the case of most grains and beans except for corn, degradation of varieties is relatively unlikely to occur, because they are self-pollination plants.

In the case of rice, even if recommending the use of purchased seeds, it can be updated once every three years. Generally, a system that uses both in-house produced and purchased seeds is recommended. In the rice promotion project in Uganda in which AAI is involved, we are trying to disseminate upland rice and paddy rice cultivation with in-house seed production by farmers. The next issue will discuss efforts related to rice seed production in this project.

#### Seed supply system in Japan

In Japan, private sector companies are responsible for supplying vegetable seeds, and they provide quality seeds under the principle of market competition. Meanwhile, for major crop seeds such as rice, wheat and soybean, the national or local governments have been responsible for producing and supplying quality seeds, under the "Main Crop Seeds Act (seed law)". However, in April 2017, legislation was passed to abolish this seed law. It is an event that greatly changes the supply system of major crop seeds in Japan. Private enterprises are expected to start breeding and supplying the major crop seeds after the abolition of the seed law. On the other hand, there is also anxiety about the stability of supply of major crop seeds including rice or the diminishing of local varieties. The seed supply system in Japan is also in transition.